Energy Tidbits

Russia's Natural Gas Squeeze Play is Real and Working: EU Govts Scramble To Avoid Winter 2022/23 Shortage

Produced by: Dan Tsubouchi

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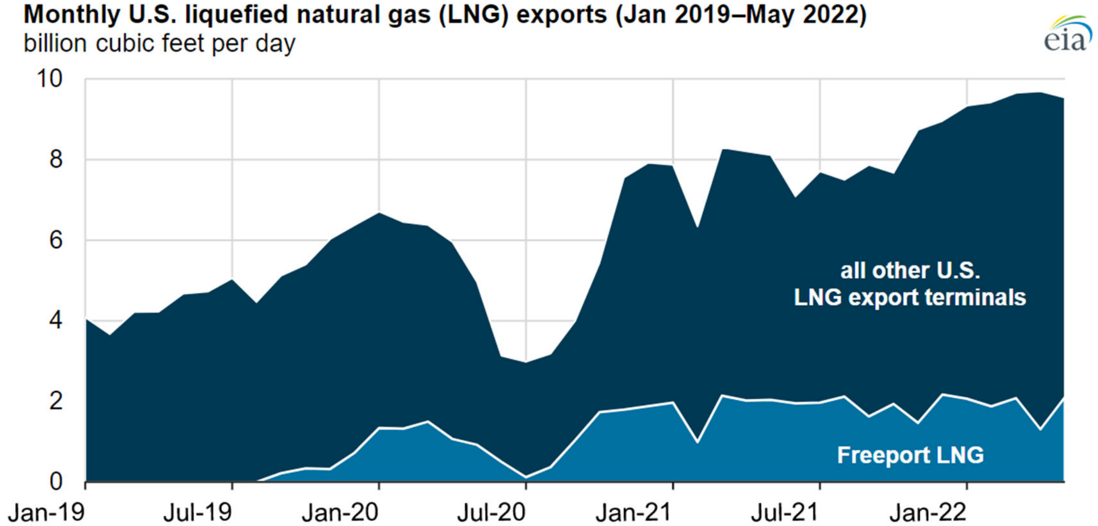
https://www.eia.gov/todayinenergy/detail.php?id=52859
JUNE 23, 2022

Fire causes shutdown of Freeport liquefied natural gas export terminal



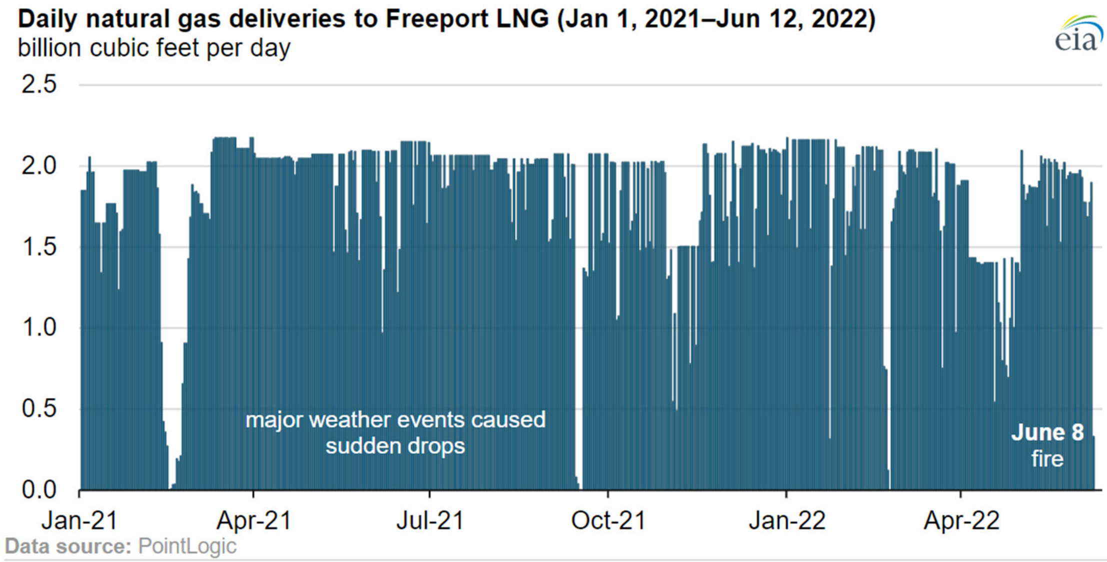
Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, and U.S. Department of Energy, *LNG Monthly* reports

On June 8, 2022, a fire at Freeport LNG's natural gas liquefaction plant on the Gulf Coast in South Texas led to the full shutdown of the facility. The shutdown of Freeport LNG will reduce total U.S. liquefied natural gas (LNG) export capacity by approximately 2 billion cubic feet per day (Bcf/d), or 17% of total U.S. LNG export capacity.

Freeport LNG is one of seven LNG export facilities operating in the United States. Freeport LNG has three operating liquefaction units (called trains) that have a combined baseload capacity of 1.98 Bcf/d and peak capacity of 2.14 Bcf/d. The facility shipped its first LNG cargo in September 2019, and it was the fifth U.S. LNG export terminal to come online in the Lower 48 states. A fourth liquefaction train (with a capacity of 0.67 Bcf/d) has been fully approved, but its owner has not yet reached a final investment decision.

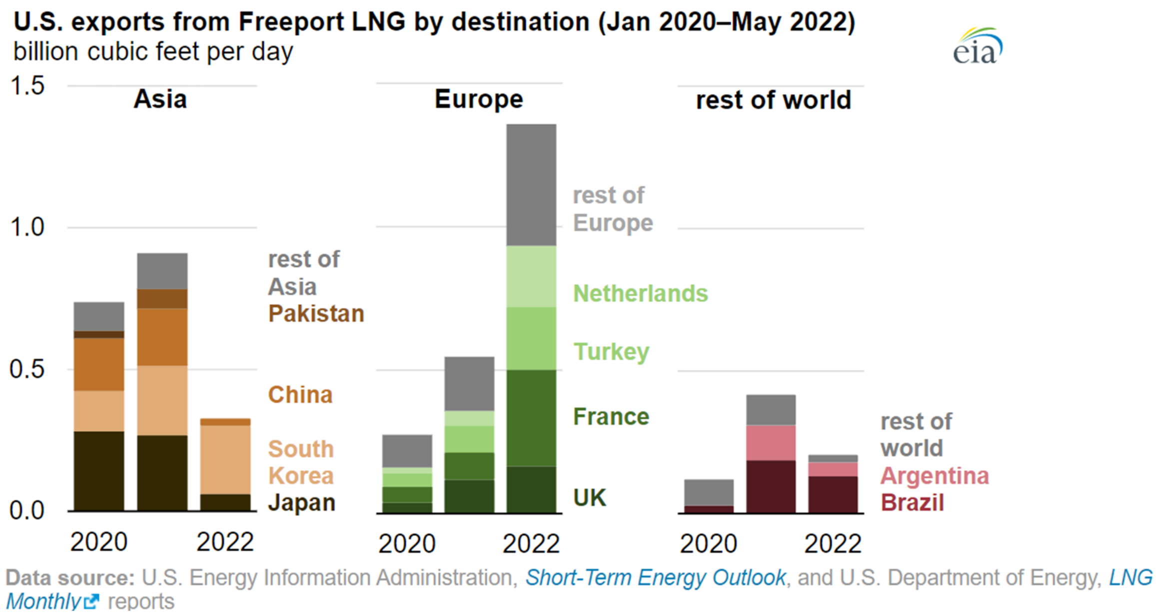
According to Freeport LNG Development, L.P., the preliminary assessment suggests that the fire was caused by excess pressure in an LNG transfer pipeline that moves LNG from the facility's storage tank to the terminal's dock facilities. The fire did not affect Freeport LNG's main facilities, such as its liquefaction trains, LNG storage tanks, dock facilities, or LNG process areas. The company announced that it does not expect the terminal to return to full service until late 2022, although it aims to have the terminal partially operating in approximately 90 days.

Outages at Freeport LNG have occurred in the past but were either short lived or limited in scope. For example, during February 2021, all three trains were eventually shut down following a freezing weather event that caused blackouts across the state. The plant operated at reduced capacity over a 14-day period from February 12 through February 25, and all three trains were briefly shut down for 2 days, from February 16 through February 17. In June 2021, two unplanned intraday outages occurred within one week. Each was due to a compressor malfunction that affected a single train, and each briefly reduced overall production capacity. In addition, from September 14, 2021, through September 17, 2021, all three trains were shut down due to a power outage following Tropical Storm Nicholas.



Feedgas (natural gas delivered by pipeline to an LNG liquefaction facility) flowing to Freeport LNG averaged 1.77 Bcf/d from January to May 2022, and it averaged 1.83 Bcf/d during the seven days before the fire, according to analysis of data from PointLogic. Similar to other U.S. LNG export facilities, Freeport LNG has been operating at high utilization rates this year. During January–May 2022, Freeport LNG's utilization averaged 92% of peak capacity, compared with 86% of peak capacity during the same period last year and 87% of peak capacity in 2021, according to EIA estimates.

Exports from the Freeport LNG terminal averaged 1.9 Bcf/d from January to May 2022, compared with 1.8 Bcf/d during the same period last year and an annual average of 1.9 Bcf/d in 2021. In a shift from historical trends in LNG export destinations, and similar to other U.S. LNG export facilities, almost three-quarters (72%) of exports from Freeport LNG were shipped to Europe (including Turkey) during the first five months of this year, compared with 29% on average during 2021. During January–May 2022, LNG exports from Freeport LNG to Asia declined by 64% compared with 2021 and averaged 0.3 Bcf/d (17% of the total exports).



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, and U.S. Department of Energy, *LNG Monthly* reports

Principal contributors: Victoria Zaretskaya, James Easton, Kirby Lawrence https://lngir.cheniere.com/news-events/press-releases/detail/252/cheniere-announces-positive-final-investment-decision-on

Cheniere Announces Positive Final Investment Decision on the Corpus Christi Stage 3 Liquefaction Project

Download as PDF JUNE 22, 2022 7:30AM EDT

HOUSTON--(BUSINESS WIRE)-- Cheniere Energy, Inc. (“Cheniere” or the “Company”) (NYSE American: LNG) announced today that its Board of Directors has made a positive Financial Investment Decision (“FID”) with respect to the 10+ million tonnes per annum of LNG Corpus Christi Stage 3 Liquefaction Project (“CCL Stage 3”) and has issued full notice to proceed to Bechtel Energy Inc. (“Bechtel”) to continue construction on CCL Stage 3, which began earlier this year under limited notice to proceed.

“Reaching FID on Corpus Christi Stage 3 represents an important milestone for Cheniere as we move forward on this significant growth project, which will strengthen our market-leading LNG infrastructure platform, provide much-needed volumes to the global LNG market by the end of 2025, and create long-term value for our stakeholders,” said Jack Fusco, Cheniere’s President and Chief Executive Officer. “I would like to recognize the Cheniere team, our financial partners, our EPC partner Bechtel and our long-term customers for their demonstrated teamwork, commitment and execution, all of which were critical elements in the successful commercialization and financing of CCL Stage 3. CCL Stage 3 is supported by a truly global portfolio of long-term customers and reflects the call for investment in natural gas infrastructure around the world to support environmental priorities and long-term energy security.”

On June 15, 2022, Cheniere’s wholly-owned subsidiary, Cheniere Corpus Christi Holdings, LLC (“CCH”) closed on an amended and restated approximately $4 billion Senior Secured Term Loan due 2029 (“CCH 2029 Term Loan”), as well as an amended, extended and upsized $1.5 billion Working Capital Facility due 2027. In conjunction with the financing, Cheniere contributed its wholly-owned equity interests in Corpus Christi Liquefaction Stage III, LLC (“CCL Stage III, LLC”) to CCH, and merged CCL Stage III, LLC into Corpus Christi Liquefaction, LLC (“CCL”), a subsidiary of CCH, with CCL continuing as the surviving company. Borrowings under the CCH 2029 Term Loan are being used to fund approximately half of the total expected cost to develop, construct, and place into service CCL Stage 3, the associated pipeline expansion and other infrastructure at or near the project, and for related business purposes. The remaining costs are expected to be funded from Cheniere.

About Cheniere

Qatar to Demand EU Sign Long-Term LNG Deals If It Wants More Gas
2022-06-23 06:18:28.134 GMT

By Stephen Stapczynski and Verity Ratcliffe
(Bloomberg) -- Qatar plans to insist on terms that will lock Europe Union countries in for two decades of liquefied natural gas purchases, a move that will complicate the bloc's goal to cut emissions while also reducing its dependence on Russian fuel.
The Persian Gulf state, one of the world's top LNG exporters, will demand that EU nations sign long-term contracts, according to people familiar with the situation who asked not to identified discussing a private matter. The EU countries say they need a shorter duration to hit the region's pollution reduction goals, the people said.
A recent German deal for a 20-year US LNG supply agreement bolstered Qatar's reserve to push through its demands, the people said. However, the Europeans argue that the Qatari offers are too rigid, providing buyers little ability to divert supply -- unlike the US contracts. Negotiations on the duration of the imports have been in deadlock since March, the people said.
State-controlled Qatar Energy and Qatargas, which operates the LNG facilities, didn't immediately respond to requests for comment. Neither did Germany's finance ministry.
War Is Making One of the World's Richest Countries Even Richer
European nations, led by Germany, have been pushing back against Qatari pressure over fears the strict nature of those contracts will mean they'll need to keep importing the fossil fuel even after the region aims to curb emissions. If Qatar doesn't relent, it threatens Europe's ability to diversify gas supplies from Russia as the Middle Eastern nation may move to sign more pacts in other regions like Asia.
Europe is racing to find alternatives to gas from Russia -- the continent's biggest supplier -- after Moscow's invasion of Ukraine. Imports of LNG from Qatar, which is investing tens of billions of dollars to boost production in the next five years, could be a key part of that solution.
Besides Qatar and the US, there are few other LNG exporters significantly boosting supply over the next decade, especially as the war in Ukraine is likely to crimp Russia's expansion plans. But at the same time, European LNG demand is slated to balloon through 2030, while Qatar needs to lock-in customers to underpin an enormous expansion LNG plan.
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Read more:
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Germany's EnBW Signs Long-Term Deal to Buy LNG From the USExxon Joins Energy Majors Investing in Qatar Gas ProjectConocoPhillips Invests in Qatar, Says Gas Turmoil May Last YearsGermany Opens Door to Qatar Natural Gas in Pivot From Russia

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The deal that Germany signed with the US earlier this week, while 20 years in length, has very flexible terms and allows for shipments to be diverted or even canceled for a smaller fee. Those terms could prove useful if future German gas demand falls amid the energy transition. Gas is a cleaner fossil fuel than coal or oil, but the industry is still responsible for significant emissions of carbon and methane.
In contrast, Qatar usually doesn't allow for buyers to send shipments to different ports or scrap a delivery without paying the full value of the cargo.
The Qatari energy minister, Saad al-Kaabi, said on Tuesday that there were still "a lot of grumblings" in the negotiations between his country and Germany.
Robert Habeck, Germany's economy minister, visited Qatar in March. He met the emir and al-Kaabi as part of Berlin's push to shore up gas supplies as the nation prepares to start directly importing the super-chilled fuel.
Qatar said LNG could be sent to Germany from a new US plant it has a stake in, from 2024, but there's been no concrete agreement.

--With assistance from Anna Kitanaka and Rob Verdonck.

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https://venturegloballng.com/press/venture-global-and-enbw-announce-lng-sales-and-purchase-agreements/

Venture Global and EnBW announce LNG Sales and Purchase Agreements

JUNE 21, 2022

Arlington, Virginia/Stuttgart, Germany. Today, Venture Global LNG and EnBW announced the execution of two long-term Sales and Purchase Agreements (SPAs) for 1.5 million tonnes per annum (MTPA) of liquefied natural gas (LNG) from Venture Global's Plaquemines and CP2 facilities, starting 2026. According to the agreement, EnBW will purchase 0.75 MTPA from Plaquemines LNG and 0.75 MTPA from CP2 LNG for 20 years. EnBW becomes the next European customer of Venture Global, who already announced agreements with PGNiG, BP, Shell, Repsol, Edison and GALP.

"Venture Global is thrilled to welcome EnBW as a long-term customer for both our Plaquemines and CP2 LNG facilities," said Mike Sabel, CEO of Venture Global LNG. "This is the first direct binding offtake agreement for long-term US LNG signed by a German company, an important step that manifests Germany's strategy to diversify its energy mix. Our company is honored to become a major provider of LNG to Germany, providing security of supply on a competitive, long-term basis."

"EnBW looks forward to a long-term LNG partnership with Venture Global", says Georg Stamatelopoulos, Chief Operating Officer Generation & Trading at EnBW. "We have expanded our LNG activities step by step in the recent years. Liquefied natural gas plays a key role in the diversification of our fuels for electricity and heat generation: It opens up the possibility of new sources to secure Germany's gas supply in the current energy transition phase and builds a bridge to a green energy supply."

About Venture Global LNG

Venture Global is a long-term, low-cost provider of U.S. LNG sourced from resource rich North American natural gas basins. Venture Global's first facility, Calcasieu Pass, commenced producing LNG in January 2022. The company is also constructing or developing an additional 60 MTPA of production capacity in Louisiana to provide clean, affordable energy to the world. The company is developing Carbon Capture and Sequestration (CCS) projects at each of its LNG facilities

www.venturegloballng.com

About EnBW

With over 24,000 employees, EnBW is one of the largest energy companies in Germany and Europe. It supplies around 5.5 million customers with electricity, gas, water as well as services and products in the areas of infrastructure and energy. The expansion of renewable energies is a cornerstone of the growth strategy and a focus of investment. EnBW will invest around 4 billion euros in the further expansion of wind and solar energy by 2025. By the end of 2025, more than half of the generation portfolio is to consist of renewable energies. This is already having a noticeable effect on reducing CO2 emissions, which EnBW aims to halve by 2030. EnBW is aiming for climate neutrality by 2035.

www.enbw.com

https://semprainfrastructure.com/news-and-events/news-releases/sempra-infrastructure-and-ineos-energy-trading-sign-heads-of-agreement-for-lng-supply

Sempra Infrastructure and INEOS Energy Trading Sign Heads of Agreement for LNG Supply

JUNE 22, 2022

HOUSTON, June 22, 2022 – Sempra Infrastructure, a subsidiary of Sempra (NYSE: SRE) (BMV: SRE), and INEOS Energy Trading Ltd., a subsidiary of INEOS, a global chemical products manufacturer, today announced they have entered into a heads of agreement (HOA) for the long-term supply of liquefied natural gas (LNG) from Sempra Infrastructure's Gulf Coast LNG portfolio of projects under development in North America.

The HOA provides the framework for the negotiation and finalization of a definitive 20-year LNG sale and purchase agreement for approximately 1.4 million tonnes per annum (Mtpa) of LNG delivered free-on-board from the proposed Port Arthur LNG project or Cameron LNG Phase 2 project.

"INEOS is one of Europe's largest end-users of natural gas and we look forward to building a long-term relationship with a company that shares our vision of increasing the world's energy security while simultaneously advancing lower-carbon energy sources," said Justin Bird, CEO of Sempra Infrastructure. "This HOA demonstrates our ongoing momentum in advancing our next generation of LNG export facilities with an eye toward supplying U.S. natural gas to some of the world's leading energy and manufacturing companies."

"We are delighted to begin a strategic relationship with Sempra Infrastructure bringing significant expertise in construction and operation of LNG facilities. This agreement is an important part of our strategy as we build a network of liquefaction, shipping and regasification capacity to deliver affordable, cleaner and reliable energy to our businesses and customers globally," said David Bucknall, CEO of INEOS Energy.

Sempra Infrastructure is working to expand its Gulf Coast LNG asset base through the simultaneous development of the Port Arthur LNG project in Jefferson County, Texas, and the proposed expansion of the Cameron LNG facility in Hackberry, Louisiana. INEOS joins the company's growing portfolio of global energy and manufacturing companies that have recently executed HOAs for potential long-term offtake from these projects.

In addition to the 1.4 Mtpa HOA with INEOS Energy Trading, last month Sempra Infrastructure announced an HOA with the Polish Oil & Gas Company (PGNiG) for 2 Mtpa from Cameron LNG Phase 2 and 1 Mtpa from Port Arthur LNG, with an option for PGNiG to reallocate the Cameron LNG Phase 2 volumes to Port Arthur LNG. Sempra Infrastructure also recently announced an HOA with RWE Supply and Trading for 2.25 Mtpa from the Port Arthur LNG project.

The Port Arthur LNG Phase 1 project has received all major permits and is anticipated to include up to two natural gas liquefaction trains capable of producing, under optimal conditions, approximately 13.5 Mtpa of LNG. In addition, the proposed Cameron LNG Phase 2 project, expected to include a single LNG train with a maximum production capacity of 6.75 Mtpa of LNG, continues to reach a number of important commercial and permitting milestones, including the launch of a competitive Front-End Engineering Design (FEED) process.

The referenced HOAs are preliminary non-binding arrangements, and the development of the Port Arthur LNG and Cameron LNG Phase 2 projects remain subject to a number of risks and uncertainties, including reaching definitive agreements, securing all necessary permits, signing engineering and construction contracts, obtaining financing and incentives, and reaching a final investment decision.

About Sempra Infrastructure

Sempra Infrastructure delivers energy for a better world. Through the combined strength of its assets in North America, the company is dedicated to enabling the energy transition and beyond. With a continued focus on sustainability, innovation, world-class safety, championing people, resilient operations and social responsibility, its more than 2,000 employees develop, build and operate clean power, energy networks and LNG and net-zero solutions, that are expected to play a crucial role in the energy systems of the future. For more information about Sempra Infrastructure, please visit www.SempraInfrastructure.com and Twitter.

About INEOS

INEOS is committed to achieving net-zero by 2050 across its operations. The company is working to, over time, decarbonize the supply chain through carbon capture and storage and provide optionality for alternative sources of energy such as its leadership in the production of hydrogen.

INEOS Energy meets society's energy needs today and for the future. As an integral part of INEOS, a global manufacturing company, it continues to make an indispensable contribution to society by providing the most sustainable options for a wide range of everyday needs, making the products and energy essential for everyday life. INEOS Energy is committed to net-zero by 2050, producing and trading energy, power and carbon credits. It will grow through the acquisition of existing oil and gas assets, to run them safely, reliably, and efficiently. The business will be at the forefront of new decarbonization technologies such as carbon capture and storage and hydrogen. A sustainable energy business that continues to help consumers and industry to meet their long-term energy needs and carbon reduction targets.

https://lngir.cheniere.com/news-events/press-releases/detail/253/cheniere-and-chevron-sign-long-term-lng-sale-and-purchase

Cheniere and Chevron Sign Long-Term LNG Sale and Purchase Agreements

JUNE 22, 2022 8:00AM EDT

HOUSTON--(BUSINESS WIRE)-- Cheniere Energy, Inc. (“Cheniere” or the “Company”) (NYSE American: LNG) announced today that two of its subsidiaries, Sabine Pass Liquefaction, LLC (“SPL”) and Cheniere Marketing, LLC (“Cheniere Marketing”), have each entered into long-term liquefied natural gas (“LNG”) sale and purchase agreements (each, an “SPA”) with Chevron U.S.A. Inc. (“Chevron”), a wholly-owned subsidiary of Chevron Corporation (NYSE: CVX). At plateau, Chevron will purchase a combined 2.0 million tonnes per annum (“mtpa”) of LNG from Cheniere subsidiaries, subject to certain conditions described below.

Under the first SPA, Chevron has agreed to purchase approximately 1.0 mtpa of LNG from SPL on a free-on-board (“FOB”) basis. Deliveries under the SPA will begin in 2026, reach the full 1.0 mtpa during 2027 and continue until mid-2042. Under the second SPA, Chevron has agreed to purchase approximately 1.0 mtpa of LNG from Cheniere Marketing on an FOB basis with deliveries beginning in 2027 and continuing for approximately 15 years. The Cheniere Marketing SPA is subject to Cheniere making a positive final investment decision to construct additional liquefaction capacity at the Corpus Christi LNG Terminal beyond the seven-train Corpus Christi Stage III Project. The purchase price for LNG under the SPAs is indexed to the Henry Hub price, plus a fixed liquefaction fee.

Additionally, Cheniere’s subsidiary, Sabine Pass LNG, L.P. (“SPLNG”), and Chevron have agreed to terms for the early termination of their LNG Terminal Use Agreement (the “TUA”) in return for a lump sum payment to be made by Chevron to SPLNG during calendar year 2022. Termination of the TUA is subject to the consent of certain lenders to Cheniere Energy Partners, L.P., expected during the third quarter of 2022.

“We are pleased to welcome Chevron, one of the world’s premier integrated energy companies, as a valued long-term LNG offtaker,” said Anatol Feygin, Cheniere’s Executive Vice President and Chief Commercial Officer. “These long-term SPAs underscore the growing demand for reliable, cleaner burning LNG supply beyond 2040 and further support investment in additional LNG capacity beyond our Corpus Christi Stage III Project. We look forward to leveraging our market-leading LNG platform to explore opportunities to collaborate with Chevron on lower-carbon initiatives in the future.”

"Our strategy is to deliver lower carbon energy to a growing world," said Colin Parfitt, Chevron Vice President, Midstream. "Our agreements with Cheniere allow us to harness growing U.S. natural gas production and Gulf Coast LNG export capacity to help meet long-term demand for affordable, reliable, and ever cleaner energy.”

About Cheniere

Cheniere Energy, Inc. is the leading producer and exporter of liquefied natural gas (LNG) in the United States, reliably providing a clean, secure, and affordable solution to the growing global need for natural gas. Cheniere is a full-service LNG provider, with capabilities that include gas procurement and transportation, liquefaction, vessel chartering, and LNG delivery. Cheniere has one of the largest liquefaction platforms in the world, consisting of the Sabine Pass and Corpus Christi liquefaction facilities on the U.S. Gulf Coast, with total production capacity of approximately 45 mtpa of LNG in operation and an additional 10+ mtpa of expected production capacity under construction. Cheniere is also pursuing liquefaction expansion opportunities and other projects along the LNG value chain. Cheniere is headquartered in Houston, Texas, and has additional offices in London, Singapore, Beijing, Tokyo, and Washington, D.C.

https://venturegloballng.com/press/venture-global-announces-lng-sales-and-purchase-agreements-with-chevron/

JUNE 22, 2022

VENTURE GLOBAL ANNOUNCES LNG SALES AND PURCHASE AGREEMENTS WITH CHEVRON

Arlington, Virginia – Today Venture Global announced the execution of two long-term Sales and Purchase Agreements (SPAs) for the purchase of two million tonnes per annum (2MTPA) of liquefied natural gas (LNG) for 20 years. Under the agreements, Chevron U.S.A. Inc. will purchase 1MTPA from the Plaquemines LNG facility and 1MTPA from CP2 LNG. Plaquemines LNG has been under full construction since August of 2021 and the construction of CP2 LNG is expected to commence in 2023.

"Venture Global is delighted to begin a long-term LNG agreement with Chevron, one of the world's premier integrated energy companies," said **Venture Global CEO Mike Sabel**. "This is an outstanding addition to our growing customer portfolio at CP2. Our innovative and proven approach for the deployment of LNG trains enables us to deliver energy to our customers faster and at the lowest cost. As we prepare to roll out trains number 55 through 90 at CP2, we are honored that this competitive advantage has been recognized by Chevron."

"Our agreements with Venture Global allow Chevron to deliver affordable, reliable, and ever cleaner energy to meet long-term demand," said **Colin Parfitt, Chevron Vice President, Midstream**. "This is part of Chevron's strategy to connect and strengthen relationships across the natural gas value chain – from natural gas production and lower carbon initiatives, to transportation, marketing and delivery to the customers who need it most."

About Venture Global LNG

Venture Global is a long-term, low-cost provider of U.S. LNG sourced from resource rich North American natural gas basins. Venture Global's first facility, Calcasieu Pass, commenced producing LNG in January 2022. The company is also constructing or developing an additional 60 MTPA of production capacity in Louisiana to provide clean, affordable energy to the world. The company is developing Carbon Capture and Sequestration (CCS) projects at each of its LNG facilities.

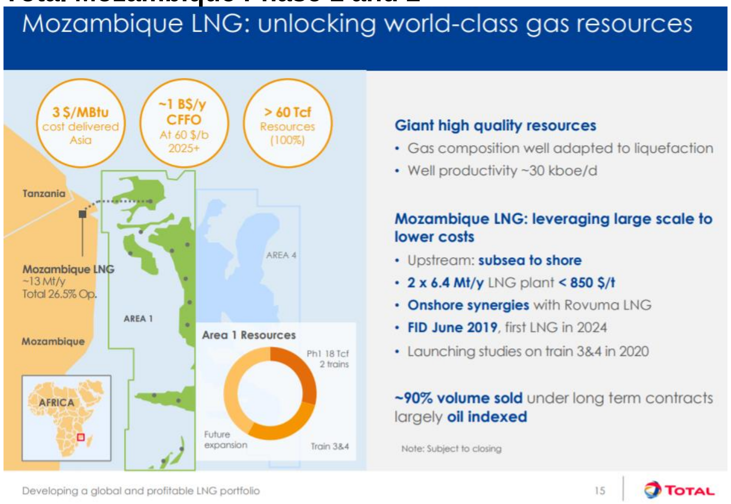
Multiple Brownfield LNG FIDs Now Needed To Fill New LNG Supply Gap From Mozambique Chaos? How About LNG Canada Phase 2?

Posted Wednesday April 28, 2021. 9:00 MT

The next six months will determine the size and length of the new LNG supply gap that is hitting harder and faster than anyone expected six months ago. Optimists will say the Mozambique government will bring sustainable security and safety to the northern Cabo Delgado province and provide the confidence to Total to quickly get back to LNG development such that its LNG in-service delay is a matter of months and not years. We hope so for Mozambique's domestic situation, but will it be that easy for Total's board to quickly look thru what just happened? Total suspended LNG development for 3 months, restarted development on March 25, but then 3 days of violence led it to suspend development again on March 28, and announce force majeure on Monday April 26. Even if the optimists are right, Mozambique LNG is counted on for LNG supply and the major LNG supply project that are in LNG supply forecasts are now all delayed – Total Phase 1 of 1.7 bcf/d and its follow on Phase 2 of 1.3 bcf/d, and Exxon's Rozuma Phase 1 of 2.0 bcf/d. It is important to remember this 5.0 bcf/d of major LNG supply is being counted in LNG supply forecasts and starting in 2024. At a minimum, we think the more likely scenario is a delay of at least 2 years in this 5.0 bcf/d from the pre-Covid timelines. And this creates a much bigger and sooner LNG supply gap starting ~2025 and stronger outlook for LNG prices. Thermal coal in Asia will play a role in keeping a lid on LNG prices. But there will be the opportunity for LNG suppliers to at least review the potential for brownfield LNG projects to fill the growing supply gap. The thought of increasing capex was a non-starter six months ago, but there is a much stronger outlook for global oil and gas prices. Oil and gas companies are pivoting from cutting capex to small increases in 2021 capex and expecting for higher capex in 2022. We believe this sets the stage for looking at potential FID of brownfield LNG projects before the end of 2021 to be included in 2022 capex budgets. Mozambique is causing an LNG supply gap that someone will try to fill. And if brownfield LNG is needed, what about Shell looking at 1.8 bcf/d brownfield LNG Canada Phase 2? Cdn natural gas producers hope so as this would mean more Cdn natural gas will be tied to Asian LNG markets and not competing in the US against Henry Hub.

<u>Total declares force majeure on Mozambique LNG,</u> Yesterday, Total announced [LINK] "*Considering the evolution of the security situation in the north of the Cabo Delgado province in Mozambique, Total confirms the withdrawal of all Mozambique LNG project personnel from the Afungi site. This situation leads Total, as operator of Mozambique LNG project, to declare force majeure. Total expresses its solidarity with the government and people of Mozambique and wishes that the actions carried out by the government of Mozambique and its regional and international partners will enable the restoration of security and stability in Cabo Delgado province in a sustained manner".* Total is working Phase 1 is ~1.7 bcf/d (Train 1 + 2, 6.45 mtpa/train) and was originally expected to being LNG deliveries in 2024. There was no specific timeline for Phase 2 of 1.3 bcf/d (Train 3 + 4, 5.0 mtpa/train), but was expected to follow Phase 1 in short order to keep capital costs under control with a continuous construction process with a potential onstream shortly after 2026.

Total Mozambique Phase 1 and 2



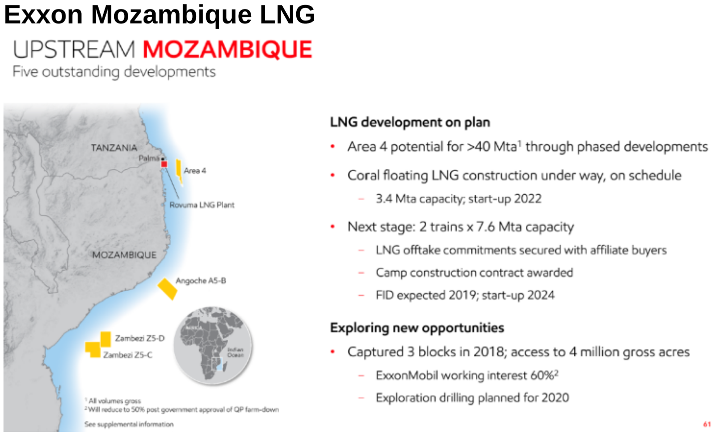
Source: Total Investor Day September 24, 2019

Total's Mozambique force majeure is no surprise, especially the need to the restoration of security and stability "in a sustained manner". Yesterday, Total announced [LINK] "*Considering the evolution of the security".* No one should be surprised by the force majeure or the sustained manner caveat. SAF Group posts a weekly Energy Tidbits research memo [LINK], wherein we have, in multiple weekly memos, that Total had shut down development in December for 3 months due to the violent and security risks. It restarted development on Wed March 24, violence/attacks immediately resumed for 3 consecutive days, and then Total suspended development on Sat March 27. Local violence/attacks shut development down in Dec, the situation gets settled enough for Total to restart in March, only to be shut down 3 days thereafter. No one should be surprised especially with Total's need to see security and stability "in a sustained manner".

Does anyone really think Total will risk another quick 2-3 month restart or even in 2021? The Mozambique government will be working hard to convince Total to restart soon. We just find it hard to believe Total board will risk a replay of March 24-27 in 2021. Unfortunately, Mozambique has had internal conflict for years. It reached a milestone to the positive in August 2019. Our SAF Group August 11, 2019 Energy Tidbits memo [LINK] highlighted the signing of a peace pact between Mozambique President Nyusi and leader of the Renamo opposition Momade. This was the official end to a 2013 thru 2016 conflict following a failure to hold up the prior peace pact. At that time, FT reported [LINK] "Mr Nyusi has said that "*the government and Renamo will come together and hunt" rebels who fail to disarm. The government has struggled to stem the separate insurgency in the north, which has killed or displaced hundreds near the gas-rich areas during the past two years. While the roots of the conflict remain murky, it is linked to a local Islamist group and appears to be drawing on disaffection over sharing gas investment benefits, say analysts*." This is just a reminder this is not a new issue. LNG is a game changer to Mozambique's economic future. It is, but also has been, a government priority to have the security and safety for Total and Exxon to move on their LNG developments. Its hard to believe the Mozambique government will be able to quickly convince Total and Exxon boards that they can be comfortable there is a sustained security/safety situation and they can send their people back in to develop the LNG. Total's board would allow any resumption of development before year end 2021. The last thing Total wants is a replay of March 24-27. The first question is how long will it take before the Total board is convinced its safe to restart. Could you imagine them doing a replay of what just happened? Wait three months, restart development and have to stop again right away? We have to believe that could lead the Total board to believe it is unfixable for years. We just don't think they are to prepared to risk that decision in 3 months. Its why we have to think there isn't a restart approval until at least in 2022 at the earliest ie. why we think the likely scenario is a delay of 2-3 years, and not a matter of months.

Mozambique's security issues pushes back 5.0 bcf/d of new LNG supply at least a couple years. The global LNG issue is that 5 bcf/d of new Mozambique LNG supply (apart from the Eni Coral FLNG of 0.45 bcf/d) won't start up in 2024 and continuing thru the 2020s. And we believe all LNG forecasts included this 5.0 bcf/d to be in service in the 2020s as Mozambique had been considered the best positioned LNG supply to access Asia after Australia and Papua New Guinea. (i) Eni Coral Sul (Rovuma Basin) FLNG of 0.45 bcf/d planned in service in 2022. [LINK] This is an offshore floating LNG vessel that is still expected to be in service in 2022. (ii) Total Phase 1 to add 1.7 bcf/d with an in service originally planned for 2024. We expect the in service data to be pushed back to at least 2026 assuming Total gives a development restart approval in Dec 2021. In theory, this would only be a 1 year loss of time. However, Total has let services go, the project will be idle for 9 months, it isn't clear if the need to get people out quickly let them do a complete put the project on hold, and how many people will be on site maintaining the status of the development during the force majeure. Also what new procedures and safety will be put in place for a restart. These all mean there will be added time needed to get the project back to where it was when force majeure was declared ie. why we think a 12 month time delay will be more like an 18 month project delay. (iii) Exxon's Rozuma Phase 1 LNG will add 2.0 bcf/d and, pre-Covid, was expected to be in service in 2025. We believe the delays related to security and safety at Total are also going to impact Exxon. We find it highly unlikely the Exxon board would take a different security and safety decision than Total. Pre-pandemic, Exxon's March 6, 2019 Investor Day noted their operated Mozambique Rovuma LNG Phase 1 was to be 2 trains each with 1.0 bcf/d capacity for total initial capacity of 2.0 bf/d with FID expected in 2019 and first LNG deliveries in 2024. The 2019 FID expectation was later pushed to be expected just before the March 2020 investor day. But the pandemic hit, and on March 21, 2020, we tweeted [LINK] on the Reuters story "*Exclusive: Coronavirus, gas slump put brakes on Exxon's giant Mozambique LNG plan"* [LINK] that noted Exxon was expected to delay the Rovuma FID. There was no timeline, but the expectation was that FID would now be in 2022 (3 years later than original timeline0 and that would push first LNG likely to 2027. (iv) Total Phase 2 was to add 1.3 bcf/d. There was no firm in service date but it was expected to follow closely behind Phase 1 to maintain services. That would have put it originally in the 2026/2027 period. But if Phase 1 is pushed back 2 years, so will Phase 2 so more likely 2028/2029.. (v) Total Phase 1 + 2 and Exxon Rozuma Phase 1 total 5.0 bcf/d and would have been (and still are) in all LNG supply forecasts for the 2020s. (vi) We aren't certain if the LNG supply forecasts include Exxon Rozuma Phase 2 ,which would be an additional 2.0 bcf/d on top of the 5.0 bcf/d noted above. Exxon Rozuma has always been expected to be at least 2 Phases. This has been the plan since the Anadarko days given the 85 tcf size of the resource on Exxon's Area 4. There was no firm in service data for Phase 2, but it was expected they would also closely follow Phase 1 to maintain services. We expect that original timeline would have been 2026/2027 and that would not be pushed back to 2029/2030. (vii) It doesn't matter if its only 5 bcf/ of Mozambique that is delayed 2 to 3 years, it will cause a bigger LNG supply gap and sooner. The issue for LNG markets is this is taking projects that are in development effectively out of the queue for some period.

Exxon Mozambique LNG



Source: Exxon Investor Day March 6, 2019

<u>Won't LNG and natural gas get hit by Biden's push for carbon free electricity?</u> Yes, in the US. For the last 9 months, we have warned on Biden's climate change plan that were his election platform and now form his administration's energy transition map. We posted our July 28, 2020 blog "*Biden To Put US On "Irreversible Path to Achieve Net-Zero Emissions, Economy-Wide" Is a Major Negative To US Natural Gas in 2020s* "[LINK] on Biden's platform "*The Biden Plan to Build a Modern, Sustainable Infrastructure and an Equitable Clean Energy Future*" [LINK]. Biden's new American Jobs Plan

[LINK] lines up with his campaign platform including to put the US "*on the path to achieving 100 percent carbon-free electricity by 2035*.". Our July 28, 2020 blog noted that it would require replacing ~60% of US electricity generation with more renewable and it could eliminate ~40% (33.5 bcf/d) of 2019 US natural gas consumption. If Biden is 25% successful by 2030, it would replace ~6.3 bcf/d of natural gas demand. It would be a negative to US natural gas and force more US natural gas to export markets. The wildcard when does US natural gas start to decline if producers are faced with the reality of natural gas being phased out for electricity. The other hope is that when Biden says "carbon-free", its not what ends up in the details of any formal policy statement ie. carbon electricity will be allowed with Biden's push for CCS.

<u>Will Cdn natural gas be similarly hit by if Trudeau move to "emissions free" and not "net zero emissions" electricity?</u> Yes and No. Our SAF Group April 25, 2021 Energy Tidbits memo [LINK] was titled ""*Bad News For Natural Gas, Trudeau's Electricity Goal is Now 100% "Emissions Free" And Not "Net Zero Emissions*". On Thursday, PM Trudeau spoke at Biden's global climate summit [LINK] and looks like he slipped in a new view on electricity than was in last Monday's budget and his Dec climate plan. Trudeau said "*In Canada, we've worked hard to get to over 80% emissions-free electricity, and we're not going to stop until we get to 100%."* Speeches, especially ones made on a global stage are checked carefully so this had to be deliberate. Trudeau said "*emissions free*" and not net zero emissions electricity. It seems like this language is carefully written to exclude any fossil fuels as they are not emissions free even if they are linked to CCS. Recall in Liberals big Dec 2020 climate announcement [LINK], Liberals said ""*Work with provinces, utilities and other partners to ensure that Canada's electricity generation achieves net-zero emissions before 2050*." There is no way Trudeau changed the language unless he meant to do so. And this is a major change as it would seem to indicate his plan to eliminate all fossil fuels used for electricity. If so this would be a negative to Cdn natural gas that would be stuck within Western Canada and/or continuing to push into the US when Biden is trying to switch to carbon free electricity. We recognize that there is still some ambiguity in what will be the details of policy and the Liberals aren't changing to no carbon sourced electricity at all. Let's hope so. But let's also be careful that politicians don't change language without a reason or at least with a view to setting up for some future hit. Plus Trudeau had a big warning in that same speech saying "*we will make it law to respect our new 2030 target and achieve net-zero emissions by 2050*". They plan to make it the law that Canada has to be on track for the Liberals 2030 emissions targets. This means that the future messaging will be that the Liberals have no choice but to take harder future emissions actions as it is the law. They will be just obeying the law as they will be obligated to obey the law. Everyone knows the messaging will be we have to do more get to Net Zero, that in itself will inevitably mean it will be the law if he actually does move to eliminate any carbon based electricity. So yes it's a negative, that is unless more Cdn natural gas can be exported via LNG to Asia. We believe this would be a plus to be priced against global LNG instead of Henry Hub.

<u>Biden's global climate summit reminded there is too much risk to skip over natural gas as the transition fuel.</u> Apart from the US and Canada, we haven't seen a sea shift to eliminating natural gas for power generation, especially from energy import dependent countries. There is a strong belief that hydrogen and battery storage will one day be able to scale up at a competitive cost to lead to the acceleration away from fossil fuels. But that time isn't yet here, at least not for energy import dependent countries. One of the key themes from last week's leader's speeches at the Biden global climate summit – to get to Net Zero, the world is assuming there wilt be technological advances/discoveries that aren't here today and that have the potential to immediately ramp up in scale. IEA Executive Director Faith Birol was blunt in his message [LINK] saying "*Right now, the data does not match the rhetoric – and the gap is getting wider*." And "*IEA analysis shows that about half the reductions to get to net zero emissions in 2050 will need to come from technologies that are not yet ready for market. This calls for massive leaps in innovation. Innovation across batteries, hydrogen, synthetic fuels, carbon capture and many other technologies.* US Special Envoy for Climate John Kerry said a similar point that half of the emissions reductions will have to come from technologies that we don't yet have at scale. UK PM Johnson [LINK] didn't say it specifically, but points to this same issue saying "*To do these things we've got to be constantly original and optimistic about new technology and new solutions whether that's crops that are super-resistant to drought or more accurate weather forecasts like those we hope to see from the UK's new Met Office 1.2bn supercomputer that we're investing in*." It may well be that the US and other self sufficient energy countries are comfortable going on the basis of assuming technology developments will occur on a timely basis. But, its clear that countries like China, India, South Korea and others are not prepared to do so. And not prepared to have the confidence to rid themselves of coal power generation. This is why there hasn't been any material change in the LNG demand outlook

We expect the IEA's blunt message that the gap is getting wider will be reinforced on May 18. We have had a consistent view on the energy transition for the past few years. We believe it is going to happen, but it will take longer, be a bumpy road and cost more than expected. This is why we believe the demise of oil and natural gas won't be as easy and fast as hoped for by the climate change side. The IEA's blunt warning on the gap widening should not be a surprise as they warned on this in June 2020. Birol's climate speech also highlighted that the IEA will release on May 18 its roadmap for how the global energy sector can reach net zero by 2050. Our SAF Group June 11, 2020 blog "*Will The Demise Of Oil Take Longer, Just Like Coal? IEA and Shell Highlight Delays/Gaps To A Smooth Clean Energy Transition*" [LINK] feature the IEA's June 2020 warning that the critical energy technologies needed to reduce emissions are nowhere near where they need to be. In that blog, we said "there was an excellent illustration of the many significant areas, or major pieces of the puzzle, involved in an energy transition by the IEA last week. The IEA also noted the progress of each of the major pieces and the overall conclusion is that the vast majority of the pieces are behind or well behind where they should be to meet a smooth timely energy transition. It is important to note that these are just what the IEA calls the "*critical energy technologies*" and does not get into the wide range of other considerations needed to support the energy transition. The IEA divides these "critical energy technologies "into major groupings and then ranked the progress of each of these pieces in its report "*Tracking Clean Energy Progress"* [LINK] by on track, more efforts needed, or not on track". Our blog included the below IEA June 2020 chart.

IEA's Progress Ranking For "Critical Energy Technologies" For Clean Energy Transition

	🟡 Renewable Power	🔴 Geothermal
	🟢 Solar PV	🔴 Ocean Power
	🟡 Onshore Wind	🔴 Nuclear Power
🔴 Power	🟡 Offshore Wind	🟡 Natural Gas-Fired Power
	🟡 Hydropower	🔴 Coal-Fired Power
	🟢 Bioenergy Power Generation	🔴 CCUS in Power
	🔴 Concentrating Solar Power	
🔴 Fuel Supply	🔴 Methane Emissions from O&G	🔴 Flaring Emissions
	🟡 Chemicals	🟡 Pulp and Paper
🟡 Industry	🟡 Iron and Steel	🟡 Aluminum
	🟡 Cement	🔴 CCUS in Industry and Transformation
	🟢 Electric Vehicles	🔴 Transport Biofuels
🟡 Transport	🟢 Rail	🟡 Aviation
	🔴 Fuel Consumption of Cars and Vans	🟡 International Shipping
	🟡 Trucks and Busses	
	🔴 Building Envelopes	🟢 Lighting
🔴 Buildings	🔴 Heating	🟡 Appliances and Equipment
	🟡 Heat Pumps	🟢 Data Centres and Data Transmission Networks
	🟡 Cooling	
	🟡 Energy Storage	🟡 Demand Response
🟡 Energy Integration	🟡 Hydrogen	🟡 Direct Air Capture
	🟡 Smart Grids	

Source: IEA

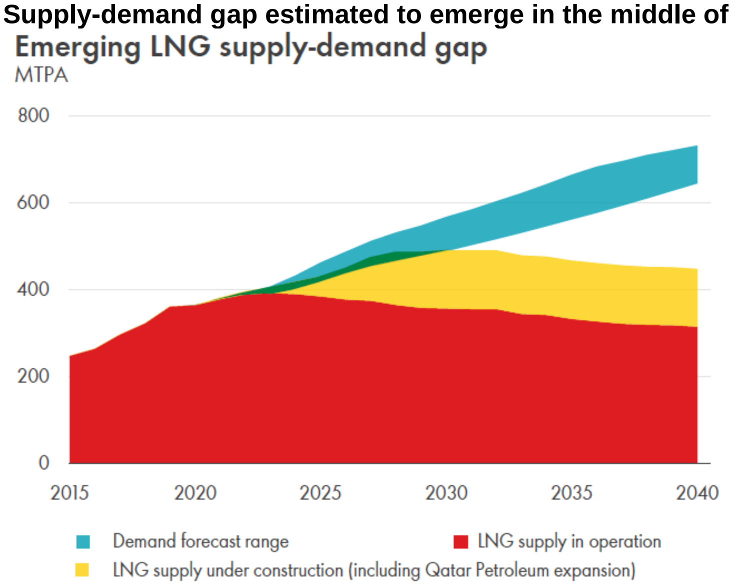
🟢 On Track 🟡 More Efforts Needed 🔴 Not on Track

Source: IEA Tracking Clean Energy Progress, June 2020

We are referencing Shell's long term outlook for LNG We recognize there are many different forecasts for LNG, but are referencing Shell' LNG Outlook 2021 from Feb 25, 2021 for a few reasons. (i) Shell's view on LNG is the key view for when and what decision will be made for LNG Canada Phase 2. (ii) Shell is one of the global leaders in LNG supply and trading. (iii) Shell provides on the record LNG outlooks every year so there is the ability to compare and make sure the outlook fits the story. It does. (iv) Shell, like other supermajors, has had to make big capex cuts post pandemic and that certainly wouldn't put any bias to the need for more capex.

Shell's March 2021 long term outlook for LNG demand was basically unchanged vs 2020 and leads to a LNG supply gap in mid 2020s Shell does not provide the detailed numbers in their Feb 25, 2021 LNG forecast. We would assume they would have reflected some delay, perhaps 1 year, at Mozambique but would be surprised if they put a 2-3 year delay in for the 5 bcf/d from Total Phase 1 +2 and Exxon Rozuma Phase 1. Compared to their LNG Outlook 2020, it looks like there was no change for their estimate of global natural gas demand growth to 2040, which looked relatively unchanged at approx. 5,000 bcm/yr or 484 bcf/d. Similarly, long term LNG demand looked unchanged to 2040 of ~700 mm tonnes (92 bcf/d) vs 360 mm tonnes (47 bcf/d) in 2020. In the 2021 outlook, Shell highlighted that the pandemic delayed project construction timelines and that the "*lasting impact expected on LNG supply not demand"*. And that Shell sees a LNG "*supply-demand gap estimated to emerge in the middle of the current decade as demand rebounds*". Comparing to 2020, it looks like the supply-demand gap is sooner.

Supply-demand gap estimated to emerge in the middle of the current decade



Source: Shell LNG Outlook 2021, Feb 25, 2021

<u>Mozambique delays are redefining the LNG markets for the 2020s: Delaying 5 bcf/d of Mozambique new LNG supply 2-3 years means a much bigger supply gap starting in 2025..</u> Even if the optimists are right, there are now delays to all major Mozambique LNG supply from LNG supply forecasts. We don't have the detail, but we believe all LNG forecasts, including Shell's LNG Outlook 2021, would have included Total's Phase 1 and Phase 2 and Exxon Rozuma Phase 1. As noted earlier, we believe that the likely impact of the Mozambique security concerns is that these forecasts would likely have to push back 1.7 bcf/d from Total Phase 1 to at least 2026, 2.0 bcf/d Exxon Rozuma Phase 1 to at least 2027, and 1.3 bcf/d Total Phase 2 to at least 2028/2029 with the real risk these get pushed back even further. 5.0 bcf/d is equal to 38 mtpa. These delays would mean there is an increasing LNG supply gap in 2025 and increasingly significantly thereafter. And even if a new greenfield LNG project is FID's right away, it wouldn't be able to step in to replace Total Phase 1 prior startup timing for 2024 or likely the market at all until at least 2027. Its why the decision on filling the gap will fall on brownfield LNG projects.

<u>And does this bigger, nearer supply gap force LNG players to look at what brownfield LNG projects they could advance?</u> A greenfield LNG project would likely take at least until 2027 to be in operations. Its why we believe the Mozambique delays will effectively force major LNG players to look to see if there are brownfield LNG projects they should look to advance. Prior to the just passed winter, no one would think Shell or other major LNG players would be considering any new LNG FIDs in 2021. All the big companies are in capital reduction mode and debt reduction mode. But Brent oil is now solidly over $60 and LNG prices hit record levels in Jan and the world's economic and oil and gas demand outlook are increasing with vaccinations. And we are starting to see companies move to increasing capex with the higher cash flows. We would not expect any major LNG players to move to FID right away. But we see them watching to see if 2021 plays out to still support this increasing LNG supply gap. And unless new mutations prevent vaccinations from returning the world to normal, we suspect that major LNG players, like other oil and gas companies, will be looking to increase

capex as they approve 2022 budgets. The outlook for the future has changed dramatically in the last 5 months. The question facing Shell and others, should they look to FID new LNG brownfield projects in the face of an increasing LNG supply gap that is going to hit faster and harder than expected a few months ago. We expect these decisions to be looked at before the end of 2021. LNG prices will be stronger, but we expect the limiting cap in Asia will be that thermal coal will be used to mitigate some LNG price pressure.

<u>Back to Shell, does increasing LNG supply gap provide the opportunity to at least consider a LNG Canada Phase 2 FID over the next 9 months?</u> Shell is no different than any other major LNG supplier in always knowing the market and that the oil and gas outlook is much stronger than 6 months ago. No one has been or is talking about this Mozambique impact and how it will at least force major LNG players to look at if they should FID new brownfield LNG projects to take advantage of this increasing supply gap. We don't have any inside contacts at Shell or LNG Canada, but that is no different than when we looked at the LNG markets in September 2017 and saw the potential for Shell to FID LNG Canada in 2018. We posted a September 20, 2017 blog *"China's Plan To Increase Natural Gas To 10% Of Its Energy Mix Is A Global Game Changer Including For BC LNG*" [LINK]. Last time, it was a demand driven supply gap, this time, it's a supply driven supply gap. We have to believe any major LNG player, including Shell, will be at least looking at their brownfield LNG project list and seeing if they should look to advance FID later in 2021. Shell has LNG Canada Phase 2, which would add 2 additional trains or approx. 1.8 bcf/d. And an advantage to an FID would be that Shell would be able to commit to its existing contractors and fabricators for a continuous construction cycle following on LNG Canada Phase 1 ie. to help keep a lid on capital costs. No one is talking about the need for these new brownfield LNG projects, but, unless Total gets back developing Mozambique and keeps the delay to a matter of months, its inevitable that these brownfield LNG FID internal discussions will be happening in H2/21. Especially since the oil and gas price outlook is much stronger than it was in the fall and companies will be looking to increase capex in 2022 budgets

<u>A LNG Canada Phase 2 would be a big plus to Cdn natural gas.</u> A LNG Canada Phase 2 FID would be a big plus for Cdn natural gas. It would allow another ~1.8 bcf/d of Cdn natural gas to be priced against Asian LNG prices and not against Henry Hub. And it would provide demand offset versus Trudeau if he moves to make electricity "emissions free" and not his prior "net zero emissions". Mozambique may be in Africa, but, unless sustained peace and security is attained, it is a game changer to LNG outlook creating a bigger and sooner LNG supply gap. And with a stronger tone to oil and natural gas prices in 2021, the LNG supply gap will at least provide the opportunity for Shell to consider FID for its brownfield LNG Canada Phase 2 and provide big support to Cdn natural gas for back half of the 2020s. And perhaps if LNG Canada is exporting 3.6 bcf/d from two phases, it could help flip Cdn natural gas to a premium to US natural gas especially if Biden is successful in reducing US domestic natural gas consumption for electricity. The next six months will be very interesting to watch for LNG markets.

Asian LNG Buyers Abruptly Change and Lock in Long Term Supply – Validates Supply Gap, Provides Support For Brownfield LNG FIDs

Posted 11am on July 14, 2021

The last 7 days has shown there is a sea change as Asian LNG buyers have made an abrupt change in their LNG contracting and are moving to lock in long term LNG supply. This is the complete opposite of what they were doing pre-Covid when they were trying to renegotiate Qatar LNG long term deals lower and moving away from long term deals to spot/short term sales. Why? We think they did the same math we did in our April 28 blog "*Multiple Brownfield LNG FIDs Now Needed To Fill New LNG Supply Gap From Mozambique Chaos? How About LNG Canada Phase 2?*" and saw a much bigger and sooner LNG supply gap driven by the delay of 5 bcf/d of Mozambique LNG that was built into most, if not all LNG supply forecasts. Asian LNG buyers are committing real dollars to long term LNG deals, which we believe is the best validation for the LNG supply gap. Another validation, Shell, Total and others are aggressively competing to invest long term capital to partner in Qatar Petroleum's massive 4.3 bcf/d LNG expansion despite plans to reduce fossil fuels production in the 2020s. And even more importantly to LNG suppliers, the return to long term LNG contracts provides the financing capacity to commit to brownfield LNG FIDs. The abrupt change by Asian LNG buyers to long term contracts is a game changer for LNG markets and sets the stage for brownfield LNG FIDs likely as soon as before year end 2021. It has to be brownfield LNG FIDs if the gap is coming bigger and sooner. And we return to our April 28 blog point, if brownfield LNG is needed, what about Shell looking at 1.8 bcf/d brownfield LNG Canada Phase 2? LNG Canada Phase 1 at 1.8 bcf/d capacity is already a material positive for Cdn natural gas producers. A FID on LNG Canada Phase 2 would be huge, meaning 3.6 bcf/d of Cdn natural gas will be tied to Asian LNG markets and not competing in the US against Henry Hub. And with a much shorter distance to Asian LNG markets. This is why we focus on global LNG markets for our views on the future value of Canadian natural gas.

<u>Sea change in Asian LNG buyers is also the best validation of the LNG supply gap and big to LNG supply FIDs.</u> Has the data changed or have the market participants changed in how they react to the data? We can't recall exactly who said that on CNBC on July 12, it's a question we always ask ourselves. In the LNG case, the data has changed with Mozambique LNG delays and that has directly resulted in market participants changing and entering into long term contracts. We can't stress enough how important it is to see Asian LNG buyers move to long term LNG deals. (i) Validates the sooner and bigger LNG supply gap. We believe LNG markets should look at the last two weeks of new long term deals for Asian LNG buyers as being the validation of the LNG supply gap that clearly emerged post Total declaring force majeure on its 1.7 bcf/d Mozambique LNG Phase 1 that was under construction and on track for first LNG delivery in 2024. Since then, markets have started to realize the Mozambique delays are much more than 1.7 bcf/d. They have seen major LNG suppliers change their outlook to a more bullish LNG outlook and, most importantly, are now seeing Asian LNG buyers changing from trying to renegotiate long term LNG deals lower to entering into long term LNG deals to have security of supply. Asian LNG buyers are cozying up to Qatar in a prelude to the next wave of Asian buyer long term deals. What better validation is there than companies/countries putting their money where their mouth is. (ii) Provides financial commitment to help push LNG suppliers to FID. We believe these Asian LNG buyers are doing much more than validating a LNG supply gap to markets. The big LNG suppliers can move to FID based on adding more LNG supply to their portfolio, but having more long term deals provides the financial anchor/visibility to long term capital commitment from the buyers. Long term contracts will only help LNG suppliers get to FID.

<u>It was always clear that the Mozambique LNG supply delay was 5.0 bcf/d, not just 1.7 bcf/d from Total Phase 1.</u> LNG markets didn't really react to Total's April 26 declaration of force majeure on its 1.7 bcf/d Mozambique LNG Phase 1. This was an under construction project that was on time to deliver first LNG in 2024. It was in all LNG supply forecasts. There was no timeline given but, on the Apr 29 Q1 call, Total said that it expected any restart decision would be least a year away. If so, we believe that puts any actual construction at least 18 months away. There will be work to do just to get back to where they were when they were forced to stop development work on Phase 1. Surprisingly, markets didn't look the broader implications, which is why we posted our 7-pg Apr 28 blog "*Multiple Brownfield LNG FIDs Now Needed To Fill New LNG Supply Gap From Mozambique Chaos? How About LNG Canada Phase 2?*" [LINK] We highlighted that Mozambique LNG delays were actually 5 bcf/d, not 1.7 bcf/d. And this 5 bcf/d of Mozambique LNG supply was built into most, if not all, LNG supply forecasts. The delay in Total Phase 1 would lead to a commensurate delay in its Mozambique LNG Phase 2 of 1.3 bcf/d. Total Phase 2 was to add 1.3 bcf/d. There was no firm in service date, but it was expected to

follow closely behind Phase 1 to maintain services. That would have put it originally in the 2026/2027 period. But if Phase 1 is pushed back at least 2 years, so will the follow on Phase 2, so more likely, it will be at least 2028/2029. The assumption for most, if not all, LNG forecasts was that Phase 2 would follow Phase 1. Exxon Rozuma Phase 1 of 2.0 bcf/d continues to be pushed back in timeline especially following Total Phase 1. Exxon's Mozambique Rozuma Phase 1 LNG will add 2.0 bcf/d and, pre-Covid, was originally expected to be in service in 2025. The project was being delayed and Total's force majeure has added to the delays. Rozuma onshore LNG facilities are right by Total. On June 20, we tweeted [LINK] on the Reuters report "*Exclusive: Galp says it won't invest in Rovuma until Mozambique ensures security*" [LINK]. Galp is one of Exxon's partners in Rozuma. Reuters reported that Galp said they won't invest in Exxon's Rozuma LNG project until the government ensures security, that this may take a while, they won't be considering the project until after Total has reliably resumed work on its Phase 1, which likely puts any Rozuma decision until at least end of 2022 at the earliest. Galp has taken any Rozuma Phase 1 capex out of their new capex plans thru 2025 and will have to take out projects in their capex plan if Rozuma does come back to work. This puts Rozuma more likely 2028 at the earliest as opposed to before the original expectations of before 2025. Pre-pandemic, Exxon's March 6, 2019 Investor Day noted their operated Mozambique Rovuma LNG Phase 1 was to be 2 trains each with 1.0 bcf/d capacity for total initial capacity of 2.0 bf/d with FID expected in 2019 and first LNG deliveries sometime before 2025. LNG forecasts had been assuming Exxon Rozuma would be onstream around 2025. The 2019 FID expectation was later pushed to be expected just before the March 2020 investor day. But the pandemic hit, and on March 21, 2020, we tweeted [LINK] on the Reuters story "*Exclusive: Coronavirus, gas slump put brakes on Exxon's giant Mozambique LNG plan*" [LINK] that noted Exxon was expected to delay the Rovuma FID. There was no timeline, but now, any FID is not expected until late 2022 at the earliest, that would push first LNG likely to at least 2028. What this means is that the Mozambique LNG delays are not 1.7 bcf/d but 5.0 bcf/d of projects that were in all, if not most, LNG supply forecasts. There is much more in our 7-pg blog. But Mozambique is what is driving a much bigger and sooner LNG supply gap starting ~2025 and stronger outlook for LNG prices

<u>One of the reasons why it went under the radar is that major LNG suppliers played stupid on the Mozambique impact.</u> It makes it harder for markets to see a big deal when the major LNG suppliers weren't making a big deal of Mozambique or playing stupid in the case of Cheniere in their May 4 Q1 call. In our May 9, 2021 Energy Tidbits memo, we said we had to chuckle when we saw Cheniere's response in the Q&A to its Q1 call on May 4 that they only know what we know from reading the Total releases on Mozambique and its impact on LNG markets. It's why we tweeted [LINK] "*Hmm! $LNG says only know what we read on #LNG market impact from $TOT $XOM MZ LNG delays*. *Surely #TohokuElectric & other offtake buyers are reaching out to #Cheniere. MZ LNG delays is a game changer to LNG in 2020s, see SAF Group blog. Thx @olympe_mattei @TheTerminal #NatGas".* How could they not be talking to LNG buyers for Total and /or Exxon Mozambique LNG projects. In the Q1 Q&A, mgmt was asked about Mozambique and didn't know any more than what you or I have read. Surely, they were speaking to Asian LNG buyers who had planned to get LNG supply from Total Mozambique or Exxon Rozuma Mozambique or both. Mgmt is asked "*wanted to just kind of touch on the color use talking about for these supply curve. And are you able to kind of provide any thoughts on the Mozambique and a deferral with the project of that size on 13 and TPA being deferred by we see you have you noticed any impact to the market has is there any impact for stage 3 with that capacity? Thanks*." Mgmt replies "*No. Look, I only know about the Mozambique delay with what I read as well as what you read that from total and an Exxon. And it's a sad situation and I hope everybody is safe and healthy that were there to experience that unrest but no I don't think it's, again it's a different business paradigm than what we offer. So, we offer a full value product, the customer doesn't have to invest in equity, customer doesn't have to worry about the E&P side of the business because, we've been able to both the by at our peak almost 7 Dee's a day of US NAT gas from almost a 100 different producers on 26 different pipelines and deliver it to our to facilities. So we take care of a lot of what the customer needs".*

<u>There are other LNG supply delays/interruptions beyond Mozambique.</u> There have been a number of other smaller LNG delay or existing supply interruptions that add to Asian LNG buyers feeling less secure about the reliability of mid to long term LNG supply. Here are just a few examples. (i) Total Papua LNG 0.74 bcf/d. On June 8, we tweeted [LINK] *"Timing update Papua #LNG project. $OSH June 8 update "2022 FEED, 2023 FID targeting 2027 first gas". $TOT May 5 update didn't forecast 1st gas date. Papua is 2 trains w/ total capacity 0.74 bcf/d."* We followed the tweet saying [LINK] *"Bigger #LNG supply gap being created >2025. Papua #LNG originally expected FID in 2020 so 1st LNG is 2 years delayed.*

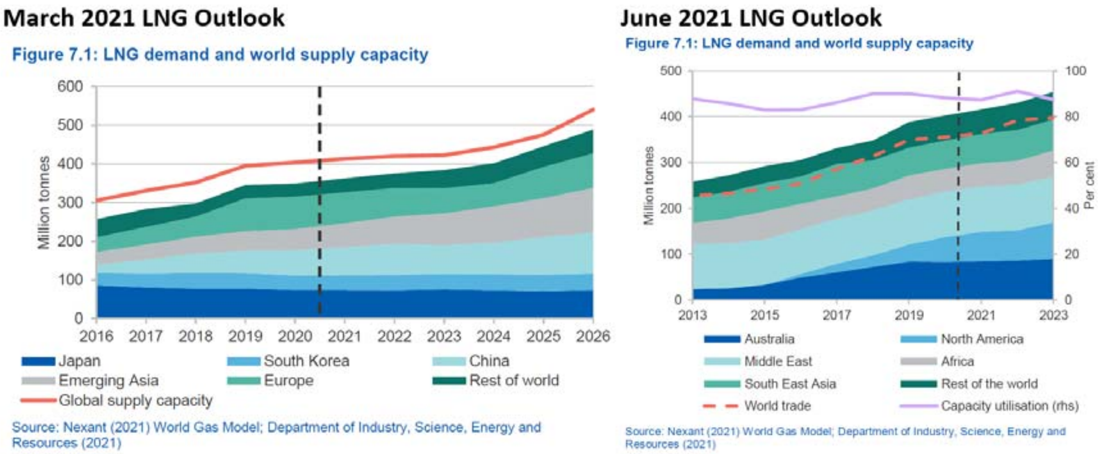
Common theme - new LNG supply is being delayed ie. [Total] Mozambique. Don't forget need capacity>demand due to normal maintenance, etc. Positive for LNG." (ii) Chevron's Gorgon. A big LNG story in H2/20 was the emergence of weld quality issues in the propane heat exchangers at Train 2, which required additional downtime for repair. Train 2 was shut on May 23 with an original restart of July 11, but the repairs to the weld quality issues meant it didn't restart until late Nov. The same issue was found in Train 1 but repairs were completed. However extended downtime for the trains led to lower LNG volumes. Gorgon produced ~2.3 bcf/d in 2019 but was down to 2.0 bcf/d in 2020. (iii) Equinor's Melkoeya 0.63 bcf/d shut down for 18 months due to a fire. A massive fire led to the Sept 28, 2020 shutdown of the 0.63 bcf/d Melkoeya LNG facility in Norway. On April 26, Equinor released "*Revised start-up date for Hammerfest LNG*" [LINK] with regard to the 0.63 bcf/d Melkoeya LNG facility. The original restart date was Oct 1, 2021 (ie. a 12 month shut down), but Equinor said "*Due to the comprehensive scope of work and Covid-19 restrictions, the revised estimated start-up date is set to 31 March 2022"*. When we read the release, it seemed like Equinor was almost setting the stage for another potential delay in the restart date. Equinor had two qualifiers to this March 31, 2022 restart date. Equinor said "*there is still some uncertainty related to the scope of the work*" and "*Operational measures to handle the Covid-19 situation have affected the follow-up progress after the fire. The project for planning and carrying out repairs of the Hammerfest LNG plant must always comply with applicable guidelines for handling the infection situation in society. The project has already introduced several measures that allow us to have fewer workers on site at the same time than previously expected. There is still uncertainty related to how the Covid-19 development will impact the project progress."*

<u>Cheniere stopped the game playing the game on June 30</u>. Our July 4, 2021 Energy Tidbits memo noted that it looks like Cheniere has stopped playing stupid with respect to the strengthening LNG market in 2021. We can't believe they thought they were fooling anyone, especially their competitors. Bu that week, they came out talking about how commercial discussions have picked up in 2021 and it's boosted their hope for a Texas (Corpus Christi) LNG expansion. On Wednesday, Platts reported "*Pickup in commercial talks boosts Cheniere's hopes on mid-scale LNG project*" [LINK] Platts wrote "*Cheniere Energy expects to make a "substantial dent" by the end of 2022 in building sufficient buyer support for a proposed mid-scale expansion at the site of its Texas liquefaction facility, Chief Commercial Officer Anatol Feygin said June 30 in an interview." " As a result, he said, " The commercial engagement, I think it is very fair to say, has really picked up steam, and we are quite optimistic over the coming 12-18 months to make a substantial dent in that Stage 3 commercialization."* Platts also reported that Cheniere noted this has been a tightening market all year (ie would have been known by the May 4 Q1 call). Platts wrote "*We obviously find ourselves at the beginning of this year and throughout in a very tight market where prices today into Asia and into Europe are at levels that we frankly haven't seen in a decade-plus," Feygin said. "We've surpassed the economics that the industry saw post the Fukushima tragedy in March 2011, and that's happened in the shoulder period."* It's a public stance as to a more bullish LNG outlook

<u>But we still see major LNG suppliers like Australia hinting but not outright saying that LNG supply gap is coming sooner.</u> We have to believe Australia will be unveiling a sooner LNG supply gap in their September forecast. On June 28, we tweeted [LINK] on Australia's Resources and Energy Quarterly released on Monday [LINK] because there was a major change to their LNG outlook versus their March forecast. We tweeted "*#LNGSupplyGap. AU June fcast now sees #LNG mkt tighten post 2023 vs Mar fcast excess supply thru 2026. Why? $TOT Mozambique delays. See below SAF Apr 28 blog. Means brownfield LNG FID needed ie. like #LNGCanada Phase 2. #OOTT #NatGas".* Australia no longer sees supply exceeding demand thru 2026. In their March forecast, Australia said "*Nonetheless, given the large scale expansion of global LNG capacity in recent years, demand is expected to remain short of total supply throughout the projection period."* Note this is thru 2026 ie. a LNG supply surplus thru 2026. But on June 28, Australia changed that LNG outlook and now says the LNG market may tighten beyond 2023. Interestingly, the June forecast only goes to 2023 and not to 2026 as in March. Hmmm! On Monday, they said "*Given the large scale expansion of global LNG capacity in recent years, import demand is expected to remain short of export capacity throughout the outlook period. Beyond 2023, the global LNG market may tighten, due to the April 2021 decision to indefinitely suspend the Mozambique LNG project, in response to rising security issues. This project has an annual nameplate capacity of 13 million tonnes, and was previously expected to start exporting LNG in 2024*." 13 million tonnes is 1.7 bcf/d so they are only referring to Total Mozambique LNG Phase 1. So no surprise the change is Mozambique LNG driven but we have to believe the reason why they cut their forecast off this time at 2023 is that they are looking at trying to figure out what to forecast beyond 2023 in addition to Total Phase 1. And, importantly, we believe they will be changing their LNG forecast for more than Mozambique ie. India

demand that we highlight later in the blog. They didn't say anything else specific on Mozambique but, surely they have to also be delaying the follow on Total Phase 2 of 1.3 bcf/d and Exxon Rozuma Phase 1 of 2.0 bcf/d.

Australia's LNG Outlook: March 2021 vs June 2021 Forecasts

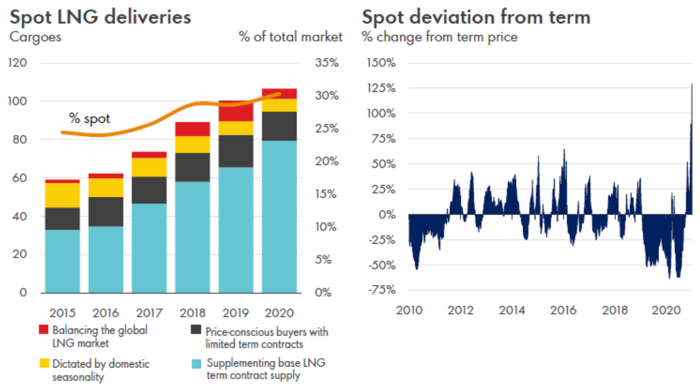


Source: Australia Resources and Energy Quarterly

Clearly Asian LNG buyers did the math, saw the new LNG supply gap and were working the phones in March/April/May trying to lock up long term supply. We wrote extensively on the Total Mozambique LNG situation before the April 26 force majeure as it was obvious that delays were coming to a project counted on for first LNG in 2024. Total had shut down Phase 1 development in December for 3 months due to the violence and security risks. It restarted development on Wed March 24, violence/attacks immediately resumed for 3 consecutive days, and then Total suspended development on Sat March 27. That's why no one should have been surprised by the April 26 force majeure. Asian LNG buyers were also seeing this and could easily do the same math we were doing and saw a bigger and sooner LNG supply gap. They were clearly working the phones with a new priority to lock up long term LNG supply. Major long term deals don't happen overnight, so it makes sense that we started to see these new Asian long term LNG deals start at the end of June.

A big pivot from trying to renegotiate down long term LNG deals or being happy to let long term contracts expire and replace with spot/short term LNG deals. This is a major pivot or abrupt turn on the Asian LNG buyers contracting strategy for the 2020s. There is the natural reduction of long term contracts as contracts reach their term. But with the weakness in LNG prices in 2019 and 2020, Asian LNG buyers weren't trying to extend long term contracts, rather, the push was to try to renegotiate down its long term LNG deals. The reason was clear, as spot prices for LNG were way less than long term contract prices. And this led to their LNG contracting strategy – move to increase the proportion of spot LNG deliveries out of total LNG deliveries. Shell's LNG Outlook 2021 was on Feb 25, 2021 and included the below graphs. The spot LNG price derivation from long term prices in 2019 and 2020 made sense for Asian LNG buyers to try to change their contract mix. Yesterday, Maeil Business News Korea reported on the new Qatar/Kogas long term LNG deal with its report "*Korea may face LNG supply cliff or pay hefty price after long-term supplies run out*" [LINK], which highlighted this very concept – Korea wasn't worried about trying to extend expiring long term LNG contracts. Maeil wrote "*Seoul in 2019 secured a long-term LNG supply contract with the U.S. for annual 15.8 million tons over a 15-year period. But even with the latest two LNG supply contracts, the Korean government needs extra 6 million tons or more of LNG supplies to keep up the current power pipeline. By 2024, Korea's long-term supply contracts for 9 million tons of LNG will expire - 4.92 million tons on contract with Qatar and 4.06 million tons from Oman, according to a government official who asked to be unnamed.*"

Spot LNG deliveries and Spot deviation from term price



Source: Shell LNG Outlook 2021 on Feb 25, 2021

Asian LNG buyers moving to long term LNG deals provide financing capacity for brownfield LNG FIDs. We believe this abrupt change and return to long term LNG deals is even more important to LNG suppliers who want to FID new projects. The big LNG players like Shell can FID new LNG supply without new long term contracts as they can build into their supply options to fill their portfolio of LNG contracts. But that doesn't mean the big players don't want long term LNG supply deals, as having long term LNG contracts provide better financing capacity for any LNG supplier. It takes big capex for LNG supply and long term deals make the financing easier.

Four Asian buyer long term LNG deals in the last week. It was pretty hard to miss a busy week for reports of new Asian LNG buyer long term LNG deals. There were two deals from Qatar Petroleum, one from Petronas and one from BP. The timing fits, it's about 3 months after Total Mozambique LNG problems became crystal clear. And as noted later, there are indicators that more Asian buyer LNG deals are coming.

> Petronas/CNOOC is 10 yr supply deal for 0.3 bcf/d. On July 7, we tweeted [LINK] on the confirmation of a big positive to Cdn natural gas with the Petronas announcement [LINK] of a new 10 year LNG supply deal for 0.3 bcf/d with China's CNOOC. The deal also has special significance to Canada. (i) Petronas said "*This long-term supply agreement also includes supply from LNG Canada when the facility commences its operations by middle of the decade*". This is a reminder of the big positive to Cdn natural gas in the next 3 to 4 years – the start up of LNG Canada Phase 1 is ~1.8 bcf/d capacity. This is natural gas that will no longer be moving south to the US or east to eastern Canada, instead it will be going to Asia. This will provide a benefit for all Western Canada natural gas. (ii) First ever AECO linked LNG deal. It's a pretty significant event for a long term Asia LNG deal to now have an AECO link. Petronas wrote "*The deal is for 2.2 million tonnes per annum (MTPA) for a 10-year period, indexed to a combination of the Brent and Alberta Energy Company (AECO) indices. The term deal between PETRONAS and CNOOC is valued at approximately USD 7 billion over ten years.*" 2.2 MTPA is 0.3 bcf/d. (iii) Reminds of LNG Canada's competitive advantage for low greenhouse gas emissions. Petronas said "*Once ready for operations, the LNG Canada project paves the way for PETRONAS to supply low greenhouse gas (GHG) emission LNG to the key demand markets in Asia.*"
>
> Qatar Petroleum/CPC (Taiwan) is 15 yr supply deal for 0.16 bcf/d. Pre Covid, Qatar was getting pressured to renegotiate lower its long term LNG contract prices. Now, it's signing a 15 year deal. On July 9, they entered in a new small long term LNG sales deal [LINK], a 15-yr LNG Sale and Purchase Agreement with CPC Corporation in Taiwan to supply it ~0.60 bcf/d of LNG. LNG deliveries are set to begin in January 2022. H.E. Minister for Energy Affairs & CEO of Qatar Petroleum Al-Kaabi said *"We are pleased to enter into this long term LNG SPA, which is another milestone in our relationship with CPC, which dates back to almost three decades. We look forward to commencing deliveries under this SPA and to continuing our supplies as a trusted and reliable global LNG provider."* The pricing was reported to be vs a basket of crudes.

BP/Guangzhou Gas, a 12-yr supply deal for 0.13 bcf/d. On July 9, there was a small long term LNG supply deal with BP and Guangzhou Gas (China). Argus reported [LINK] BP had signed a 12 year LNG supply deal with Guangzhou Gas (GG), a Chinese city's gas distributor, which starts in 2022. The contract prices are to be linked to an index of international crude prices. Although GG typically gets its LNG from the spot market, it used a tender in late April for ~0.13 bcf/d starting in 2022. BP's announcement looks to be for most of the tender, so it's a small deal. But it fit into the trend this week of seeing long term LNG supply deals to Asia. This was intended to secure deliveries to the firm's Xiaohudao import terminal which will become operational in August 2022.

Qatar/Korea Gas is a 20-yr deal to supply 0.25 bcf/d. On Monday, Reuters reported [LINK] "*South Korea's energy ministry said on Monday it had signed a 20-year liquefied natural gas (LNG) supply agreement with Qatar for the next 20 years starting in 2025. South Korea's state-run Korea Gas Corp (036460.KS) will buy 2 million tonnes of LNG annually from Qatar Petroleum".* There was no disclosure of pricing.

More Asian buyer long term LNG deals (ie. India) will be coming. There are going to be more Asian buyer long term LNG deals coming soon. Our July 11, 2021 Energy Tidbits highlighted how India's new petroleum minister Hardeep Singh Puri (appointed July 8) hit the ground running with what looks to be a priority to set the stage for more India long term LNG deals with Qatar. On July 10, we retweeted [LINK] "*New India Petroleum Minister hits ground running. What else w/ Qatar but #LNG. Must be #Puri setting stage for long term LNG supply deal(s). Fits sea change of buyers seeing #LNGSupplyGap (see SAF Apr 28 blog http://safgroup.ca) & wanting to tie up LNG supply. #OOTT".* It's hard to see any other conclusion after seeing what we call a sea change in LNG buyer mentality with a number of long term LNG deals this week. Puri tweeted [LINK] "*Discussed ways of further strengthening mutual cooperation between our two countries in the hydrocarbon sector during a warm courtesy call with Qatar's Minister of State for Energy Affairs who is also the President & CEO of @qatarpetroleum HE Saad Sherida Al-Kaabi".* As noted above, we believe there is a sea change in LNG markets that was driven by the delay in 5 bcf/d of LNG supply from Mozambique (Total Phase 1 & Phase 2, and Exxon Rozuma Phase 1) that was counted on all LNG supply projections for the 2020s. Puri's tweet seems to be him setting the stage for India long term LNG supply deals with Qatar.

Supermajors are aggressively competing to commit 30+ year capital to Qatar's LNG expansion despite stated goal to reduce fossil fuels production. It's not just Asian LNG buyers who are now once again committing long term capital to securing LNG supply, it's also supermajors all bidding to be able to commit big capex to part of Qatar Petroleum's 4.3 bcf/d LNG expansion. Qatar Petroleum received a lot of headlines following the their June 23 announcement on its LNG expansion [LINK] on how they received bids for double the equity being offered. And there were multiple reports that these are on much tougher terms for Qatar's partners. Qatar Petroleum CEO Saad Sherida Al-Kaabi specifically noted that, among the bidders, were Shell, Total and Exxon. Shell and Total have two of the most ambitious plans to reduce fossil fuels production in the 2020's, yet are competing to allocate long term capital to increase fossil fuels production. And Shell and Total are also two of the global LNG supply leaders. It has to be because they are seeing a bigger and sooner LNG supply gap.

Remember Qatar's has a massive expansion but India alone needs 3x the Qatar expansion LNG capacity. In addition to the competition to be Qatar Petroleum's partners, we remind that, while this is a massive 4.3 bcf/d LNG expansion, India alone sees its LNG import growing by ~13 bcf/d to 2030. The Qatar announcement reminded they see a LNG supply gap and continued high LNG prices. We had a 3 part tweet. (i) First, we highlighted [LINK] "*1/3. #LNGSupplyGap coming. big support for @qatarpetroleum expansion to add 4.3 bcf/d LNG. but also say "there is a lack of investments that could cause a significant shortage in gas between 2025-2030" #NatGas #LNG".* This is after QPC accounts for their big LNG expansion. The QPC release said "*However, His Excellency Al-Kaabi voiced concern that during the global discussion on energy transition, there is a lack of investment in oil and gas projects, which could drive energy prices higher by stating that "while gas and LNG are important for the energy transition, there is a lack of investments that could cause a significant shortage in gas between 2025-2030, which in turn could cause a spike in the gas market."* (ii) Second, this is a big 4.3 bcf/d expansion, but India alone has 3x the increase in LNG import demand. We tweeted [LINK] "*2/3. Adding 4.3 bcf/d is big, but dwarfed by items like India. #Petronet gave 1st specific forecast for what it means if #NatGas is to be 15%*

of energy mix by 2030 - India will need to increase #LNG imports by ~13 bcf/d. See SAF Group June 20 Energy Tidbits memo." (iii) Third, Qatar's supply gap warning is driven by the lack of investments in LNG supply. We agree, but note that the lack of investment is in great part due to the delays in both projects under construction and in FIDs that were supposed to be done in 2019. We tweeted [LINK] "3*/3. #LNGSupplyGap is delay driven. $TOT Mozambique Phase 1 delay has chain effect, backs up 5 bcf/d. See SAF Group Apr 28 blog Multiple Brownfield LNG FIDs Now Needed To Fill New #LNG Supply Gap From Mozambique Chaos? How About LNG Canada Phase 2? #NatGas*."

Seems like many missed India's first specific LNG forecast to 2030. Our June 20, 2021 Energy Tidbits memo highlighted the first India forecast that we have seen to estimate the required growth in natural gas consumption and LNG imports if India is to meet its target for natural gas to be 15% of its energy mix by 2030. India will need to increase LNG imports by ~13 bcf/d or 3 times the size of the Qatar LNG expansion. Our June 6, 2021 Energy Tidbits noted the June 4 tweet from India's Energy Minister Dharmendra Pradhan [LINK] reinforcing the 15% goal "*We are rapidly deploying natural gas in our energy mix with the aim to increase the share of natural gas from the current 6% to 15% by 2030."* But last week, Petronet CEO AK Singh gave a specific forecast. Reuters report "*LNG's share of Indian gas demand to rise to 70% by 2030: Petronet CEO"* [LINK] included Petronet's forecast if India is to hit its target for natural gas to be 15% of energy mix by 2030. Singh forecasts India's natural gas consumption would increase from current 5.5 bcf/d to 22.6 bcf/d in 2030. And LNG shares would increase from 50% to 70% of natural gas consumption ie. an increase in LNG imports of ~13 bcf/d from just under 3 bcf/d to 15.8 bcf/d in 2030. Singh did not specifically note his assumption for India's natural gas production, but we can back into the assumption that India natural gas production grows from just under 3 bcf/d to 6.8 bcf/d. It was good to finally see India come out with a specific forecast for 2030 natural gas consumption and LNG imports if India is to get natural gas to 15% of its energy mix in 2030. Petronet's Singh forecasts India natural gas consumption to increase from 5.5 bcf/d to 22.6 bcf/d in 2030. This forecast is pretty close to our forecast in our Oct 23, 2019 blog "*Finally, Some Visibility That India Is Moving Towards Its Target For Natural Gas To Be 15% Of Its Energy Mix By 2030*". Here part of what we wrote in Oct 2019. "*It's taken a year longer than we expected, but we are finally getting visibility that India is taking significant steps towards India's goal to have natural gas be 15% of its energy mix by 2030. On Wednesday, we posted a SAF blog [LINK] "Finally, Some Visibility That India Is Moving Towards Its Target For Natural Gas To Be 15% Of Its Energy Mix By 2030".* Our 2019 blog estimate was for India natural gas demand to be 24.0 bcf/d in 2030 (vs Singh's 22.6 bcf/d) and for LNG import growth of +18.4 bcf/d to 2030 (vs Singh's +13 bcf/d). The difference in LNG would be due to our Oct 2019 forecast higher natural gas consumption by 1.4 bcf/d plus Singh forecasting India natural gas production +4 bcf/d to 2030. Note India production peaked at 4.6 bcf/d in 2010.

Bigger, nearer LNG supply gap + Asian buyers moving to long term LNG deals = LNG players forced to at least look at what brownfield LNG projects they could advance and move to FID. All we have seen since our April 28 blog is more validation of the bigger, nearer LNG supply gap. And now market participants (Asian LNG buyers) are reacting to the new data by locking up long term supply. Cheniere noted how the pickup in commercial engagement means they "*are quite optimistic over the coming 12-18 months to make a substantial dent in that Stage 3 commercialization."* Cheniere can't be the only LNG supplier having new commercial discussions. It's why we believe the Mozambique delays + Asian LNG buyers moving to long term deals will effectively force major LNG players to look to see if there are brownfield LNG projects they should look to advance. Prior to March/April, no one would think Shell or other major LNG players would be considering any new LNG FIDs in 2021. Covid forced all the big companies into capital reduction mode and debt reduction mode. But Brent oil is now solidly over $70, and LNG prices are over $13 this summer and the world's economic and oil and gas demand outlook are increasing with vaccinations. And we are starting to see companies move to increasing capex with the higher cash flows. The theme in Q3 reporting is going to be record or near record oil and gas cash flows, reduced debt levels and increasing returns to shareholders. And unless new mutations prevent vaccinations from returning the world to normal, we suspect that major LNG players, like other oil and gas companies, will be looking to increase capex as they approve 2022 budgets. The outlook for the future has changed dramatically in the last 8 months. The question facing major LNG players like Shell is should they look to FID new LNG brownfield projects in the face of an increasing LNG supply gap that is going to hit faster and harder and Asian LNG buyers prepared to do long term deals. We expect these decisions to be looked at before the end of 2021 for 2022 capex budget/releases. One wildcard that could force these decisions sooner is the already stressed out global supply chain. We have to believe that discussion there will be pressure for more Asian LNG buyer long term deals sooner than later.

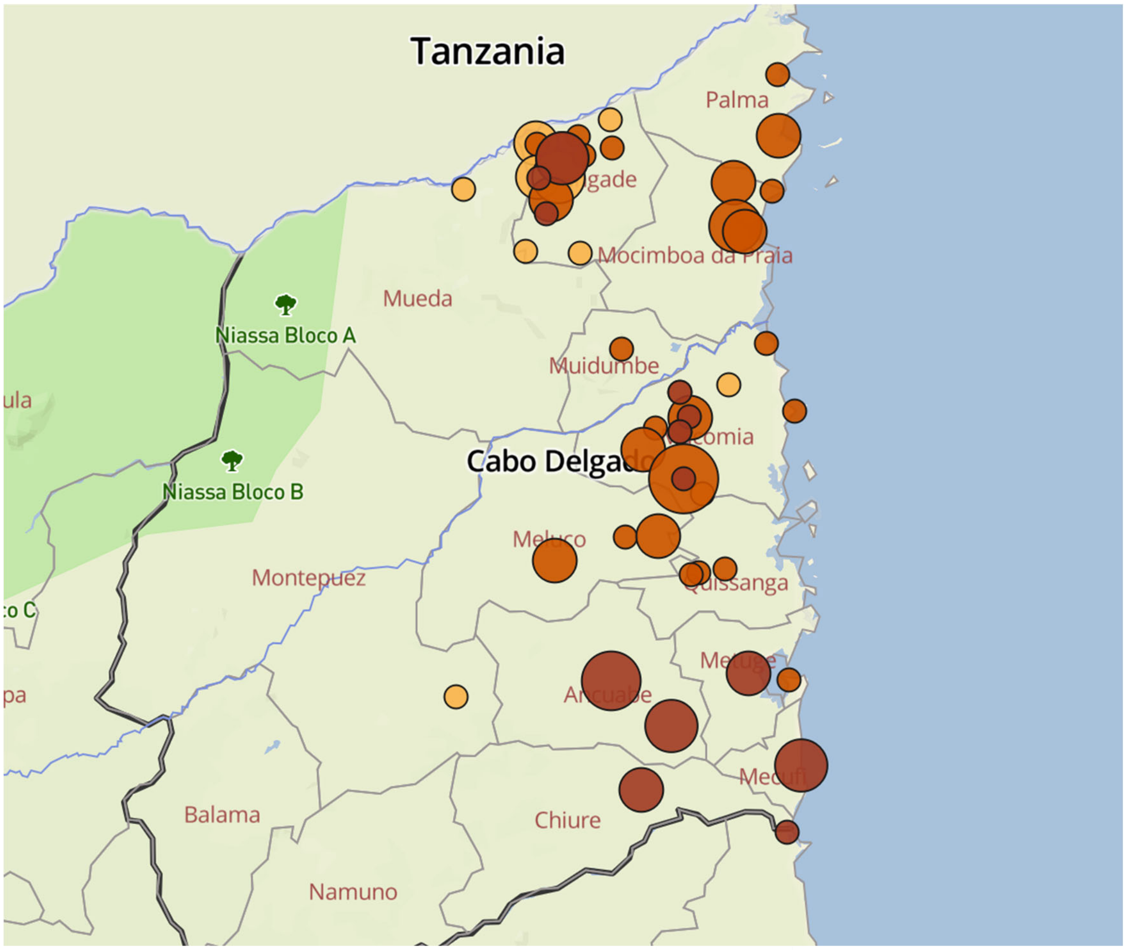
For Canada, does the increasing LNG supply gap provide the opportunity to at least consider a LNG Canada Phase 2 FID over the next 6 months? Our view on Shell and other LNG players is unchanged since our April 28 blog. Shell is no different than any other major LNG supplier in always knowing the market and that the oil and gas outlook is much stronger than 9 months ago. Even 3 months post our April 28 blog, we haven't heard any significant talks on how major LNG players will be looking at FID for new brownfield LNG projects. We don't have any inside contacts at Shell or LNG Canada, but that is no different than when we looked at the LNG markets in September 2017 and saw the potential for Shell to FID LNG Canada in 2018. We posted a September 20, 2017 blog *"China's Plan To Increase Natural Gas To 10% Of Its Energy Mix Is A Global Game Changer Including For BC LNG"* [LINK]. Last time, it was a demand driven supply gap, this time, it's a supply driven supply gap. We have to believe any major LNG player, including Shell, will be at least looking at their brownfield LNG project list and seeing if they should look to advance FID later in 2021. Shell has LNG Canada Phase 2, which would add 2 additional trains or approx. 1.8 bcf/d. And an advantage to an FID would be that Shell would be able to commit to its existing contractors and fabricators for a continuous construction cycle following on LNG Canada Phase 1 ie. to help keep a lid on capital costs. We believe maintaining a continuous construction cycle is even more important given the stressed global supply chain. No one is talking about the need for these new brownfield LNG projects, but, unless some major change in views happen, we believe its inevitable that these brownfield LNG FID internal discussions will be happening in H2/21. Especially since the oil and gas price outlook is much stronger than it was in the fall and companies will be looking to increase capex in 2022 budgets.

A LNG Canada Phase 2 would be a big plus to Cdn natural gas. LNG Canada Phase 1 is a material natural gas development as its 1.8 bcf/d capacity represents approx. 20 to 25% of Cdn gas export volumes to the US. The EIA data shows US pipeline imports of Cdn natural gas as 6.83 bcf/d in 2020, 7.36 bcf/d in 2019, 7.70 bcf/d in 2018, 8.89 bcf/d in 2017, 7.97 bcf/d in 2016, 7.19 bcf/d in 2015 and 7.22 bcf/d in 2014. A LNG Canada Phase 2 FID would be a huge plus for Cdn natural gas. It would allow another ~1.8 bcf/d of Cdn natural gas to be priced against pricing points other than Henry Hub. And it would provide demand offset versus Trudeau if he moves to make electricity "emissions free" and not his prior "net zero emissions". Mozambique has been a game changer to LNG outlook creating a bigger and sooner LNG supply gap. And with a stronger tone to oil and natural gas prices in 2021, the LNG supply gap will at least provide the opportunity for Shell to consider FID for its brownfield LNG Canada Phase 2 and provide big support to Cdn natural gas for the back half of the 2020s. And perhaps if LNG Canada is exporting 3.6 bcf/d from two phases, it could help flip Cdn natural gas to a premium vs US natural gas especially if Biden is successful in reducing US domestic natural gas consumption for electricity. The next six months will be very interesting to watch for LNG markets and Cdn natural gas valuations. Imagine the future value of Cdn natural gas is there was visibility for 3.6 bcf/d of Western Canada natural gas to be exported to Asia.

https://www.caboligado.com/reports/cabo-ligado-weekly-13-19-june-2022

Cabo Ligado Weekly: 13-19 June 2022

Jun 22, 2022



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By the Numbers: Cabo Delgado, October 2017-June 2022 [1]

- **Total number of organized political violence events**: 1,300
- **Total number of reported fatalities from organized political violence**: 4,051
- **Total number of reported fatalities from organized violence targeting civilians**: 1,752

All ACLED data are available for download via the data export tool and curated data files.

Situation Summary

Attacks on civilians and security forces intensified simultaneously across Ancuabe, Nangade, Chiure, and Mecufi districts last week. Insurgents even launched an incursion across the Lúrio river to strike into Nampula province for the first time, marking the first attack in that province and the insurgency's first outside Cabo Delgado since its short-lived offensive into Niassa in December 2021.

Ancuabe was the scene of some of the most intense violence this week, suffering three confirmed attacks in just two days in which at least five people were killed and a large number of homes destroyed. On 18 June, at least two members of the security forces and possibly two civilians were killed in an attack in Nikuita village, approximately 8 km north of Ancuabe. A Mahindra jeep carrying forces said to be from the police force's Rapid Intervention Unit (UIR) was attacked on its way to the farm of influential Frelimo veteran and former Minister for National Defense, Alberto Chipande, killing two of the officers inside and wounding two others, according to local reports.

Islamic State (IS) claimed via social media channels on 19 June to have attacked Nikuita village and clashed with security forces who tried to intervene, killing two of them. The next day, IS published a photo report allegedly of the incident, showing the bodies of two men in military fatigues and a burning car.

According to a Lusa report, insurgents killed two more people in the village, including a child, before moving onto Nanoa village, less than 5 km from Ancuabe district headquarters. Local reports suggested that insurgents arrived in the village at night on 18 June and promptly began setting fire to people's homes. NASA's Fire Information for Resource Management System (FIRMS), which monitors fires using satellite observations, detected fires in Nanoa village that night. IS published a statement on 19 June claiming responsibility for beheading a civilian and burning a church along with several homes in Nanoa. One source suggests that another civilian died in the fires.

The next day, insurgents attacked the village of Macaia, 6 km northeast of Ancuabe, burning houses and killing up to two civilians. NASA FIRMS detected a cluster of fires over populated areas of Macaia late on 19 June. IS claimed to have beheaded two civilians and burned down two churches in Macaia that night.

Killings also took place around Nangade district headquarters during a visit from President Filipe Nyusi. Carta reported that on 16 June, a group of 10 insurgents disturbed men in a cashew grove, killing four of them, before moving about 20 km south to Ngangolo village, where they kidnapped women working in the fields. A local source also reported that insurgents killed four people in the fields around the village of Lissulo before moving to Ngangolo and killing at least one more person and capturing another six. Mediafax reported that Local Forces based in Ntamba Administrative Post made their way to Ngangolo and engaged with the insurgents, killing seven. IS posted a statement three days later claiming to have beheaded "a number of Christians" and burned two churches in Ngangolo.

At the time of the attacks, Nyusi was visiting the district as part of a tour of Cabo Delgado on which he inspected troops of the Southern African Development Community Mission in Mozambique (SAMIM) and met with senior officers. Tanzanian and Lesotho troops, who represent SAMIM in Nangade, were reportedly very slow to respond to the attacks, frustrating the local population, according to a local source.

IS published a photo report on 20 June, claiming to depict its recent campaign in Nangade. The report features pictures of burning buildings, insurgents posing with IS flags and two beheaded bodies, but no specific location is provided.

Insurgent activity has continued in Chiure and appears to have spilled across the district border into Mecufi, which this week experienced its first attack. On 13 June, Micolene in Chiure was reported to be in flames and the next day IS claimed to have attacked the village, beheading two civilians and burning a church.

On 14 June, Mancuaia in Mecufi district, approximately 20 km west of Mecufi district headquarters and 35 km south of Pemba, was reported to be under attack. It is not yet known if there were any casualties, but many residents hid in the bush while others tried to find transport to escape. Bus fares from Mecufi to Pemba have apparently been hiked from 150-200 meticais to 500 meticais.

Nampula suffered its first attack since the start of the conflict three days later, when insurgents attacked the village of Lúrio in Memba district and beheaded a civilian, according to IS social media. A local source confirmed there was an attack while Pinnacle News, an online news service, reported that insurgents looted food and shot a local trader in the arm, who is recovering in hospital. The police spokesperson in Nampula, Zacarias Nacute, gave a wooly half-denial that the incident had taken place. Nampula-based Ikweli newspaper later reported residents of Lúrio saying that the incident was an operation to help recruiters for the insurgency who had moved to the town to get back across the Lúrio river and into Chiure district.

The near relentless frequency of attacks across several districts suggests a degree of strategic coordination between insurgent groups, forcing the security forces onto a reactive footing. It is not clear if the insurgency's supply lines are robust enough to sustain an extended offensive, if, as some believe, the insurgents have moved south in flight from combined Rwandan and Mozambican military operations in Macomia district. Nevertheless, security forces in the southern districts are stretched, rushing from one incident to the next. For the moment at least, the insurgents have some momentum.

Weekly Focus: Insurgents Inspire Fear, State Intelligence Fails

The rapid expansion of the insurgency in recent weeks into the province's southern districts, and beyond into Nampula, raises questions about insurgency tactics, and counterterrorism actions equally. The insurgents' rapid and relatively comprehensive communication of their attacks in recent weeks, and their apparent freedom of movement in the relatively densely populated south in particular, suggest this development may have some resilience. The attacks have placed humanitarian operations too under strain.

IS has released six photo reports so far this month. They are notable for two reasons. Firstly, they come from across the province. Two are from Nangade and Macomia, while the remaining three feature incidents in Ancuabe and Meluco. The spread of locations indicates that cells across the province remain in touch with the coordinator of the IS communications channel, said by the US State Department to be Bonomade Machude Omar. Even as the insurgency has been severely disrupted by the arrival of intervention forces last year, communication and planning mechanisms have not been destroyed by the intervention.

Secondly, of the six photo reports, five highlight victims of beheading. The photographs, likely curated by the IS Central Media Bureau from a number of submissions, circulate widely in Mozambique. The stories of the victims will circulate through networks of family, friends, and colleagues. The result is a clear statement of power to already vulnerable populations. This communication of the insurgents' mercilessness is repeated on the ground. Beheadings have characterized attacks in Ancuabe in particular. Mediafax, a Cabo Ligado partner, reported this week how one woman in Mecufi district was psychologically tortured by insurgents who presented to her in a bag the head of a man said to be her husband.

Despite this aggressive posture towards the population, the insurgents appear to have effective intelligence networks in areas in which they have not been active before. Security services are responding to attacks according to sources on the ground, but are not in a position to prevent them.

Attacks on civilians and incursions at sites on main roads such as Ntutupue, Chai, and Massassi indicate that they have intelligence on sites of military and police bases, and their basic movements and, with the exception of the 18 June attack on the UIR jeep at Nikuita, are successfully avoiding direct engagement.

This should not be a surprise. The insurgency is understood to have developed significant networks of informers across Cabo Delgado and in Nampula. Just last week, Minister of the Interior Arsenia Massingue, speaking at provincial police headquarters, pointed the finger at members of the Defense and Security Forces (FDS), accusing them of passing on information to the insurgents. As informants in the past have been paid, we can assume that intelligence networks are still in place, and that financing networks must also remain.

The flipside of course is that the security forces have weak intelligence about the insurgents' movements into these new districts, given the spread and frequency of recent attacks. This issue was also addressed by Minister Massingue, who said that failure to interact with communities allowed insurgents to settle within communities, and "plan their incursions while they are there." In demonstrating that some in the FDS are "corrupt, undisciplined, lazy, and failing at work," she highlighted the challenge of security sector reform that has been pointed out in recent weeks by Minister of National Defense Cristóvão Chume. The advances made in the southern districts further prove the urgency of that reform.

The deterioration in security has displaced over 20,000 since the first attack in Ancuabe over two weeks ago. As civilian life is disrupted, so are ongoing humanitarian operations. By attacking where they have, insurgents have made the primary routes out of Pemba, west to Montepuez and south to Nampula, extremely insecure. While military escorts are not required on those routes since last week, according to a source, United Nations road operations are still suspended, while non-governmental organizations have restricted movements. If this continues, humanitarian organizations may need to use their available air assets for movement of personnel and small air drops.

Government Response

President Filipe Nyusi landed in Pemba on Wednesday last week for a working visit to Cabo Delgado, which included the districts of Ancuabe, Macomia, Nangade, and Mueda. Nyusi started with a meeting on 16 June in Pemba with senior officials of the Mozambican army, SAMIM, and Rwanda to learn about the course of operations in the northern operational theater. He then headed to the neighboring district of Ancuabe.

Speaking publicly in Ancuabe town, Nyusi said that the insurgent incursions in the area were the result of "heavy fire" and intensified pursuits further north carried out by the joint forces of Mozambique, Rwanda, and SAMIM. He dismissed the insurgent threat in the south of Cabo Delgado, saying that the insurgents are weakened and bewildered, and that the attacks in Ancuabe are mainly aimed at searching for food. While also at Ancuabe, Nyusi assured the population that efforts by FDS are underway to re-establish security in the area. Privately, sources say, he was furious with the shift south, and the failure to prevent it.

On the same day, the Governor of Cabo Delgado, Valige Tauabo, was in Mecufi where he reiterated the Mozambican president's stance that insurgent incursions south of Cabo Delgado are a result of the progress of the FDS and their allies in counterinsurgency efforts. Valige urged the population not to hastily abandon their villages because of what he called "the stampede of terrorists in the province."

The pressure of displaced people fleeing the attacks in Ancuabe is already being felt in Metuge district. According to the officials in charge of the accommodation centers in Ntokota and Tratara, they are increasingly receiving displaced people fleeing Ancuabe. These centers, they say, have neither adequate shelter nor enough food for these new arrivals. This was also highlighted by the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). On 16 June, they indicated that only 10% of the 17,000 people displaced by attacks in Ancuabe and Chiure districts by that day had received food support and shelter. The number has since exceeded 20,000.

Australian mining company, Syrah Resources, announced in a statement it had lifted precautionary measures to limit personnel and logistics to and from its sites in the mining area, which it had imposed following insurgent attacks in Ancuabe. The company further reported that operations were not affected by the suspension. Triton Minerals, whose early stage mine project was directly attacked, finally managed to retrieve the bodies of two staff members who were beheaded by insurgents. The retrieval was delayed by waiting for an escort from the FDS — who, after the deed was done, left frustrated at not having been paid by the company, a local source said.

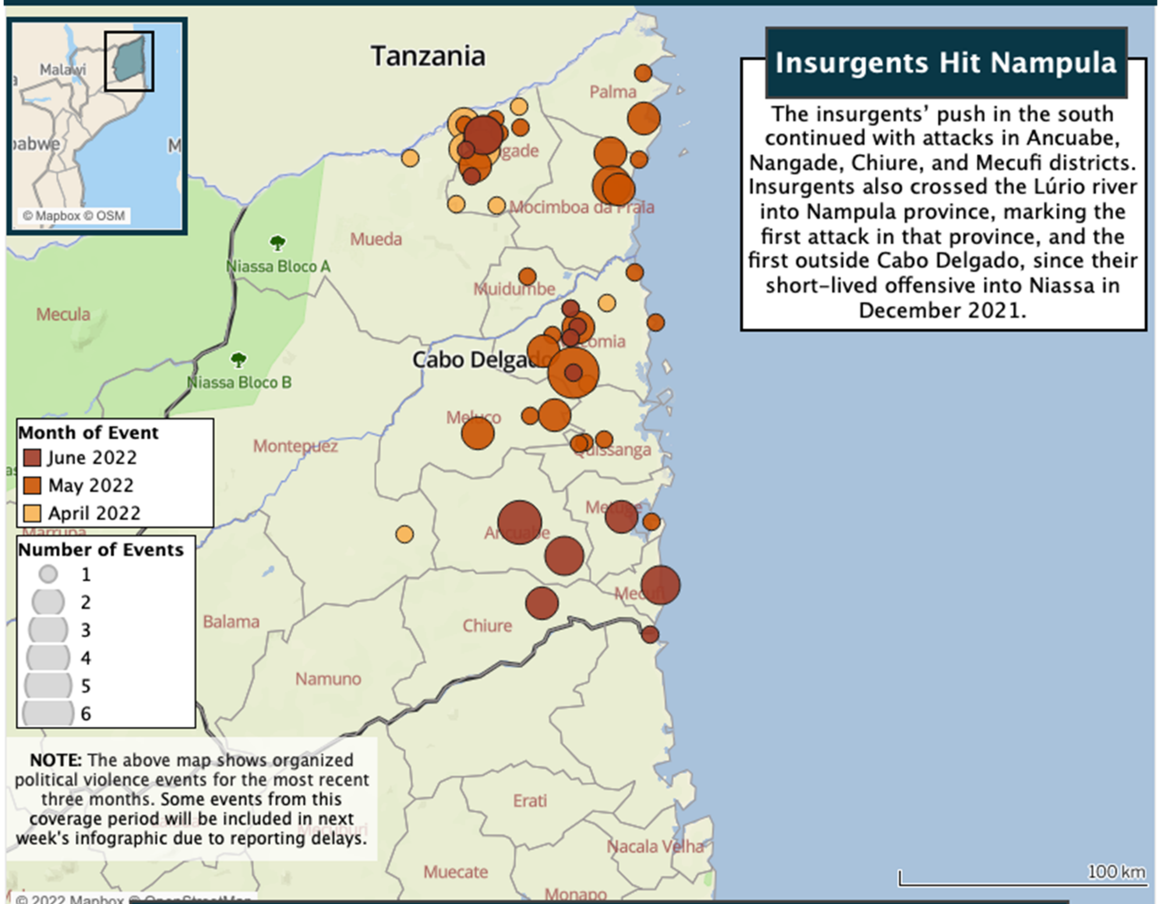
IS noted the impact the insurgents are having on investment projects in the province in last week's edition of its weekly publication, Al Naba. A report on incidents from "Mozambique Province" referred to the "crusader Australian company Triton" in its account of the killings. It also noted the large number of "crusader companies" in the province, and reported the evacuation of staff of the Portuguese electrical engineering contractor Efacec on 7 June from the site of a 41 megawatt solar power project at Metoro. The project is implemented by Neoen of France in collaboration with Electricidade de Moçambique, with partial funding from the government of France.

US Under Secretary of State for Political Affairs Victoria Nuland stopped in Mozambique as part of an Africa tour last week. Her focus was on political engagements to roll out the Strategy to Prevent Conflict and Promote Stability. The multi-country 10-year program, which includes Mozambique, was announced in April. During her visit, Nuland confirmed a $29.5 million donation to the World Food Program (WFP) to support around 950,000 people displaced by conflict in Cabo Delgado. The US support will serve as an oxygen balloon for the WFP, which was in risk of suspending humanitarian assistance in August due to lack of funding.

Ligado Weekly #102

Insurgents Hit Nampula

The insurgents' push in the south continued with attacks in Ancuabe, Nangade, Chiure, and Mecufi districts. Insurgents also crossed the Lúrio river into Nampula province, marking the first attack in that province, and the first outside Cabo Delgado, since their short-lived offensive into Niassa in December 2021.



NOTE: The above map shows organized political violence events for the most recent three months. Some events from this coverage period will be included in next week's infographic due to reporting delays.

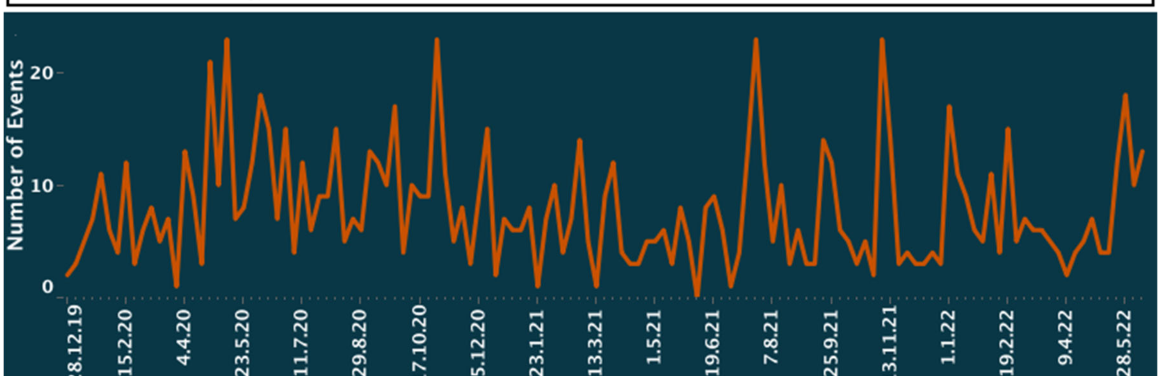
By the Numbers: Cabo Delgado (1 October 2017 - 17 June 2022)

Total number of organized political violence events: **1,300**

Total number of reported fatalities from organized political violence: **4,051**

Total number of reported fatalities from organized violence targeting civilians: **1,752**

*Numbers shown here and in the line graph below are for Cabo Delgado province only. See full report and ACLED website for more information about terminology.



Organized Political Violence in Cabo Delgado (1 JAN 2020 - 17 JUN 2022)

https://www2.argusmedia.com/en/news/2344529-seoul-to-suspend-voluntary-coal-curbs-this-summer?backToResults=true

Seoul to suspend voluntary coal curbs this summer

Published date: 24 June 2022

Seoul plans to suspend voluntary coal plant restrictions during July-August this year in a bid to reduce LNG use during the peak demand period, a source familiar with the matter told *Argus*.

This suggests that Kepco's coal-fired fleet could operate closer to available capacity, which is set to average 27.8GW in July-August, based on the latest maintenance schedule. Assuming that Kepco's coal-fired units are loaded at 93pc — an average load in July-August 2018, before any coal-fired plant restriction measure was introduced — the state-owned company's coal-fired output could increase to 25.9GW in July-August this year, up from 24.5GW average output a year earlier.

Coal-fired generation from private utilities could increase to 4.8GW average during the two-month period from 3.7GW, based on flat year-on-year load factor.

Stronger-than-expected coal-fired generation in South Korea could help utilities to reduce LNG use during the peak cooling season, with nuclear output also scheduled to average 20.9GW during the two-month period, up from 16.9GW. Based on *Argus* analysis, South Korea's combined nuclear and coal-fired output could increase by around 6.5GW in July-August, which is equivalent to around 1.26mn t of LNG or 17-18 standard-sized LNG cargoes.

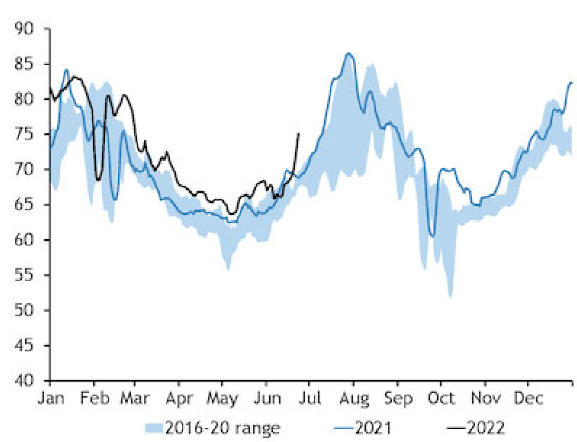
But robust power demand amid hotter weather across the northern hemisphere indicates that LNG demand will not be reduced by as much. South Korea's power demand remained above the last year's level by 5pc/month during January-April, while daily peak power demand data shows that power demand has remained above the seasonal range so far this year *(see chart)*.

Kepco's coal-fired units were asked by the government last year to voluntarily reduce generation during April-November, when the units are not affected by the seasonal coal-fired plant restriction measures typically implemented in December-March. This request was aided by the low gas prices then, supporting South Korea's gas-fired output reaching 19.8GW in July-August 2021, from 15.9GW a year earlier.

That said, persistent rallies in global LNG prices this year had already prompted Kepco to announce in April that it would limit the voluntary restrictions to weekends this year to reduce gas-fired power generation. Kepco's coal-fired output remained flat on the year at 15.2GW in April, while firmer output from private utilities supported overall coal-fired output rising to 18.6GW from 17.9GW.

By Evelyn Lee

Seven-day avg S Korean peak power demand GW



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June 19, 20222:24 PM MDTLast Updated 4 hours ago

Austria revives coal-fired power option as Russia cuts gas supply

Reuters

VIENNA, June 19 (Reuters) - Austria's government agreed with utility Verbund (VERB.VI) on Sunday to convert a reserve, gas-fired power plant so that it can produce electricity with coal should restricted gas supplies from Russia result in an energy emergency.

The decision, taken by a "small crisis cabinet" led by Chancellor Karl Nehammer, came after neighbouring Germany announced steps to address reduced Russian gas deliveries including increased reliance on coal-fired power plants. read more

The European Union's reliance on Russian gas and the risk that Moscow could cut supplies in retaliation for economic sanctions imposed after its invasion of Ukraine has been a headache for the bloc, prompting it to build up inventories and seek alternative supplies.

Nehammer's office said that majority state-owned utility Verbund had agreed to convert the Mellach power plant in the southern Styria region, which has been shut down but kept on stand-by, for renewed use of coal.

It was Austria's last coal-fired power plant before being converted into a gas-fired plant for use when needed.

"The federal government and the energy group VERBUND have agreed to convert the Mellach (Styria) district heating power plant, which is currently shut down, so that in an emergency it can once again produce electricity from coal (not gas)," Nehammer's office said in a statement.

It added that the government was examining further legal measures to diversify gas supplies with the aim of reducing dependence on Russian supplies.

Russian gas flows to Europe fell short of demand on Friday, coinciding with an early heatwave gripping its south and boosting benchmark prices already lifted by concerns the continent may struggle to build up storage in time for winter. read more

Austria gets 80% of its gas from Russia and since the war in Ukraine it has been scrambling to find alternative suppliers.

Writing by Paul Carrel; Editing by Chizu Nomiyama https://www-bmwk-de.translate.goog/Redaktion/DE/Pressemitteilungen/2022/06/20220619-habeck-wir-starken-die-vorsorge-weiter.html?_x_tr_sl=de&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=wapp

06/19/2022 -**PRESS RELEASE** -energy

Habeck: "We are further strengthening precautions and taking additional measures to reduce gas consumption"

In view of the throttling of gas supplies from Russia, the federal government is taking additional measures to save gas. In this way, the use of gas for power generation and industry will be reduced and storage tanks will be filled.

Federal Economics and Climate Protection Minister Robert Habeck:
"The situation on the gas market has deteriorated in recent days. The missing quantities can still be replaced, and the gas storage tanks are still being filled, albeit at high prices. Security of supply is currently guaranteed. But the situation is serious. We are therefore further strengthening precautions and taking additional measures to reduce gas consumption. This means that gas consumption must continue to fall, so more gas must be stored in storage, otherwise things will get really tight in winter. We will now take the next steps. For months we have been in the process of sharpening tools, creating new ones and removing existing obstacles. We are accelerating the expansion of renewable energies in an unprecedented way, we are pushing through the storage of gas and driving the expansion of LNG terminals and energy efficiency measures. The urgency of these tasks determines our ongoing work. Now we're going to pull out and use another set of tools. We will reduce gas consumption in the electricity sector and in industry and force storage tanks to be filled. Depending on the situation, we will take further measures."

The minister made it clear: "The tense situation and high prices are a direct consequence of Putin's war of aggression against Ukraine. There is no mistake. What's more, it's obviously Putin's strategy to unsettle us, drive up prices and divide us. We won't allow that. We defend ourselves resolutely, precisely and thoughtfully."

Overview of additional measures for less gas consumption:

1. Gas reduction in the electricity sector

In order to reduce gas consumption, less gas is to be used to produce electricity. Instead, coal-fired power plants will have to be used more. The corresponding law on the availability of replacement power plants, which makes this possible, is currently in the parliamentary process and is to be dealt with in the Bundesrat on July 8th and then come into force quickly. At the same time, the Federal Ministry of Economics and Climate Protection (BMWK) is now preparing the necessary ministerial regulation that will activate the gas replacement reserve.

"With the law, we are setting up a gas replacement reserve on demand. And I can already say: We will call off the gas replacement reserve as soon as the law comes into force. That means, to be honest, more coal-fired power plants for a transitional period. That's bitter, but in this situation it's almost necessary to reduce gas consumption. We must and we will do everything we can to store as much gas as possible in summer and autumn. The gas storage tanks must be full in winter. That has top priority, "said Habeck.

With the Replacement Power Plant Availability Act, the gas replacement reserve will be set up for a limited period until March 31, 2024. To this end, power plants that are already available to the electricity system as a reserve are being upgraded in order to be able to return to the market in the short term. In view of the price structure, this means that gas-fired power plants are being squeezed out of the market. Gas contributed around 15 percent to public electricity generation in 2021, but the share is likely to be lower in the first few months of 2022. Measures to reduce gas consumption can increase the power generation capacity by up to 10 GW in a critical gas supply situation, which substantially reduces gas consumption for power generation.

In order to get the replacement power plants up and running, the operators need technical advance notice. Minister Habeck made it clear that the power plant operators should prepare themselves now so that everything is ready for use as soon as possible.

2. Gas auction model to reduce industrial gas

A gas auction model is to be launched in the summer, which will encourage industrial gas consumers to save gas. To this end, the market area manager Trading Hub Europe (THE), the Federal Network Agency (BNetzA) and the BMWK are developing a gas balancing energy product that industrial customers can use together with their suppliers to reduce their consumption in bottleneck situations and make gas available to the market in return for remuneration based purely on the energy price (Demand side management). This creates a mechanism - similar to an auction - that gives industrial gas consumers an incentive to save gas, which in turn can then be used for storage. The model is intended to ensure that as many gas quantities as possible are available for any bottleneck situations in the coming winter.

“This creates an incentive to reduce consumption in industry so that more is available for storage. This is urgently needed. Everything that we consume less helps. Industry is a key factor here,” said Habeck.

3. Strengthening of storage

In order to secure the storage of gas, the federal government will soon make additional KfW credit lines available. This will initially give the Trading Hub Europe THE market area manager the necessary liquidity to buy gas and fill the storage facilities. The loan is secured by a federal guarantee.

About THE : Trading Hub Europe GmbH (THE) is a subsidiary of eleven long-distance gas network operators and operates the German market area as the market area manager. The main tasks of THE are balancing energy management, balancing group management and operation of the virtual trading point. In this way, THE exercises a statutory and legitimized monopoly task and, since the amendment of the Energy Industry Act (EnWG) , has carried out measures to fill gas storage facilities as required.

The core of the revised EnWG , which came into force on April 30, 2022 , is that users of gas storage facilities in Germany must fill the capacities they have booked in order to avoid vacancies. If there is no filling, the capacities will be withdrawn from the users and made available to THE as the market area manager. This has already been done for the Rehden gas storage facility (see below). THE is thus obliged to gradually fill the gas storage facilities up to 90 percent by December 1, 2022. The filling level should reach at least 65 percent by August 1st and at least 80 percent by October 1st. The THEthen either has the storage tanks filled by other market players by way of a special tender or buys in gas itself in order to store it.

Overview of measures already taken to strengthen precautionary measures in the gas sector:

The Federal Government and the Federal Ministry for Economic Affairs and Climate Protection have been taking a wide range of measures for months to strengthen precautions and ensure security of supply in Germany. This includes the following measures in particular:

1. Purchase of gas

In March 2022, the Federal Ministry of Economics had the market area manager THE Gas procured. This purchase program has now been completed. A total of around 950 million m³ of natural gas was acquired, which was brought into storage by the end of May. Since March 18, 2022, the gas storage facilities have mostly been refilled. After low storage levels in winter, the levels are currently around 56% and thus above the storage levels of the previous year in the same period.

2. Ensuring the liquidity of players in the gas purchase market

In order to ensure the functioning of the energy market - and thus the energy supply - and to secure the necessary liquidity for companies that are particularly affected in view of the sharp rise in gas prices, the Federal Government has provided support with KfW loans.

In addition, the federal government has created a new security instrument as part of the protective shield for companies affected by the Ukraine war. This involves companies that trade in electricity, natural gas and emission certificates on the futures exchanges. They have to finance security deposits (so -called margins), which are higher the higher the prices rise. So that the energy traders have enough liquidity, the federal government provides financial resources in the form of credit lines from KfW and secures them with a federal guarantee. Consultations on the program have been possible since June 17, 2022. The application can probably start at the end of June 2022. More information can be found here .

3. Gas Storage Act

The "Gas Storage Act" passed by the German Bundestag on March 25 came into effect on April 30. came into effect. For the first time, it regulates that gas storage tanks must be almost completely full at the beginning of the heating period in order to get through the winter safely. Concrete filling levels are specified for this: the storage tanks must be 80 percent full by October 1st, 90 percent by November 1st and still 40 percent by February 1st.

As a result, the gas storage facilities are already much better filled than in previous years - and this after the storage levels were at a historic low at the beginning of the year.

4. Filling of the largest gas storage facility in Rehden and other gas storage facilities

On June 1, 2022, Federal Minister Robert Habeck issued a ministerial regulation to ensure sufficient levels of gas storage in Germany, which came into force on June 2, 2022. This ordinance makes it possible to fill up storage facilities with particularly low levels in good time. This means that Germany's largest gas storage facility in Rehden, which previously had historically low levels, can now also be filled. The storage is carried out by the Trading Hub Europe market area manager , who should now receive credit lines for the storage (see above). The gas storage facility in Rehden is owned by the Gazprom Germania Group (in future SEFE , seehere). Unlike tanks from other owners, it was only filled to a small extent over months; for months the fill level was only 2 percent. Only through the activities of THE in the last few weeks have the filling levels increased again.

5. Rapid expansion of the LNG infrastructure

Germany has not yet had a port where liquid gas can be landed. However, this is necessary in order to strengthen the gas supply from non-Russian sources and thus become independent of Russian imports. The federal government is therefore pushing ahead with the construction of so-called floating LNG terminals. First, it has secured four special ships, so-called FSRU , on which liquid gas is converted back into gas. Secondly, with an LNG Acceleration Act, it has created the legal prerequisites to accelerate the construction of the necessary connections on land so that two of the four FSRU ships can go into operation in winter and thus LNGcan be fed into the German gas supply network. Everyone involved is working hard on this.

6. Securing the GPG trust administration (now Securing Energy for Europe GmbH , SEFE)

In order to ensure security of supply in Germany, the federal government has secured the trusteeship of Gazprom Germania in the longer term by transferring the previous trustee under foreign trade law into a trustee under the Energy Security Act. At the same time, the German government saved the company, which had faltered due to Russian sanctions, from insolvency with a loan of EUR 9-10 billion . With this approach, the Federal Government retains its influence on this part of the critical energy infrastructure and prevents energy security from being endangered. You can find the government press release on thishere . You can find more information and an FAQ list here .

7. Protection of energy and trade intensive companies

In order to support energy- and trade-intensive companies that are particularly affected by increases in natural gas and electricity prices, a fourth program is on target as part of the protective shield for companies affected by the Ukraine war. It supplements the three support measures that have already started, consisting of KfW loans, the special guarantee program and the margining hedging instrument . This fourth program for temporary cost containment allows for a time-limited and narrowly defined cost subsidy with no repayment obligation. The necessary approval under state aid law is expected shortly, so the application can be expected to start in the coming weeks.

https://www.dutchnews.nl/news/2022/06/dutch-to-boost-coal-fired-electricity-production-to-save-gas/

Dutch to boost coal-fired electricity production to save gas

Business June 20, 2022 - By Robin Pascoe

Dutch cabinet plans to use coal-fired power stations at full capacity in the coming period to make sure that there is enough gas left to heat homes in the coming winter.

The decision has been taken despite the option of using gas from under Groningen province. Those fields are currently being wound down because of the resulting earthquakes.

The Dutch decision, which goes against official government policy, comes a day after Germany said it too would fire up coal-fired power stations to conserve gas stocks for central heating.

That decision was prompted by an announcement by Russian gas giant Gazprom last week, which said it was reducing supplies through the Nord Streat 1 pipeline for technical reasons.

Although there is no acute shortage of gas at the moment the step needs to be taken to ensure that there is enough gas for the winter, climate minister Rob Jetten told a press conference late on Monday afternoon.

‘If these were not special times, we would never do this,’ he said. ‘This is an important step to ensure the security of supply.’ Gas storage is currently at between 45% and 55% capacity.

Coal-fired power stations are currently restricted to 35% of capacity to reduce carbon dioxide emissions. Measures are now being worked out to compensate for this, Jetten said. The Netherlands has four coal-fired power stations and all are supposed to have switched to non-fossil sources by 2030.

Big users

Big gas users will be able to get a financial incentive to use less gas and extra measures will be announced in the September budget, he said. This would also include extra help for low income households.

Some of the funding for this would come from savings made on compensation for the owners of coal-fired power stations when production was cut.

In the meantime, Jetten urged people to do all they could to cut back on gas usage. ‘It might be an odd thing to ask in the summer, but every cubic metre of gas counts,’ he said. ‘So take shorter showers and increase your home insulation now, to use less gas in the winter.’

Groningen

Using more gas from Groningen would be a very last resort, Jetten said.

Mines minister Hans Vijlbrief said that he still planned to officially close down the Groningen fields in 2023 or 2024, but that all 11 would be kept open in the meantime in case of an emergency.

‘Groningen gas cannot be used safely,’ he said. ‘The mining inspectorate is very clear about this. It can only be used when public safety is under threat.’

Russia has threatened to cut gas deliveries to countries which refuse to pay in roubles and last month Gazprom said it would no longer deliver to Dutch trading giant GasTerra because of the payment dispute.

Read more at DutchNews.nl:

Google Translate of Le Journal du Dimanche report https://www.lejdd.fr/Societe/tribune-nous-devons-collectivement-agir-sur-la-demande-en-energie-4119737

GRANDSTAND. "The price of energy threatens our cohesion", by the bosses of Engie, EDF and TotalEnergies

10:35 p.m., June 25, 2022

By Catherine MacGregor, Jean-Bernard Lévy, Patrick Pouyanné

SUBSCRIBERS Catherine MacGregor, Managing Director of Engie, Jean-Bernard Lévy, Chairman and Chief Executive Officer of EDF, Patrick Pouyanné, Chairman and Chief Executive Officer of TotalEnergies call for emergency sobriety in the face of soaring energy prices.

Patrick Pouyanné, Catherine MacGregor, and Jean-Bernard Lévy. (AFP/ERIC DESSONS/JDD/ROMUALD

Here is their platform: "For months now, the European energy system has been under great strain and the French energy system has not been spared. Deliveries of Russian gas by pipeline have fallen sharply for some countries, including France. Although increasing, imports of liquefied natural gas (LNG) are today still too limited to offset these declines. The level of alert on gas stocks at European level is therefore high and rationing measures are put in place in some countries. Controllable electricity production capacities in Europe are also under strain following national choices or for maintenance programs. Climatic conditions and drought have reduced hydropower production.

The soaring energy prices that result from these difficulties threaten our social and political cohesion and have a too heavy impact on the purchasing power of families.

This is why we are launching this joint appeal.

We want to help meet these short-term deadlines with determination, alongside the public authorities who have been able, since the start of this crisis, to courageously take easing measures that are a step in the right direction.

We, energy companies, take our responsibilities by acting on the offer. We have already implemented short-term actions to respond to this emergency: the diversification of gas supplies, the proactive filling of storage facilities, the ongoing installation of a floating storage and regasification unit (FSRU) in the port of Le Havre to speed up LNG imports, the re-commissioning of "mothballed" facilities. Our human and financial resources are mobilized with the greatest determination to increase the offer.

But – more than ever – the best energy is still the one we don't consume. We must, collectively, act on energy demand by reducing our consumption to restore our room for manoeuvre. We will need it to manage future peaks in consumption and to cushion any technical hazards or geopolitical shocks that we may have to face. Acting this summer will allow us to be better prepared to tackle next winter and in particular to preserve our gas reserves.

Make no mistake: saving energy means increasing purchasing power and also reducing greenhouse gas emissions

We therefore call for awareness and collective and individual action so that each of us – each consumer, each company – changes their behavior and immediately limits their consumption of energy, electricity, gas and petroleum products.

We must initiate a major energy efficiency program and a national waste hunt. The effort must be immediate, collective and massive. Every gesture counts. And make no mistake: saving energy means increasing purchasing power and also reducing greenhouse gas emissions.

This call is obvious to us, energy companies, who are committed to serving our individual customers, companies or communities as well as possible. To support our fellow citizens in this necessary exceptional sobriety, we have tools, expertise, which we intend to mobilize to achieve this sobriety over the long term without significantly affecting our lifestyles.

Our long-term objectives in favor of carbon neutrality will be achieved even more quickly by this mobilization. We are continuing our commitments and actions to accelerate the energy transition. It is no longer just an imperative in the face of the climate emergency, but a response to the challenges of energy sovereignty. It requires massive investments in energy efficiency and in all low-carbon energy sources, electricity and gas. And asks, in a transparent dialogue, the support of the populations, the elected officials who represent them and the administration which applies the law.

We must also act on a European scale and show solidarity. Our markets are interdependent. This European electricity and gas interconnection is more fundamental than ever. Targeted investments will make it possible to strengthen the balance between countries and to sustain

Executive Vice-President & Chief Operating Officer
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June 20, 2022

Team,

I am writing to you today as the International Brotherhood of Electrical Workers (IBEW) has unfortunately rejected our latest offer and final attempt at avoiding a labour stoppage. We are very disappointed with this outcome.

It's important to me that you have the details of the latest offer that CN has presented to the IBEW.

We have been in negotiations with the union since October 2021. CN has approached this round of bargaining with the objective of improving wages, benefits, and work rules, and ensuring the safety of our employees. We have met or exceeded every one of the Union's demands in an effort to reach an agreement prior to the strike deadline. Unfortunately, we did not reach an agreement and the union has exercised its legal right to strike.

Our latest offer, which the union has rejected, specifically includes:

- 10 percent improvement to wages over 3 years,
- More paramedical benefits and mental health support in addition to increased flexibility to select a plan that best suits your needs,
- An increase in meal per diems, and
- Double the mileage reimbursements when you travel for business.

We have also agreed to the union's demands regarding:

- Better scheduling, which will ensure two consecutive days off,
- Increase in the all-inclusive expense allowance,
- Overtime procedures now based on seniority, and
- New classification for "work gangs" that will include incentives and an implementation process.

We value you and your important contribution to CN and feel that this offer is reflective of that. While we are disappointed in the current situation, we remain open to resolving the outstanding issues through an agreement or through binding arbitration.

I sincerely hope we can come to a resolution as soon as possible.

Please stay safe,

Rob Reilly

Rob Reilly

https://regina.ctvnews.ca/we-re-trying-to-keep-up-cn-signal-workers-on-strike-across-canada-1.5960216

'We’re trying to keep up': CN signal workers on strike across Canada

- Stacey Hein
- CTV News Yorkton Video Journalist

Published June 23, 2022 12:02 p.m. MDT

Signal and communication workers for the Canadian National Railway Company are on strike as of Saturday, which included a group of workers who walked off the job in Melville.

The workers are part of a group called the International Brotherhood of Electrical Workers. It represents more than 700 CN employees across the country, something stand-in representative Blair Mason said CN doesn’t have enough of.

“We are very short staffed. We are on call 24/7 and more employees would help us with a work-life balance,” said Mason.

He explained that they can’t ask for more employees but they can ask for a two day weekend, and fair wages.

“We’re trying to keep up. We’re not even asking for the inflation rate. We’re just asking for a fair wage increase,” Mason added.

While the workers are on strike, CN has a contingency plan.

“The plan is designed to keep the railroad operating normally and safely,” CN spokesperson Jonathan Abecassis said in an emailed statement.

However, some employees are skeptical.

“The contingency plan for CN is suspect at best. All the members we have are very skilled at what they do,” said IBEW General Chairman for Western Canada, Lee Hooper.

“I know how much work me and the guys put in everyday,” he added.

“I can’t see how it’s all getting done the way it’s supposed to be,” said Signal Maintainer Richard Andres.

“Right now they’ve got replacement workers in there. I don’t know if they’re qualified or not. It’s impacting the public safety,” Mason said.

“CN's operational contingency plan uses managers and contractors that are qualified to do the work they are doing,” Abecassis said.

The workers are hoping their demands are met soon they can get back on track.

https://www.reuters.com/business/energy/trans-mountain-oil-pipeline-no-longer-profitable-canada-budget-officer-2022-06-22/

UPDATE 2-Canada-owned Trans Mountain oil pipeline not profitable after higher costs: budget officer - Reuters

22-Jun-2022 10:09:55 AM

Adds further detail from report, environmentalist comment, file photos

By Rod Nickel and Ismail Shakil

June 22 (Reuters) - The Canadian government-owned Trans Mountain oil pipeline is no longer profitable after cost over-runs and delays to its expansion project, the country's parliamentary budget officer (PBO) said on Wednesday.

A report from PBO Yves Giroux said the pipeline has a net present value of negative C$600 million ($463.03 million), based on the difference between Trans Mountain's cash flows and its C$4.4 billion purchase price.

The report from the PBO, which provides independent advice to Parliament, is a blow to Prime Minister Justin Trudeau, whose government bought the pipeline in 2018 to ensure that the expansion proceeded despite protests. Expansion of other pipelines, notably Enbridge Inc's ENB.TO Line 3 to U.S. Midwest refiners, has since smoothed the flow of crude, one of Canada's most valuable exports.

Trudeau has faced criticism that expanding the pipeline is contrary to Canada's goals of cutting greenhouse gas emissions.

Spokespersons for Canada's finance ministry could not be immediately reached. Trudeau's government has long said it plans to sell the pipeline once the expansion is complete.

The pipeline moves up to 300,000 barrels per day of oil from near Edmonton, Alberta to the Pacific coast in British Columbia, and the expansion would nearly triple capacity.

Additional delays and increased construction costs would further reduce Trans Mountain's value, the PBO said.

If Ottawa chose to cancel the expansion, the government faces a C$14.4 billion write-off, the PBO said.

The government should do exactly that to cut its losses, said Julia Levin, national climate program manager at Environmental Defence.

"Continuing to throw public dollars at the project would be another broken promise from a government that committed to end fossil fuel subsidies," she said.

The cost of expanding Trans Mountain has jumped to C$21.4 billion from C$12.6 billion, and its in-service date delayed by nine months to late 2023, Trans Mountain Corp said in February.

($1 = 1.2958 Canadian dollars)

(Reporting by Rod Nickel and Ismail Shakil; additional reporting by Steve Scherer in Ottawa; Editing by Chizu Nomiyama and Nick Zieminski)

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Executive Summary

Parliamentarians continue to have interest in the Government of Canada's 2018 decision to acquire, expand, operate, and eventually divest of the Trans Mountain Pipeline system. In response, PBO has proactively undertaken a follow-up to his December 2020 report to provide updated financial analysis of the Trans Mountain assets.

PBO requested updated projected future cash flows for the Trans Mountain Pipeline system from the Canada Development Investment Corporation (CDEV), the crown corporation holding the Trans Mountain assets. Using the same methodology and model from its December 2020 report, PBO updated its model with the new data in conjunction with relevant publicly available information.

In this update, PBO finds that the Government's 2018 decision to acquire, expand, operate, and eventually divest of the Trans Mountain assets will result in a net loss for the federal government as calculated on a Net Present Value (NPV basis).

PBO also examined a scenario where the Trans Mountain Pipeline expansion is stopped after June 2022 and cancelled indefinitely. Under this scenario, the Government would need to write off over $14 billion in assets. The net impact would result in a significant financial loss for the Government and would lead to the Trans Mountain Corporation no longer being a going concern.

1. Introduction

1.1. Since 2020, developments have occurred that impact the financial valuation of Trans Mountain

Parliamentarians continue to have interest in the Government of Canada's 2018 decision to acquire, expand, operate, and eventually divest of the Trans Mountain Pipeline system. In response, PBO has proactively undertaken a follow-up to his December 2020 report to provide updated financial analysis of the Trans Mountain assets.

Since PBO's previous report, there have been certain developments which alter the underlying assumptions of the previous model, most notably:

- the construction budget for the Trans Mountain Expansion Project (TMEP) has increased from $12.6 to $21.4 billion with an anticipated mechanical completion date in late 2023[1]; and,
- the federal government has announced a $10 billion loan guarantee for the project.[2]

1.2. PBO re-assessed Trans Mountain with new data, assumptions

PBO requested updated projected future cash flows for the Trans Mountain Pipeline system from the Canada Development Investment Corporation (CDEV), the crown corporation holding the Trans Mountain assets. CDEV provided all requested information to PBO, but the information was classified as commercially confidential.[3] The data's confidentiality did not inhibit PBO's work to model the data, assess the value of the Trans Mountain assets, or publish analytical results in this report.

Using the same methodology and model from its December 2020 report, PBO updated its model with the new data in conjunction with relevant publicly available information.[4] Based on this new information and data, Table 1 outlines key PBO assumptions which informed the calculation of the financial value of the Trans Mountain assets.

Table 1-1 Key assumptions on Trans Mountain's projected cash flows (Reference Case)

TMEP total construction and financing costs	$21.4 billion
TMEP in-service date	December 31, 2023
Long term discount rate	7.8%[5]
Trans Mountain Pipeline system utilization	Contract utilization: Full Spot utilization: Near Full
Service and tolling framework after 20-year contracts expire (2044 –)	Continuation of similar contract service: Committed contracts (up to 80% of pipeline capacity) Spot contracts (remaining capacity)

Source: Parliamentary Budget Officer.

To remain consistent with the previous analysis, the "reference case" assumes that shippers will recontract after their existing 20-year contracts expire.[6] PBO has included a reversion back to a cost-of-service tolling framework as part of its sensitivity analysis in the following section.[7]

PBO's assessment was limited to examining the financial cost of the pipeline expansion; any other economic costs or benefits associated with the pipeline were not included in this analysis.

2. Results

With these assumptions, PBO used a discounted cash flow (DCF) analysis to determine the net present value (NPV) of the Trans Mountain Pipeline system, based on the present value of the future cash flows it is expected to generate.

2.1. Trans Mountain no longer continues to be a profitable undertaking

Based on the new developments since the previous report, specifically the increased construction costs and the delay in the in-service date, PBO finds that the Government's 2018 decision to acquire, expand, operate, and eventually divest of the Trans Mountain assets will result in a net loss for the federal government (Table 2-1).

Table 2-1 Net Present Value of Trans Mountain Pipeline System (Reference Case)

Present value of cash flows since acquisition	$3.9 billion
Purchase Price	$4.4 billion
Net Present Value	-$0.6 billion

Source: Parliamentary Budget Officer.

Notes: Totals may not add due to rounding.

The present value of cash flows since acquisition includes construction costs.

The key assumptions underpinning PBO's financial valuation of the Trans Mountain are subject to risk and uncertainty. Changes to key assumptions underpinning the financial modelling will impact the value of Trans Mountain Pipeline system.

Consistent with the previous report, PBO considered how the value of the Trans Mountain Pipeline system is impacted by changes to five key assumptions:

- TMEP's in-service date;
- TMEP's construction costs;
- Pipeline utilization on the Trans Mountain system;
- The service and tolling framework after 20-year contracts expire; and
- The discount rate used to value Trans Mountain's cash flows.

Table 2-2 provides a summary of the impact of changing each assumption individually and the associated NPV.

Table 2-2 Net present value (NPV) of the Trans Mountain Pipeline system based on changes to key assumptions in Trans Mountain's projected cash flow

($ millions)

Assumption	NPV	Change in NPV
Reference Case	- 600	
In-service date		
One-year delay	- 1,700	- 1,200
Construction costs		
- 10.0 per cent	300	800
+10.0 per cent	- 1,400	- 800
Pipeline utilization		
- 5.0 percentage points	- 1,100	- 500
+ 5.0 percentage points	- 200	400
Discount rate		
- 0.5 percentage points	700	1,300
+ 0.5 percentage points	- 1,700	- 1,100
Service and tolling framework after 20-year contracts expire		
Cost-of-service	- 2,700	- 2,100

Source: Parliamentary Budget Officer.

Notes: The net present value presented in the table is net of the purchase price paid by the Government of Canada to acquire the Trans Mountain Pipeline system.

These figures were calculated assuming that for any given change in a specific assumption, all other assumptions remain the same.

The ratio of capped and uncapped costs is a PBO assumption. Any change to this ratio would also impact the NPV.

2.2. If TMEP is cancelled, the Government would face a significant asset write-off

PBO also examined the impacts of a scenario where the expansion on the Trans Mountain Pipeline is stopped and cancelled indefinitely. While this section looks at the financial implications for this scenario, it is not intended to indicate that it is what PBO deems most likely.

Under this scenario, PBO assumes that construction on the Expansion Pipeline will stop at the end of June 2022. Only the base pipeline and existing assets continue to operate.

If the construction of TMEP is halted and the expansion project is cancelled indefinitely, PBO estimates that the Government may need to write off assets worth $14.4 billion in 2022. This includes sunk costs in capital expenditures for the expansion pipeline, as well as the portion of the goodwill related to the Expansion Project.[8]

Mexico’s New Oil Refinery’s Cost Rises to as Much as $18 Billion
2022-06-22 18:02:20.33 GMT

By Amy Stillman

(Bloomberg) -- A week before the grand opening of Mexican President Andres Manuel Lopez Obrador’s flagship oil refinery project, costs have spiraled out of control to reach as much as $18 billion -- more than double its original price tag.

The value of contracts for construction work through to 2024 signed by Mexico’s energy ministry rose to more than $14 billion in May, and the final amount is likely to be between $16 billion and $18 billion, according to people with knowledge of the matter, who asked not to be identified because they aren’t authorized to speak publicly about the Petroleos Mexicanos project.

Representatives for Pemex, as the state-owned oil producer is known, Mexico’s Energy Ministry, and President Lopez Obrador didn’t respond to requests for comment.

Cost overruns are likely to continue due to soaring inflation, undermining the austerity pledges of AMLO, as the Mexican president is known. The situation also casts doubt on whether Pemex can fulfill its goal of producing all of its own gasoline, given how crucial the refinery is to the oil company’s efforts to end dependence on fuel imports.

The refinery will have the capacity to process 340,000 barrels a day of crude, which would add about 20% to its current refining capacity in Mexico. Industry members and energy analysts were already questioning Pemex’s ability to raise fuel output given declining oil production for its refineries, lack of plant maintenance and a heavy debt burden, which is the highest of any oil company.

AMLO pledged to build the facility in his home state of Tabasco, in the country’s southeast, as part of a campaign to return Pemex to its former glory and make Mexico self-sufficient in fuel. The mega-refinery -- known as Dos Bocas, but officially named Olmeca -- will be inaugurated at a July 1 event attended by AMLO, Pemex Chief Executive Officer Octavio Romero Oropeza and Energy Minister Rocio Nahle.

Read more: Mexico gasoline goal in doubt with key refinery 40% over budget

The project’s initial budget was $8 billion when it was proposed in 2019. Outside offers to build the facility were deemed too expensive by the president, while some bidders suggested that the project couldn’t be done by the government’s 2022 target. As a result, AMLO tasked Mexico’s state oil company and energy ministry with completing the job within an ambitious deadline of three years.

After a period of underspending due to the pandemic, costs have risen sharply due to a flurry of new contracts to meet the deadline of finishing construction in July so it can ramp up to full production in six months. The number of contracts accounted for by Pemex has risen to about 270 from about 100, one of the people said.

--With assistance from Maya Averbuch and Max de Haldevang.

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https://www2.argusmedia.com/en/news/2344614-nigeria-seeks-to-meet-opec-target-by-endaugust?backToResults=true

Nigeria seeks to meet Opec+ target by end-August

Published date: 24 June 2022
Share:

Nigeria hopes to meet its Opec+ production quota by the end of August, on the back of efforts to stabilise regional security, oil minister Timipre Sylva told reporters today.

"We've not been able to meet Opec quota, which is our biggest headache right now," he said at a roundtable organised by the African Energy Chamber. "The assurance that from all of the operators from the region we had was that we're going to at least produce our Opec quota by the end of August. Some people who have committed to end of July, but I don't want to put that on the table."

Argus estimates Nigerian crude production was 433,000 b/d below its Opec+ target last month, and has fallen short of its monthly quotas since August 2020.

West Africa's largest producer has long contended with infrastructural collapse, loading delays at terminals, theft from oil pipelines and vandalism. Outgoing president Muhammadu Buhari's administration has now given the oil ministry a mandate to ensure energy security, which Sylva describes as a prerequisite to coax further international investment:

"We're giving ourselves just about a month to ensure that we're able to at least achieve some measurable milestone," he said. "By the end of August, we would have seen some improvement in the security, the oil sector, and then we'll be ready for investors at the same time."

He added that Shell, Chevron and ExxonMobil have all committed to additional offshore investment, while simultaneously seeking to exit their onshore positions.

Despite its long-standing production struggles, Nigeria had until late last year been lobbying hard to have its baseline — from which its Opec+ output quotas are calculated — increased from the 1.83mn b/d it has today.

But given the current realities, Sylva admitted today that Abuja's initial focus will be to revive the short-term production that was shut in during the Covid-19 pandemic after securing the oil sector, before it again brings its case for a higher baseline to the group.

"Post August, we should be back to asking for additional, because we definitely have a base that can support additional production," he said.

Five other countries in the Opec+ coalition, namely Saudi Arabia, Russia, Kuwait, the UAE and Iraq, were granted changes to their reference production levels in July.

Beyond Nigerian production, the oil minister does not anticipate Opec+ will surprise the market at its meeting of 30 June, after earlier this month provisionally agreeing 648,000 b/d of quota increases in both July and August.

"At this moment, I think the prices are firm enough, and I don't think that there will be any surprises from Opec," he said. "We've agreed on regular increases, and at this moment [I] believe that the markets [are] well supplied."

He acknowledged international pressure for Opec+ producers to pump more to reduce the effect of global prices on households, but argued a lack of capacity to meet these requests.

"It's almost clear that even Saudi Arabia, or Russia… of course Russia is out of the market now more or less... Really, there's not much additional capacity to be brought to the market," he said.

Saudi Arabia and a number of its fellow Mideast Gulf Opec members currently possess the lion's share of the coalition's lingering spare capacity. Opec+ officials have increasingly pointed to a chronic lack of investment in the oil and gas sector, which has choked long-term oil production projects. Sylva agreed that investment capital is the "main concern" at present, after the world may have attempted to move "fast, too fast" towards renewable energy.

"Everybody is coming to terms with the fact that we might have to stay with fossil fuels for a little bit more time," he said.

By Ruxandra Iordache and Nader Itayim

https://www.theatlantic.com/magazine/archive/2022/04/mohammed-bin-salman-saudi-arabia-palace-interview/622822/

GLOBAL

ABSOLUTE POWER

Asked about the murder of Jamal Khashoggi, Mohammed bin Salman said, “If that’s the way we did things, Khashoggi would not even be among the top 1,000 people on the list.”

By Graeme Wood

Photographs by Lynsey Addario

A woman walks past a poster showing Crown Prince Mohammed bin Salman (*left*) with his father (*right*) and grandfather (*top*), at the old market in Taif, Saudi Arabia. (Lynsey Addario for The Atlantic)

MARCH 3, 2022, 6 AM ET

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MOHAMMED BIN SALMAN, the crown prince of Saudi Arabia, is 36 years old and has led his country for almost five years. His father, the 86-year-old King Salman, has rarely been seen in public since 2019, and even MBS—as he is universally known—has faced the world only a few times since the pandemic began. Once, he was ubiquitous, on a never-ending publicity tour to promote his plan to modernize his father’s kingdom. But soon after the murder of the *Washington Post* columnist Jamal Khashoggi in 2018, MBS curtailed his travel. His last interview with non-Saudi press was more than two years ago. The CIA concluded that he had ordered Khashoggi’s murder, and Saudi Arabia’s own prosecutors found that it had been conducted by some of the crown prince’s closest aides. They are thought to have dismembered Khashoggi and disintegrated his corpse.

MBS had already developed a reputation for ruthlessness. In 2017, he rounded up hundreds of members of his own family and other wealthy Saudis and imprisoned them in Riyadh’s Ritz-Carlton hotel on informal charges of corruption. The Khashoggi murder fixed a view of the crown prince as brutish, thin-skinned, and psychopathic. Among those who share a dark appraisal of MBS is President Joe Biden, who has so far refused to speak with him. Many in Washington and other Western capitals hope his rise to the throne might still be averted.

But within the kingdom, MBS's succession is understood as inevitable. "Ask any Saudi, anyone at all, whether MBS will be king," a senior Saudi diplomat told me. "If there are people in Washington who think he will not be, then I cannot help them. I am not a psychiatrist."

His father's eventual death will leave him as the absolute monarch of the birthplace of Islam and the owner of the world's largest accessible oil reserves. He will also be the leader of one of America's closest allies and the source of many of its headaches.

I've been traveling to Saudi Arabia over the past three years, trying to understand if the crown prince is a killer, a reformer, or both—and if both, whether he can be one without the other.

Even MBS's critics concede that he has roused the country from an economic and social slumber. In 2016, he unveiled a plan, known as Vision 2030, to convert Saudi Arabia from—allow me to be blunt—one of the world's weirdest countries into a place that could plausibly be called normal. It is now open to visitors and investment, and lets its citizens partake in ordinary acts of recreation and even certain vices. The crown prince has legalized cinemas and concerts, and invited notably raw hip-hop artists to perform. He has allowed women to drive and to dress as freely as they can in dens of sin like Dubai and Bahrain. He has curtailed the role of reactionary clergy and all but abolished the religious police. He has explored relations with Israel.

He has also created a climate of fear unprecedented in Saudi history. Saudi Arabia has never been a free country. But even the most oppressive of MBS's predecessors, his uncle King Faisal, never presided over an atmosphere like that of the present day, when it is widely believed that you place yourself in danger if you criticize the ruler or pay even a mild compliment to his enemies. MBS's critics—not regicidal zealots or al-Qaeda sympathizers, just ordinary people with independent thoughts about his reforms—have gone into exile. Some fear that if he keeps getting his way, the modernized Saudi Arabia will oppress in ways the old Saudi Arabia never imagined. Khalid al-Jabri, the exiled son of one of MBS's most prominent critics, warned me that worse was yet to come: "When he's King Mohammed, Crown Prince MBS is going to be remembered as an angel."

For about two years, MBS hid from public view, as if hoping the Khashoggi murder would be forgotten. It hasn't been. But the crown prince still wants to convince the world that he is saving his country, not holding it hostage—which is why he met twice in recent months with me and the editor in chief of this magazine, Jeffrey Goldberg.

In our meetings, the crown prince was charming, warm, informal, and intelligent. But even at its most affable, absolute monarchy cannot escape weirdness. For our first meeting, MBS summoned us to a remote palace by the Red Sea, his family's COVID bunker. The protocols were multilayered: a succession of PCR tests by nurses from the Royal Clinics; a Gulfstream jet in the middle of the night from Riyadh; a convoy from a deserted airstrip; a surrender of electronic devices; a stopover at a mysterious guesthouse visible in satellite photos but unmarked on Google Maps. He invited us to his palace at about 1:30 a.m., and we spoke for nearly two hours.

For the second meeting, in his palace in Riyadh, we were told to be ready by 10 a.m. It also began after midnight. The halls were astir. The crown prince had just returned after nearly two years of remote work, and aides and ministers padded red carpets seeking meetings, their first in months, with the boss. Neglected packages and documents had piled up on the desks and tables in his office, which was large but hardly opulent. The most obvious concession to high taste was an old-fashioned telescope on a tripod, its altitude set shallow enough that it appeared to be pointed not at the heavens but at Riyadh, the sprawling and unsightly desert metropolis from which the Saud family has ruled for most of the past three centuries.

At the outset of both conversations, MBS said he was saddened that the pandemic precluded giving us hugs. He apologized that we all had to wear masks. (Each meeting was attended by multiple, mainly silent princes wearing identical white robes and masks, leaving us unsure, to this day, who exactly was present.) The crown prince left his tunic unbuttoned at the collar, in a casual style now favored by young Saudi men, and he gave relaxed, nonpsychopathic answers to questions about his personal habits. He tries to limit his Twitter use. He eats breakfast every day with his kids. For fun, he watches TV, avoiding shows, like *House of Cards*, that remind him of work. Instead, he said without apparent irony, he prefers to watch series that help him escape the reality of his job, such as *Game of Thrones*.

Before the meetings, I asked one of MBS's advisers if there were any questions I could ask his boss that he himself could not. "None," he answered, without pausing—"and that is what makes him different from every crown prince who has come before him." I was told he derives energy from being challenged.

MBS said it was "obvious" he had not ordered the killing of Khashoggi. "It hurt me a lot," he said. "It hurt me and it hurt Saudi Arabia, from a feelings perspective."

During our Riyadh encounter, Jeff asked MBS if he was capable of handling criticism. "Thank you very much for this question," the prince said. "If I couldn't, I would not be sitting with you today listening to that question."

"I'd be in the Ritz-Carlton," Jeff suggested.

"Well," he said, "at least it's a five-star hotel."

Difficult questions caused the crown prince to move about jumpily, his voice vibrating at a higher frequency. Every minute or two he performed a complex motor tic: a quick backward tilt of the head, followed by a gulp, like a pelican downing a fish. He complained that he had endured injustice, and he evinced a level of victimhood and grandiosity unusual even by the standards of Middle Eastern rulers.

When we asked if he had ordered the killing of Khashoggi, he said it was "obvious" that he had not. "It hurt me a lot," he said. "It hurt me and it hurt Saudi Arabia, from a feelings perspective."

"From a feelings perspective?"

"I understand the anger, especially among journalists. I respect their feelings. But we also have feelings here, pain here."

The crown prince has told two people close to him that "the Khashoggi incident was the worst thing ever to happen to me, because it could have ruined all of my plans" to reform the country.

In our Riyadh interview, the crown prince said that his *own* rights had been violated in the Khashoggi affair. "I feel that human-rights law wasn't applied to me," he said. "Article XI of the Universal Declaration of Human Rights states that any person is innocent until proven guilty." Saudi Arabia had punished those responsible for the murder, he said—yet comparable atrocities, such as bombings of wedding parties in Afghanistan and the torture of prisoners in Guantánamo Bay, have gone unpunished.

The CIA concluded that Mohammed bin Salman ordered the murder of the *Washington Post* columnist Jamal Khashoggi. Saudi Arabia's own prosecutors found that it had been conducted by some of the crown prince's closest aides. (Moises Saman / Magnum)

The crown prince defended himself in part by asserting that Khashoggi was not important enough to kill. "I never read a Khashoggi article in my life," he said. To our astonishment, he added that if he *were* to send a kill squad, he'd choose a more valuable target, and more competent assassins. "If that's the way we did things"—murdering authors of critical op-eds—"Khashoggi would not even be among the top 1,000 people on the list. If you're going to go for another operation like that, for another person, it's got to be professional and it's got to be one of the top 1,000." Apparently, he had a hypothetical hit list, ready to go. Nevertheless, he maintained that the Khashoggi killing was a "huge mistake."

"Hopefully," he said, no more hit squads would be found. "I'm trying to do my best."

If his best is not good enough for Joe Biden, MBS said, then the consequences of running a moralistic foreign policy would be the president's to discover. "We have a long, historical relationship with America," he said. "Our aim is to keep it and strengthen it." Biden and Vice President Kamala Harris have called for "accountability" for Khashoggi's murder, as well as the humanitarian disaster in Yemen, due to war between Saudi Arabia and Iranian-backed Houthi rebels. The Americans also refuse to treat him as Biden's counterpart—Biden's peer is the king, they insist—even though the crown prince rules the country with his father's blessing. This stings. MBS has lines open to the Chinese. "Where is the potential in the world today?" he said. "It's in Saudi Arabia. And if you want to miss it, I believe other people in the East are going to be super happy."

We asked whether Biden misunderstands something about him. "Simply, I do not care," he replied. Alienating the Saudi monarchy, he suggested, would harm Biden's position. "It's up to him to think about the interests of America." He gave a shrug. "Go for it."

Also risible to the crown prince was the notion that his citizens fear speaking out against him. We need dissent, he said, "if it's objective writing, without any ideological agenda." In practice, I noted, dissent seemed to be nonexistent. In September 2017, MBS ordered a boycott of Qatar, citing the country's support for the Iranian government, the Muslim Brotherhood, al-Qaeda, and other Islamist organizations in the region. His tiny neighbor suddenly transformed from official friend into official villain, and those expressing a kind word toward it disappeared into prison.

These sentiments, apparently, did not count as objective or nonideological. Qatar, MBS said, was comparable to Nazi Germany. "What do you think [would have happened] if someone was praising and trying to push for Hitler in World War II?" he asked. "How would America take that?" Of course Saudis would react strongly to Nazi sympathizers in their midst. Three years later, however, the countries reconciled, and the Saudi government tweeted out a photo of MBS and Hitler—that is, Qatari Emir Tamim Al Thani—wearing board shorts and smiling at MBS's Red Sea palace. "Sheikh Tamim's an amazing person," MBS said. The fight between them had been no big deal, "a fight between brothers." The relationship is now "better than ever in history." The dissenters remain in prison, however, and I do not mean the Ritz-Carlton.

As for the actual Ritz-Carlton prisoners: They had it coming, the crown prince said. Overnight he'd rounded up hundreds of the most prominent Saudis, delivered them to Riyadh's most lavish hotel, and refused to let them go until they confessed and paid up. I said that sounded like he was eliminating rivals. MBS looked incredulous. "How can you eliminate people who don't have any power to begin with?" If they had power, he would not have been able to force them into the Ritz.

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The Ritz operation, MBS said, was a blitzkrieg against corruption, and wildly successful and popular because it started at the top and did not stop there. “Some people thought Saudi Arabia was, you know, just trying to get the big whales,” MBS said. They assumed that after the government extracted settlements from the likes of Alwaleed bin Talal, the kingdom’s richest man, corruption at lower levels would resume. MBS noted, proudly, that even the minnows had been hooked. By 2019, everyone “understood that even if you steal $100, you’re going to pay for it.” In just a few months, he claims to have recovered $100 billion directly, and says that he will recover much more indirectly, as dividends of deterrence.

MBS acknowledged that to outsiders the Ritz operation may have looked thuggish. But to him it was an elegant, and by the way nonviolent, solution to the problem of vampires feasting on the kingdom’s annual budget. (An adviser to MBS told me that one alternative his aides had suggested was executing a few prominent corrupt officials.) During the months that the Ritz served as a prison, the kingdom’s financial regulator was essentially made king pro tempore, to devote the full power of the government to bleeding the vampires dry. But the Ritz guests had not, MBS said, been placed under arrest. That would imply that they had entered the court system and faced charges. Instead, he said, they had been invited to “negotiate”—and to his pleasure, 95 percent did so. “That was a strong signal,” he said. I’m sure it was.

THE SAUDI THRONE does not, like the British throne once did, just pass to the next male heir. The king chooses his successor, and ever since the founding king of the modern Saudi state, Abdulaziz, chose his son Saud as crown prince in 1933, each king has chosen another son of Abdulaziz. (He had 36 sons—with multiple wives and concubines—who survived to adulthood.) All were old enough to remember the camels-and-tents days, before extreme wealth, and they ruled conservatively, as if to lock in their gains. Even the shrewdest and most ambitious kings accomplished little. Abdullah, who took power in 2005, began as a reformer, but much of the momentum of the first half of his reign was lost as he doddered in the second, and the royal treasury was looted. (One notorious alleged thief in the Ritz, a major figure in the Royal Court, was said to have stolen tens of billions of dollars during His Majesty’s decline.)

Salman, the current king and at 86 one of the youngest of Abdulaziz’s brood, saw the perils of unchecked gerontocracy and anointed a successor from the next generation. His choice of Mohammed was not obvious. King Salman’s sons include Faisal, 51, who has a doctorate in international relations from Oxford; and Sultan, 65, a former Royal Saudi Air Force pilot who in 1985 spent a week on the space shuttle Discovery as a payload specialist. Either of these competent and educated men, citizens of the world, might have been a natural successor. But Salman had an inkling that the next king would need a certain grit and fluency with power that cannot be acquired in a seminar or a flight simulator. The new generation, born into luxury, tended to be soft, and the next king would need to be a modern version of a desert warlord like his grandfather.

Outside the immediate family, Salman considered his nephew Mohammad bin Nayef, who is known as MBN, appointing him crown prince in 2015, when he was 55. As a spymaster and security official in the 2000s, MBN had led the country’s domestic war against al-Qaeda, and in the process had become well connected with counterparts in Washington and London. In 2009, MBN was injured when an al-Qaeda bomber packed his underpants with explosives and approached him at an event.

Foreign governments considered MBN a safe pick: old enough but not too old, a proven fighter, respected overseas. But for Salman he was merely a throne-warmer for his son. (MBS had held no high office prior to his father’s coronation and needed a couple of years as defense minister to burnish his CV.) In 2017, Salman fired MBN. When you fire a prince, you fire all those who staked their fortunes on his rise; among the opponents of MBS are foreign governments who had planned for the reign of King MBN, and Saudis whose wealth and influence flowed from him. MBN’s chief adviser, Saad al-Jabri, fled to Canada. He alleges that MBS sent a team there to kill him. MBS's government alleges that al-Jabri stole a massive fortune and is bankrolling efforts to defame the crown prince. (Both parties deny the claims.) "MBN survived al-Qaeda," al-Jabri's son Khalid told me. "But he couldn't survive his own cousin."

Others have suggested Salman's younger brother Ahmed, a well-liked former deputy interior minister, as a throne-worthy alternative to MBS. Ahmed reportedly opposed MBS's appointment as crown prince. In 2020, he was arrested on suspicion of treason.

HAVING CONSOLIDATED POWER, MBS focused on Vision 2030. He is exasperated by the rest of the world's failure to acknowledge how well it has gone. "Saudi Arabia is a G20 country," he said. "You can see our position five years ago: It was almost 20. Today, we are almost 17." He noted strong non-oil GDP growth, and reeled off statistics about foreign direct investment, Saudi overseas investment, and the share of world trade that passes through Saudi waters. The economic success, the concerts, the social reform—these are all done deals, he said. "If we were having this interview in 2016, you would say I'm making assumptions," he said. "But we did it. You can see it now with your eyes."

He was not lying. Between my first visit to Saudi Arabia, in 2019, and this conversation two years later, I had gone to the movies in Riyadh and sat next to a Saudi woman I had never met. She wore jeans and canvas sneakers, and she bounced her bare ankle while we watched *Zombieland: Double Tap*. When I first visited, I ate at restaurants that had cinder-block walls dividing single men on one side from women and families on the other. These were sledgehammered down—a little Berlin 1989 in every restaurant—and now men and women can eat together without eliciting so much as a sideways glance from fellow diners.

Many of the crown prince's most persistent critics approve of these changes, and wish only that they had come sooner. (Khashoggi was such a critic. When I met him in London for brunch, shortly before his death, I asked him to list MBS's failings. He said "90 percent" of the reforms were prudent and overdue.) The most famous Saudi women's-rights activist, Loujain al-Hathloul, campaigned for women's right to drive, and against the Saudi "guardianship law," which prevented women from traveling or going out in public without a male relative. Al-Hathloul was thrown in prison on terrorism charges in 2018—*after* MBS and his father had announced the imminent end of both policies. In prison, her family says, she was electrocuted, beaten, and—this was just a few months before Khashoggi's murder—threatened with being chopped up and thrown in a sewer, never to be found. (The Saudi government has previously denied allegations of torturing prisoners.)


Left: Saudi Crown Prince Mohammed bin Salman is greeted by Qatar's Emir Sheikh Tamim Al Thani in Doha, Qatar, in 2021. *Center:* The Saudi activist Loujain al-Hathloul in 2021. *Right:* MBS and his father, King Salman, in 2017. (Saudi Press Agency / Reuters; Ahmed Yosri / Reuters; Saudi Press Agency / AP)

Al-Hathloul and other activists had demanded rights, and the ruler had granted them. Their error was in thinking those rights were theirs to take, rather than coming from the monarch, who deserved credit for having bestowed them. Al-Hathloul was released in February 2021, but her family says she is forbidden from traveling abroad or speaking publicly.

Another dissident, Salman al-Awda, is a preacher with a massive following. His original crime, too, was to utter publicly a thought that would later be shared by the crown prince himself. When MBS began squabbling with his counterpart in Qatar, al-Awda tweeted, “May God harmonize between their hearts, for the good of their people.” He was imprisoned, and actual harmony between the two leaders has not freed him. His son Abdullah, now in the United States, claims that his father, who is 65, is being held in solitary confinement and has been tortured.

The crown prince, one of his admirers told me, “put the Wahhabis in a cage, then he reached in with gardening shears and he cut their balls off.”

Saudi authorities say al-Awda is a terrorist and a member of the Muslim Brotherhood, which is supported by Qatar and intent on overthrowing the monarchy and replacing it with a theocracy. (The Muslim Brotherhood plays a bogeyman role in the Saudi imagination similar to the role of Communists in America during the Red Scare. Also like Communists, the Muslim Brotherhood really has worked covertly to undermine state rule, just not to the extent imagined.) Al-Awda’s defenders say he is being punished for daring to speak with a moral voice independent of the monarchy’s. He faces death by beheading.

Would MBS consider pardoning those who’d spoken out in favor of women driving and normalization with Qatar—both now the policy of the country? “That’s not my power. That’s His Majesty’s power,” MBS said. But, he added, “no king has ever used” the pardon power, and his father does not intend to be the first.

The issue, he said, is not a lack of mercy. It is a problem of balance. Yes, there are liberals and kumbaya types who have run afoul of state security—and perhaps some could be candidates for a royal pardon. But some of the others in his jails are bad hombres indeed, and pardons cannot be meted out selectively. “You have, let’s say, extreme left and extreme right,” he said. “If you give forgiveness in one area, you have to give it to some very bad people. And that will take everything backward in Saudi Arabia.”

Left: Saudi women attend a live music performance in Riyadh in January. The crown prince has legalized cinemas and concerts and permitted women to dress as freely as they can in places like Dubai and Bahrain. *Bottom:* A tenth-grade girls’ basketball team in Jeddah. Until recently, a man would have been forbidden to coach a girls’ team. (Lynsey Addario for *The Atlantic*)

On one side are liberals, tugging on the sympathies of Westerners; on the other, Islamists who are also opposed to the monarchy. Letting this latter group out would not just mean the end of rock concerts and coed dining. They would not stop until they brought down the House of Saud, seized the country’s estimated 268 billion barrels of oil and the holy cities of Mecca and Medina, and established a terrorist state. In private conversations with others, MBS has likened Saudi Arabia before the Saud family’s conquest in the 18th century to the anarchic wasteland of the *Mad Max* films. His family unified the peninsula and slowly developed a system of law and order. Without them, it would be *Mad Max* all over again—or Afghanistan.

Still, the crown prince's argument—that if he extended forgiveness to good people who deserved it, he would have to extend it equally to bad people who did not—struck me as bizarre. Why would one require the other? Then I realized that MBS was not saying that the failure of his plan to remake the kingdom *might* lead to catastrophe. He was saying that he'd guarantee it would. Many secular Arab leaders before him have made the same dark implication: Support everything I do, or I will let slip the dogs of jihad. This was not an argument. It was a threat.

ALI SHIHABI, A Saudi financier and pro-MBS commentator, told me that the changes in Saudi Arabia could be compared to those in revolutionary France. An old order had been overturned, a priestly class crushed; a new order was struggling to be born.

The priestly class in particular interested me. The brand of conservative Islam practiced in Saudi Arabia—called Wahhabism, after the sect's 18th-century founder, Muhammad ibn Abd al-Wahhab—once wielded great power and enjoys at least some popular support. I asked Shihabi if MBS really had diminished the Wahhabis' role. "Diminished their role?" Shihabi asked me. "He put the Wahhabis in a cage, then he reached in with gardening shears"—here he made the universal *snip snip* gesture with his fingers—"and he cut their balls off."

My flight into Riyadh was packed with foreigners attending Stan Lee's Super Con. Ahead of me in the passport line I saw Lou Ferrigno, the Incredible Hulk.

In France, revolution worked out just as badly for the House of Bourbon as it did for the clergy. (Diderot famously wrote that the entrails of the priests would be woven into ropes to strangle kings.) The House of Saud wanted the anticlerical revolution while conveniently omitting the antiroyalist one. I wanted to see how that alliance between monarch and sansculottes was working.

Vision 2030 made modernization easier to observe now than it would have been just a few years ago. Until October 2019, tourist visas to Saudi Arabia did not exist. Then the Saudis realized that to attract crowds to the concerts they had legalized, they'd need to let in visitors. Overnight, a visa to Saudi Arabia went from one of the hardest in the world to get to one of the easiest. In minutes I had one valid for a whole year. My flight into Riyadh was packed with foreigners attending Stan Lee's Super Con. Ahead of me in the passport line I saw Lou Ferrigno, the Incredible Hulk, on his way to an autograph signing.

The new system arrived so fast that the first visitors were like an invasive species, an unnatural fit in the rigid social order of the kingdom. For years, almost every non-Saudi in the country had needed a document called an *iqama*. It was a sort of license to exist: Your *iqama* identified your Saudi patron, the local national whom you were visiting or working for, and who controlled your fate. Every Saudi patron had his own patron, too—sometimes a tribal leader, sometimes a regional one. Even those bigwigs paid obeisance to someone and, eventually, by the transitive property of Saudi deference, to the king himself. Saudi Arabia, MBS explained, "is not one monarchy. You have beneath it more than 1,000 monarchies—town monarchies, tribal monarchies, semitribal monarchies.” The *iqama* guaranteed that every sentient creature fit into this scheme of Saudi society.

MBS batted away my suggestion that this system is antiquated and might be replaced with a constitutional monarchy—one where citizens have freestanding rights not granted by a monarch or a demi-monarch. “No,” he said. “Saudi Arabia is based on pure monarchy,” and he, as crown prince, would preserve the system. To remove himself from it would amount to a betrayal of all the monarchies and Saudis beneath him. “I can’t stage a coup d’état against 14 million citizens.”

But he has already forced that system to adapt. Nearly every day someone asked for my *iqama*, and I had to explain that I had none. They reacted as if I’d told them that I had no name. Renting a car, buying a train ticket, checking into a hotel—all of these interactions left some poor clerk baffled. But in the new Saudi Arabia I was free to wander, to listen, to overhear.

Left: Men talk over coffee in Riyadh. *Right:* Young women at a Formula E racing event. (Lynsey Addario for *The Atlantic*)

In Riyadh I found, effortlessly, young people thrilled by the reforms. Like the other major Saudi cities, Dammam and Jeddah, Riyadh has specialty coffee shops in abundance—little outposts of air-conditioning and caffeine, in an environment otherwise characterized by heat and boredom. Many of the Saudis I met professed a deep love for America. “I spent seven years at Cal State Northridge,” one told me, before rattling off a list of cities he had visited. He was one of several hundred thousand Saudi students who’d attended U.S. universities on government scholarships in the 2000s. “I studied finance,” he said. “But I never graduated. I had a wonderful time.” He listed his American friends, who had names like Mike and Emilio. “I drank and did too much meth, and my grades weren’t good.”

“Is it possible to do just the right amount of meth?” I asked.

“When I came back, I stopped.” He looked out the window of the coffee shop at the parched cityscape. “This country is the best rehab center on the planet.”

Now he was studying again, at a Saudi university, and planning to open his own business. He had already attended concerts, and he said his fondest wish was to listen to music in the open air and smoke a joint—just one, he promised. He asked if I thought that would happen. I said I did not think that was explicitly part of Vision 2030, but he’d probably get his wish. Later, with him in mind, I asked the crown prince whether alcohol would soon be sold in the kingdom. It was the only policy question that he refused to answer.

In another café, in the northern city of Ha'il, a man pointed to a mural, freshly painted, of the Lebanese singer Fairouz, her hair flowing beautifully over her shoulders. Next to her were her lyrics (in Arabic): "Bring me the flute and sing, for song is the secret to eternity."

"One year ago," he said, "that would not be possible." By "that," he meant pretty much everything: a woman's hair; a celebration of song; a celebration of a song about singing; and, on top of all this, the music playing in the café as we spoke. Before the rise of MBS, every component of this scene would have violated long-standing canons of Saudi morality enforcement. The religious police, known in Arabic as the *hay'a* or *mutawwi'in*, would have busted the joint. They used to show up in ankle-length white *thobes*, their beards curly and unkempt. They yelled at people for dressing immodestly, or thwacked at them with sticks to goad them to the mosque for one of the five daily prayers. For the flagrancy of the Fairouz sins, the café's managers would have been detained, questioned, and punished. "Screw those guys," the man said, in a succinct expression of the most common sentiment I heard about the religious police.

Encounters with the *hay'a* have provided many an appalling story for foreign visitors. When Maureen Dowd of *The New York Times* went to Riyadh in 2002, the *hay'a* spotted her in a shopping mall and objected to being able to see the outline of her body. Her host, the future foreign minister Adel al-Jubeir, pleaded with them, but they were unimpressed by his status as a prominent diplomat, and she fled to her hotel room. "I fretted that I was in one of those movies where an American makes one mistake in a repressive country and ends up rotting in a dungeon," Dowd wrote.

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I told one of MBS's advisers that the religious police had been an international PR problem. "May I be impolite?" he asked me. "I don't give a fuck about the *foreigners*. They terrorized *us*." He likened the religious police to J. Edgar Hoover's FBI, operating with unchecked authority. (The religious police's official Arabic name dates back hundreds of years, but still sounds Orwellian in English: the Committee for the Prevention of Vice and Promotion of Virtue.) Anyone who wished to drag down a professional or political rival could scrutinize him for sins, then call the religious police to set up a sting. Or the *hay'a* could flex its authority on its own, either for political reasons—toppling a prince they disliked—or for recreation.

"The religious police were the losers in school," Ali Shihabi told me. "Then they got these jobs and were empowered to go and stop the cute girls, break into the parties no one wanted them at, and shut them down. It attracted a very nasty group of people." The Saudi diplomat told me that he did not miss them, and that Saudi Arabia had needed someone with the crown prince's mettle to get rid of them. "When someone hits you because he does not like what you are wearing," he said, "that is not just a form of harassment. It is abuse."



Left: Golf at the Boulevard in Riyadh. *Right:* A couple, newly engaged, dine at a restaurant in Jeddah in January. In the recent past, many restaurants had cinder-block walls dividing single men on one side from women and families on the other. (Lynsey Addario for *The Atlantic*)

MBS ordered the religious police to stand down, and one of the enduring mysteries of contemporary Saudi Arabia is what these thwackers do, now that they are invisible on the streets. Fuad al-Amri, who runs the *hay'a* in Mecca province, confessed to me that since the reforms, one of his main activities has been vetting his own employees, to ensure that they aren't fanatics loyal to the Muslim Brotherhood.

MBS'S GRANDFATHER KING Abdulaziz founded the modern Saudi state with the support of the clergy. But he also cracked down on them, hard, when they outlived their usefulness. MBS has recounted a famous anecdote about his grandfather. In 1921, Abdulaziz attended the funeral of the most senior religious scholar in the kingdom. The king told the assembled clerics that they were dear to his heart—in the Arabic idiom, "on my *iqal*," the black cord that holds a Najd headdress in place. But then he warned them: "I can always shake my *iqal*," he said, "and you will fall."

For the past 50 years, Abdulaziz's successors have taken a softer line with the Wahhabis. The Saudi clerical class's power grew, and their imprimatur mattered. In 1964, they sealed the fate of the inept King Saud when his brothers Faisal and Mohammed sought and received religious approval for ousting him. To oppose the religious conservatives was risky. Peter Theroux, a former National Security Council director who worked on the Saudi portfolio during the 2000s, recalls being aghast at the vicious sermons still being preached by government-paid imams years after September 11. Theroux told me he confronted a senior Saudi official about the sermons. "You know," the official apologized, "the big beards are kind of our constituency." The rulers of Saudi Arabia put almost no limits on the speech or behavior of conservative clerics, and in return those clerics exempted the rulers from criticism. "That was the drug deal that the Saudi state was based upon for many years," Theroux told me. "Until Mohammed bin Salman."

Who could resist cheering on MBS as he renegotiated this relationship? One of MBS's most persistent critics in Washington, Senator Chris Murphy, a Democrat from Connecticut, told me the concerts and Comic-Cons in Riyadh have not yet translated into defunding Wahhabi intolerance overseas. "When I'm traveling the world, I still hear story after story of Gulf money and Saudi money fueling very conservative, intolerant Wahhabist mosques," he said. A hallmark of traditional Wahhabism is hatred for non-Wahhabi Muslims, whom the Wahhabis view as even worse than unbelievers for perverting the faith. With little modification, Wahhabi teachings can lead to Osama bin Laden–style jihadism. Murphy said he thinks that isn't over. "The money that flows from Saudi Arabia into conservative Islam isn't as transparent as it was 10 years ago—much of it has been driven underground—but it still exists."

Yet after spending hours in MBS's company, and in the company of his allies and enemies, I was convinced that neutering the clergy was not just symbolic. He was fighting them avidly, and personally. "The kings have historically stayed away from religion," Bernard Haykel, a scholar of Islamic law at Princeton and an acquaintance of MBS's, told me. Outsourcing theology and religious law to the big beards was both an expedient and a necessity, because no ruler had any training in religious law, or indeed a beard of any significant size.

By contrast, MBS has a law degree from King Saud University and flaunts his knowledge and dominance over the clerics. "He's probably the only leader in the Arab world who knows anything about Islamic epistemology and jurisprudence," Haykel told me.

“In Islamic law, the head of the Islamic establishment is *wali al-amr*, the ruler,” MBS explained. He was right: As the ruler, he is in charge of implementing Islam. Typically, Saudi rulers have sought opinions from clerics, occasionally leaning on them to justify a policy the king has selected in advance. MBS does not subcontract his religion out at all.

He explained that Islamic law is based on two textual sources: the Quran and the Sunna, or the example of the Prophet Muhammad, gathered in many tens of thousands of fragments from the Prophet’s life and sayings. Certain rules—not many—come from the unambiguous legislative content of the Quran, he said, and he cannot do anything about them even if he wants to. But those sayings of the Prophet (called Hadith), he explained, do not all have equal value as sources of law, and he said he is bound by only a very small number whose reliability, 1,400 years later, is unimpeachable. Every other source of Islamic law, he said, is open to interpretation—and he is therefore entitled to interpret them as he sees fit.

The effect of this maneuver is to chuck about 95 percent of Islamic law into the sandpit of Saudi history and leave MBS free to do whatever he wants. “He’s short-circuiting the tradition,” Haykel said. “But he’s doing it in an Islamic way. He’s saying that there are very few things that are fixed beyond dispute in Islam. That leaves him to determine what is in the interest of the Muslim community. If that means opening movie theaters, allowing tourists, or women on the beaches on the Red Sea, then so be it.”

MBS rebuked me when I called this attitude “moderate Islam,” though his own government champions the concept on its websites. “That term would make terrorists and extremists happy.” It suggests that “we in Saudi Arabia and other Muslim countries are changing Islam into something new, which is not true,” he said. “We are going back to the core, back to pure Islam” as practiced by Muhammad and his four successors. “These teachings of the Prophet and the four caliphs—they were amazing. They were perfect.”

Even the Islamic law that he is bound to implement will be implemented sparingly. MBS told me a story, reported in Hadith, about a woman who commits fornication, confesses her crime to the Prophet, and begs to be executed. The Prophet repeatedly tells her to go away—implying, the crown prince said, that the Prophet preferred to give sinners every chance at lenience. (MBS did not relate the end of the tale: The woman returns with indisputable evidence of her sin—a bastard son—and the Prophet acquiesces. She is buried to her chest and stoned to death.)

Instead of hunting for sin and punishing it as a matter of course, MBS has curtailed the investigative function of the religious police, and encourages sinners to keep their transgressions between themselves and God. “We should not try to seek out people and prove charges against them,” he said. “You have to do it the way that the Prophet taught us how to do it.” The law will be enforced only against those so flagrant that they are practically demanding to take their lumps.

He also stressed that none of these laws applies to non-Muslims in the kingdom. “If you are a foreign person who’s living or traveling in Saudi Arabia, you have all the right to do whatever you want, based on your beliefs,” he said. “That’s what happened in the Prophet’s time.”

It is hard to exaggerate how drastically this sidelining of Islamic law will change Saudi Arabia. Before MBS, influential clerics issued fatwas exhibiting what might charitably be called a pre-industrial view of the world. They declared that the sun orbited the Earth. They forbade women from riding bikes (“the devil’s horses”) and from watching TV without veiling, just in case the presenters could see them through the screen. Salih al-Fawzan, the most senior cleric in the kingdom today, once issued a chillingly anti-American fatwa forbidding all-you-can-eat buffets, because paying for a meal without knowing what you’ll be eating is akin to gambling.

Some of the clerics may have given in because they were convinced by the crown prince's legal interpretations. Others appear to have succumbed to good old-fashioned intimidation. Formerly conservative clerics will look you in the eye and without hesitation or scruple speak in Stepfordlike coordination with the government's program. The minister of Islamic affairs and guidance, normally an unsmiling type, now cheerily defended the opening of cinemas and mass layoffs of Wahhabi imams. I liked him immediately. His name, Abdullatif Al Asheikh, indicates that he is descended from a long line of stern moralists going back to Muhammad ibn Abd al-Wahhab himself. I told him I had seen the *Zombieland* sequel in his country, and if Woody Harrelson reprised his role in *Zombieland 3*, I would return to Riyadh so we could go to a theater and watch it together. "Why not?" he replied.

Mohammad al-Arefe, a preacher known for his good looks and conservative views, mysteriously began promoting Vision 2030 after a meeting with MBS in 2016. Previously, he had preached that Mada'in Saleh, a spectacular pre-Islamic archaeological site in northwest Saudi Arabia, was forbidden to Muslim tourists. God had struck down the civilization that once lived there, and the place was forever to remain a reminder of his wrath. The conventional view held that Muslims should follow the Prophet's warning to stay away from Mada'in Saleh, but if they absolutely must pass through, they should cast their gaze downward and maintain a fearful demeanor toward the Almighty. Then, in 2019, al-Arefe appeared in what seemed, to me, like some sort of hostage video, filmed by the Saudi tourism authority, lecturing about the site's history and inviting all to enjoy it. If he was displaying a fearful demeanor, it was not toward the Almighty.

IN THE SMALLER CITIES it isn't clear how quickly modernization is catching on. I visited Buraydah, the capital of Qassim, the most conservative part of the country. In two days, every woman I saw wore a black, flowing abaya. I attended the opening of a new shopping mall and showed up early to watch the crowds arrive. The sexes separated themselves without discussion: women in the front, all in black, near the stage where children recited poems and sang; men, in white *thobes*, in the back of the audience and on the sides. The process was unconscious and organic, but to an outsider remarkable, as if salt and pepper were shaken out onto a plate, and the grains slowly and perfectly segregated themselves. Cultural practices decades or centuries old do not yield suddenly.

Taif, a city an hour outside Mecca, was once the summer residence of the king and his family. The Prophet is thought to have visited there, and many Muslims supplement their pilgrimages to Mecca with side trips to other sites from the Prophet's life. The Wahhabis have, historically, treated these visits as un-Islamic and reprehensible. Whenever pilgrimage sites have fallen into Wahhabi hands, they have methodically and remorselessly destroyed them by leveling monuments, grave markers, and other structures sacred to Muslims in other traditions.

One morning I took a long walk to a mosque where the Prophet is said to have prayed. On arrival I found a building in disrepair, fenced off by rusty wire, with parts of it reduced to rubble. A sign at this site, posted by the Ministry of Islamic Affairs, noted in Arabic, Urdu, Indonesian, and English that the historical evidence for the Prophet's visit was uncertain. It suggested, further, that "to feel an adoring reverence or regard toward these places is a kind of heresy and fabrication in religion," an innovation not sanctioned by God that "leads to polytheism."

Later, I met Mohammad al-Issa, formerly the minister of justice under King Abdullah and now, as secretary-general of the Muslim World League, an all-purpose interfaith emissary for his country. In the past, Saudi clerics inveighed against infidels of all types. Now al-Issa spends his time meeting Buddhists, Christians, and Jews, and trying to stay ahead of the occasional surfacing of comments he made in less conciliatory times. I asked him about the site, and whether Saudi Arabia's new tolerance—which he emphasizes so energetically overseas, with non-Muslims—would apply domestically. He assured me that it already did. "If in the past there were some mistakes, now there is correction,” al-Issa said. “Everyone has the right to visit the historic places, and there is a lot of care given to them.”

“But the signs are still up,” I said.

“Maybe they are there to remind people to be respectful,” he suggested. “You see signs like that at sites all over the world: ‘Don’t touch or take the stones.’”

But these signs are not meant to preserve the ruins. They are there to remind you that you are wicked for visiting at all.

A mosque in Taif where the Prophet Muhammad is said to have prayed. A sign posted by the Ministry of Islamic Affairs notes that the historical evidence for the Prophet’s visit is uncertain, and warns that “to feel an adoring reverence or regard toward these places is a kind of heresy.” (Lynsey Addario for *The Atlantic*)

The day after my trip to the mosque, I stopped by a Starbucks in Taif. It was early afternoon. When I pulled the door handle, it clunked—the shop was closed for prayer, just as it would have been if the religious police had been enforcing prayer times.

As I waited outside alone, a small police truck pulled up behind me. The police officer salaamed me, and I responded in Arabic. Only after a short interrogation (“What are you doing here? Why are you here?”) did he discover that I was American—not, as I think he suspected, Filipino—and apologize awkwardly and leave. It took me a minute to realize what had happened: The religious police have stood down, and the ordinary police have stood up in their place. The conservatism in society has not gone away. In some places, it has just undergone a costume change.

THESE LINGERING MANIFESTATIONS of intolerance illustrate what MBS’s critics say is his ultimate error: Even a crown prince can’t change a culture by fiat.

Belated realization of this error might be behind the grandest and most improbable of his projects. If existing cities resist your orders, just build a new one programmed to do your bidding from the start. In October 2017, MBS decreed a city in a mostly uninhabited area on the Gulf of Aqaba, adjacent to Egypt’s Sinai Peninsula, the southwestern edge of Jordan, and the Israeli resort town Eilat. The city is called Neom, from a violent collision between the Greek word *neos* (“new”) and the Arabic *mustaqbal* (“future”).

At present, little exists but an encampment for the employees of the Neom project, a small area of tract housing. Regular buses take them to shop in the nearest city, Tabuk, which is itself a city only by the standards of the vacant, rock-strewn desert nearby. (If you recall the early scenes of *Lawrence of Arabia*, when a lonely camel-borne Peter O'Toole sings "The Man Who Broke the Bank at Monte Carlo" to the echoes of a sandstone canyon, then you know the spot.) The ambitions for this settlement are vast. Neom's administrators say they expect it to attract billions of dollars in investment and millions of residents, both Saudi and foreign, within 10 to 20 years. Dubai grew at a similar pace in the 1990s and 2000s. MBS said Neom is "not a copy of anything elsewhere," not a xerox of Dubai. But it has more in common with the great globalized mainstream than with anything in the history of a country that, until recently, was remarkably successful at walling off its traditional culture from the blandishments of modernity.

For a few hours, the Neom team showed me around and made grandiose promises about the future. Neom would lure its investors, I gathered, by creating the ideal regulatory environment, stitched together from best practices elsewhere. The city would profit from central planning. When New York or Delhi want to grow, they choke on their own traffic and decrepit infrastructure. Neom has no inherited infrastructure at all. The centerpiece of the project will be "The Line"—a 106-mile-long, very skinny urban strip connected by a single bullet train that will travel from end to end in 20 minutes. (No train capable of this speed currently exists.) The Line is intended to be walkable—the train will run underground—and a short hike perpendicular to its main axis will take you into pristine desert. Water will be desalinated; energy, renewable.

So far, Neom is less a city than an urbanist cargo cult. The practicalities can come later, or not at all. (The projected cost is in the hundreds of billions of dollars, a huge sum even for Saudi Arabia.) But many good ideas look crazy at first. What struck me was that Neom's vision is really an anti-vision. It is the opposite of the old Saudi Arabia. In the old Saudi Arabia, and even to an extent today, corruption and bureaucracy layered on each other to make an entrepreneur's nightmare. Riyadh has almost no public transportation. No matter where you are, you cannot walk anywhere, except perhaps to your local mosque. No one in Neom mentioned religion at all. Even Neom's location is suggestive. It is far from where Saudis actually live. Instead it is huddled in a mostly empty corner, as if seeking sustenance and inspiration from Jordan and Israel.

Seen this way, Neom is MBS's declaration of intellectual and cultural bankruptcy on behalf of his country. Few nations have as many carried costs as Saudi Arabia, and Neom zeroes them out and starts afresh with a plan unburdened by the past. To any parts of the kingdom that cling to their old ways, it promises that the future is everything they are not. And the future will wait only so long.

DURING THE 1990S AND 2000S, Saudi Arabia was a net exporter of vision, but it was a jihadist vision. The standard narrative, now accepted by the Saudi state itself, is that the kingdom was seduced by conservative Islam, and eventually the jihadists it sent overseas (most famously Osama bin Laden) redirected their efforts toward the Saudi monarchy and its allies. Fifteen of the 19 hijackers on 9/11 were Saudi citizens.

"A series of things happened that made the Saudis realize they couldn't keep playing the game they had been playing," Philip Zelikow, a State Department official under George W. Bush and the executive director of the 9/11 Commission, told me. The years of violence that followed 9/11 shocked the Saudis into realizing that they had a reckoning coming, though only after jihadists began attacking in the kingdom itself did the government move to crush them. What the Saudis did not have was a plan to redirect the jihadists' energy. "They needed to have some story of what kind of country they were going to be when they grew up," Zelikow said. Jihadism would not be that story. But there was no immediate alternative, either for society or for the individuals attracted to jihadism. Saudi Arabia was left to do what most other countries, including the United States, have done, which is to imprison terrorists until they grow too old to fight.

Left: The aftermath of an al-Qaeda bombing in Riyadh in 2003. Only after jihadists began attacking in the kingdom did the government move to crush them. *Right:* Saudi Special Security Forces at the Counterterrorism Training School in Riyadh in 2013. (Lynsey Addario)

Last year, Saudi officials informed me that the crown prince had a new plan to deprogram jihadists. One morning they sent a convoy of state-security SUVs to my hotel, and with lights flashing, we left behind the glassy skyscrapers of the capital and continued along one of the straight, hypnotic roads radiating from Riyadh to nowhere. An hour later, we turned off at an area called al-Ha'ir and went through a security checkpoint.

Ha'ir is a state-security prison, run by the Saudi secret police, which means that its prisoners are not car thieves and check forgers but offenders against the state. They include jihadists from al-Qaeda and the Islamic State—I met at least a dozen of each—as well as softer Islamists, like Salman al-Awda, the cleric.

We drove past the checkpoint and through the gates, into a windswept compound coated in a film of light-brown dust, like tiramisu. We were met by the director of state-security prisons, Muhammad bin Salman al-Sarrah, and what appeared to be a television crew of at least half a dozen men, each bearing a microphone or a camera. I worried about what would happen next. Newsworthy events inside the walls of terrorist prisons tend not to be good. Lurking in the background were several bearded men in identical gray business suits.

During the 1990s and 2000s, Saudi Arabia was a net exporter of vision, but it was a jihadist vision. Fifteen of the 19 hijackers on 9/11 were Saudi citizens.

Al-Sarrah, it turned out, was a real jihadism nerd, and over tea we reminisced about various luminaries in the history of Saudi terror. After this small talk, he invited me to join him in an auditorium that could have been a lecture hall on a small college campus. Shutters clicked as the cameramen followed.

In the auditorium, the men in suits took the stage. Their leader, a man named Abdullah al-Qahtani, explained that he and most of the others in the room were prisoners, and that they had a PowerPoint presentation they wished to show me about the enterprise they were running in the prison. The camera crew was made up of prisoners too, and they were documenting my visit for imprisoned members of jihadist sects.

What followed was the most surreal slide deck I have ever seen: a corporate org chart and plans for a set of businesses run from within the prison by jihadists and other enemies of the state. Al-Qahtani spoke in Arabic, translated by an excitable counterpart nearby.

The org chart showed CEO al-Qahtani at the top, with direct reports from seven offices beneath him, among them financial, business development, and "programs' affairs." Under the last of these was another sub-office, "social responsibility."

Al-Qahtani explained that 89 percent of the prison population had taken part in the program so far. In a way, it was like any other prison-industry program; in the United States, prisoners staff call centers, raise tilapia, or just push brooms in the prison corridor for a dollar an hour. But the Ha'ir group, doing business as a company called, simply, Power, was aggressively corporate and entrepreneurial.

Al-Qahtani and the interpreter took me to a small garden, where prisoners cultivated peppers under plastic sheeting and raised bees and harvested their honey to sell at the prison shop, in little jars with the Power logo. They operated a laundromat and presented me with a price list. The prison will clean your clothes for free, they said, but staff and inmates alike could bring clothes here for special services, such as tailoring, for a fee. I could see shirts, freshly laundered and pressed, with prisoner numbers inked into the collars. Each number started with the year of entry on the Islamic calendar. I saw one that started in 1431, about 12 years ago.

Almost all the men wore thick beards, and many had a *zabiba* (literally "raisin"), the discolored, wrinkly spot one gets from pressing the head to the ground in prayer. Some of their products were artisanal and religious-themed. They led me into a tiny room, a factory for the production of perfumes for sale outside the prison, and to another room where they made prayer beads from olive pits.

"Here, smell this," a former member of al-Qaeda commanded me, sticking under my nose a paper strip blotted with a chemical I could not identify. I think the scent was lavender. Another prisoner, at the Power-run prison canteen, offered me free frozen yogurt. As I walked around the prison, the yogurt began to melt, and my interpreter held it so I could take notes.

Strangest of all, I found, was Power's corporate nerve center—a warren of drab, cubicle-filled offices. The employees wore uniforms: suits for the C-suite executives and blue Power-branded polo shirts for the mid-levels puttering on their computers. They had a conference room with a whiteboard (at the top, "In the name of God, the most gracious, most merciful" was written in Arabic, and partially erased; the rest was the remains of a sales brainstorming session), a reception desk, and portraits of the king and the crown prince overseeing it all.

Nothing is stranger than normalcy where one least expects it. These jihadists—people who recently would have sacrificed their life to take mine—had apparently been converted into office drones. Fifteen years ago, Saudi Arabia tried to deprogram them by sending them to debate clerics loyal to the government, who told the prisoners that they had misinterpreted Islam and needed to repent. But if this scene was to be believed, it turned out that terrorists didn't need a learned debate about the will of God. They needed their spirits broken by corporate drudgery. They needed Dunder Mifflin.

My hyperactive interpreter, who had been gesticulating and yapping throughout the tour, was no ordinary jihadist. He was an American-born Saudi member of al-Qaeda named Yaser Esam Hamdi. Hamdi, now 41, emerged from a pile of rubble in northern Afghanistan in December 2001. His dear friend, pulled from the same rubble, was John Walker Lindh, the so-called American Taliban. Hamdi spent months in Guantánamo Bay before being transferred to the U.S.; he was released after his father, a prominent Saudi petrochemical executive, helped take Hamdi's case to the Supreme Court, and won (*Hamdi v. Rumsfeld*). Hamdi was sent back to Saudi Arabia on the condition that he renounce his U.S. citizenship (he was born in Louisiana and left as a small child), but the Saudis decided he needed more time in prison and locked him up for eight years in a facility in Dammam, and for another seven in Ha'ir. He is due for release this year.

Hamdi guided me like a kid showing his parents around his sleepaway camp. He explained that Power is part of a larger entity at the prison, known as the "Management of Time" (*Idarat al-Waqt*)—a comprehensive but amorphous program meant to beguile the inmates out of bad ideas and replace them with good ones. It involves corporate training, but also gathering the inmates together for song and music, for poetry readings, for the publishing of newspapers (I snagged a copy of the *Management of Time News*), and for the production of TV shows. I watched a room full of men sing a song they had written, “O My Country!,” and show videos in which they extolled the government and the crown prince. Al-Qaeda and ISIS forbid most music and revile the monarchy. Like so many other Saudis, these men seemed to have swapped their religious fanaticism for nationalist fanaticism. One wondered what they really believed.

Al-Sarrah followed close behind us, and I shot him a look when I heard the name of the program. One of the most famous jihadist texts, a playbook for ISIS, is “The Management of Savagery” (*Idarat al-Tawahhush*). It is a deranged manual for destroying the world and replacing it with a new one. That was what this program was doing in reverse: replacing the jihadists’ savage appetite for an imagined future with an appetite for the real, the now, and the ordinary.

A bookish man who had been with Osama bin Laden at Tora Bora looked me steadily in the eye, like he was trying to convince me and not himself. “Vision 2030 is real,” he said.

I told Hamdi that I had corresponded with his friend Lindh, who served 17 years in federal prison in the United States before his release in 2019. Our correspondence had led me to believe that he was just as radical as ever, and that his stay in prison—spent in solitary study of Islamic texts—had confirmed his violent streak and converted him from an al-Qaeda supporter to an ISIS supporter.

Graeme Wood: I wrote to John Walker Lindh. He wrote back.

“Really?” Hamdi asked, before venturing a guess as to why. “The United States doesn’t know how to deal with Muslims. When I was in Afghanistan, I had extreme thinking.” Going to a Saudi prison helped. “The difference is that in jail [here] we have a program. You want to explode the thinking we have in our brain. For 17 years he was alone.” The Saudis filled Hamdi’s time. They managed it. “We didn’t have time to read the Islamic books … We didn’t have time to do anything but work to improve ourselves.” He was a specialist in Power’s media department, and could now produce videos of passable quality.

“I didn’t know what a montage was,” he said. “I didn’t know what a design was.” We were driving to another part of the prison with al-Sarrah in the front seat and Hamdi and me in the back. “Now I am professional!” he said. “I am a complete montage expert!” He pointed at al-Sarrah, who smiled but did not speak or even look back. “All thanks to this man! The government opened this for us! Now I am in a car! Talking to you! Normally! Peacefully! No kind of problems!” Upon release, he said, he might work for his father’s company, or even (this was his dream) go into film and television production. I wondered what it might be like to have a co-worker like Hamdi, with, shall we say, an unconventional work history, and a penchant for extremism and Osama bin Laden that he swore up and down had been thoroughly replaced with a love for film and video production and the crown prince of Saudi Arabia. I was pretty sure Hamdi would be a better colleague than John Walker Lindh.

Top left: A camel market about an hour outside Riyadh, in January. *Top right:* A sign on the highway from Jeddah to Taif marking the turnoff for Mecca. *Bottom:* Women in Asir province. Outside Saudi Arabia's major cities, it isn't clear how quickly modernization is catching on. (Lynsey Addario for *The Atlantic*)

At the prison I asked many inmates how they could trade jihadism for these worldly things, which surely amounted to frippery compared with the chance to die in the path of God. They laughed, nervously, as if to ask what I was trying to do—get them to leave the prison and kill again? They were mostly still young, and they yearned for freedom. That they no longer wanted something thrilling and extraordinary was exactly the point. It is possible to have too much vision, or the wrong kind—some of them had gone to Syria, barely survived, and had had enough vision, thank you very much. "We don't want anything but a normal life," one told me. "I would be happy just to go outside, to walk on the Boulevard in Riyadh, to go to McDonald's."

"I went to Syria because I was offered to take part in a dream, the dream of a caliphate," said another. Ali al-Faqasi al-Ghamdi, a bookish man who had been with bin Laden at Tora Bora, told me he now recognized such dreams as counterfeit. What, he asked, is the point of a big, exciting dream when it is a false one? A small ambition that can actually be fulfilled is preferable to a big one that cannot. He looked me steadily in the eye, like he was trying to convince me and not himself. "Vision 2030 is real."

AMERICA MUST NOW decide whether that vision is worth encouraging. Twenty years ago, if you had told me that in 2022 the future king of Saudi Arabia would be pursuing a relationship with Israel; treating women as full members of society; punishing corruption, even in his own family; stanching the flow of jihadists; diversifying and liberalizing his economy and society; and encouraging the world to see his country and his country to see the world—Wahhabism be damned—I would have told you that your time machine was malfunctioning and you had visited 2052 at the earliest. Now that MBS is in power, all of these things are happening. But the effect is not as pleasing as I had hoped.

In 1804, another modernizing autocrat, Napoleon Bonaparte, arrested Louis Antoine, the duke of Enghien, on suspicion of sedition. The duke was young and foolish, and no great threat to Napoleon. But the future emperor executed him. Around Europe, monarchs were shocked: If this was how Napoleon treated a harmless naif like the duke, what could they expect from him as his power grew, and his domestic opposition dissolved in fear? The execution of Enghien alerted the most perceptive among them that Napoleon could not be managed or appeased. It took a decade of carnage to figure out how to stop him.

Enghien's schemes wouldn't have stopped Napoleon, and Khashoggi's columns wouldn't have stopped MBS. But his murder was a warning about the personality of the man who will be running Saudi Arabia for the next half century, and it is reasonable to worry about that man even when most of what he does is good and long overdue.

For now, MBS's main request to the outside world, and especially the United States, is the usual request of misbehaving autocrats—namely, to stay out of his internal affairs. "We don't have the right to lecture you in America," he said. "The same goes the other way." Saudi affairs are for Saudis. "You don't have the right to interfere in our interior issues."

But he acknowledges that the fates of the two countries remain linked. In Washington, many see MBS's rise as abetted, perhaps even made inevitable, by American support. "There was a moment in time where the international community could have made it clear that the Khashoggi murder was the straw that broke the camel's back, and that we weren't willing to deal with MBS," Senator Murphy told me. The Trump administration's support, when MBS was at his most vulnerable, saved him. "If MBS ultimately becomes king," Murphy said, "he owes no one bigger than Jared Kushner," Trump's personal envoy to the crown prince. ("You Americans think there is something strange about a ruler who sends his unqualified son-in-law to conduct international relations," one Saudi analyst told me. "For us this is completely normal.")

Some still hope that MBS will not accede to the throne. "Only one of the last five crown princes has eventually become king," Khalid al-Jabri noted to me, optimistically. But everything I see suggests that his ascent is certain, and that the search for alternatives is forlorn. Two of those four also-ran crown princes were sidelined or replaced by MBS himself. The other two died of old age.

The United States needs its partners in isolating Iran, and MBS is a stalwart there. And even domestically, he remains in some ways the right man for the job. He is at least, as Philip Zelikow reminded me, not a ruler in denial. "We wanted Saudi leadership who would face their problems, and embark on an ambitious and incredibly challenging generational struggle to remake Saudi society for the modern world," he told me. Now we have such a leader, and he is presenting a binary choice: support me, or prepare for the jihadist deluge.

"We don't have the right to lecture you in America," MBS said. "The same goes the other way."

MBS is correct when he suggests that the Biden administration's posture toward him is basically recriminatory. *Stop bombing civilians in Yemen. Stop jailing and dismembering dissidents.* The U.S. might, on the margins, be able to persuade MBS to use a softer touch—but only by first persuading him that he will be rewarded for his good behavior. And no persuasion will be possible at all without acknowledging that the game of thrones has concluded and he has won.

Many of the exiles I spoke with said their best hope now is that the crown prince will mellow, and that elder Saudi wise men will keep him from destroying the country with rash decisions, like the fight with Qatar, or the murder of Khashoggi. MBS does have a sense that being capricious and impulsive can be costly. "If we run the country randomly," he told me, "then the whole economy is going to collapse." Others had tried that strategy: "That's the Qaddafi way."

King Salman has instituted measures ostensibly intended to force his son to govern more inclusively after Salman's death. He changed the law of succession to prevent the next king from naming his own children, or indeed anyone from his own branch of the family, as his crown prince. I asked MBS if he understood that to be the rule, and he said yes. I asked if he had anyone in mind for the job. "This is one of the forbidden subjects," he said. "You will be the last to know."

WHEN HE IS KING, however, the rules will belong to him, and to ask him to abide by them against his wishes will be about as easy as negotiating from your suite at the Ritz-Carlton.

A crown prince with a subtler mind and a gentler soul might have implemented MBS's reforms without resorting to his brutal methods. But it is pointless to consider policy in a state of childlike fantasy, as if it were possible to conjure some new Saudi monarch by closing your eyes and wishing him into existence. Open your eyes, and MBS will still be there. If he is not, then the man ruling in his place will not be an Arab Dalai Lama. He will be, at best, a member of the unsustainable Saudi old guard, and at worst one of the big beards of jihadism, now richer than Croesus and ready to fight. As MBS told me, to justify the Ritz operation, "It's sometimes a decision between bad and worse."

Since reality has handed us MBS, the question for America is how to influence him. This question is practical rather than moral: If your moralism drives him into a partnership with China, what good will it have been? A fundamental principle of Chinese foreign relations is butting out of other countries' internal affairs and expecting the same from them. Certainly Beijing will not reprimand him for his treatment of dissidents.

In effect, both the Saudis and the Americans are now in the Ritz-Carlton, forced to bargain with a jailer who promises us prosperity if we submit to his demands, and *Mad Max* if we do not. The predicament is familiar, because it is the same barrel over which every secular Arab autocrat has positioned America since the 1950s. Egypt, Iraq, and Syria all traded semitribal societies for modern ones, and they all became squalid dictatorships that justified themselves as bulwarks against chaos.

Twenty years ago, Syria watchers praised Bashar al-Assad for his modernizing tendencies—his openness to Western influence as well as his Western tastes. He liked Phil Collins; how evil could he be? By now most everyone outside Damascus, Tehran, and Moscow recognizes him as Saddam Hussein's only rival in the dubious competition for most evil Arab leader.

MBS has completed about three-quarters of the transition from tribal king with theocratic characteristics to plain old secular-nationalist autocrat. The rest of that transition need not be as ruthless as the beginning, but MBS shows no sign of letting up. The United States can, and should, make the case that Saudi Arabia's security and development will demand different tools going forward. It might even suggest what those tools should be. But it probably cannot make MBS use them.

A more pragmatic approach is to make sure that the reforms he has instituted stick, and that the changes in Saudi culture become irreversible. The opening of the country and the forcible sidelining of a crooked royal class—these are hard changes to undo, and they bind even the absolute monarch who decreed them. Granting women driver's licenses was ultimately a smooth process. Taking them back would disrupt millions of lives and sow protest across the kingdom. American influence can acknowledge and encourage such changes.

Sometimes this is how absolute power relaxes its grip: slowly, without anyone noticing. In England, the transition from absolute monarchy to a fully constitutional one took 200 years, not all of them superintended by the most stable kings. MBS is still young and hoarding power, and everyone who has predicted that he would ease up on dissent has so far been proved optimistic. But 50 years is a long reign. The madness of King Mohammed could give way to something else: a slow and graceful renunciation of power—or, as with Assad, an ever more violent exercise of it.

This article appears in the April 2022 print edition with the headline "Absolute Power."

Graeme Wood is a staff writer at *The Atlantic* and the author of *The Way of the Strangers: Encounters With the Islamic State*.

https://www.reuters.com/markets/commodities/libya-oil-output-rises-about-700000-bpd-minister-says-2022-06-19/?taid=62afb62d65730a00012eaeb9&utm_campaign=trueAnthem:+Trending+Content&utm_medium=trueAnthem&utm_source=twitter

June 19, 20224:52 PM MDTLast Updated an hour ago

Libya oil output rises to about 700,000 bpd, minister says

Reuters

BENGHAZI, June 20 (Reuters) - Libyan oil total production is at about 700,000 barrels per day (bpd), the Libyan oil minister Mohamed Oun told Reuters on Monday.

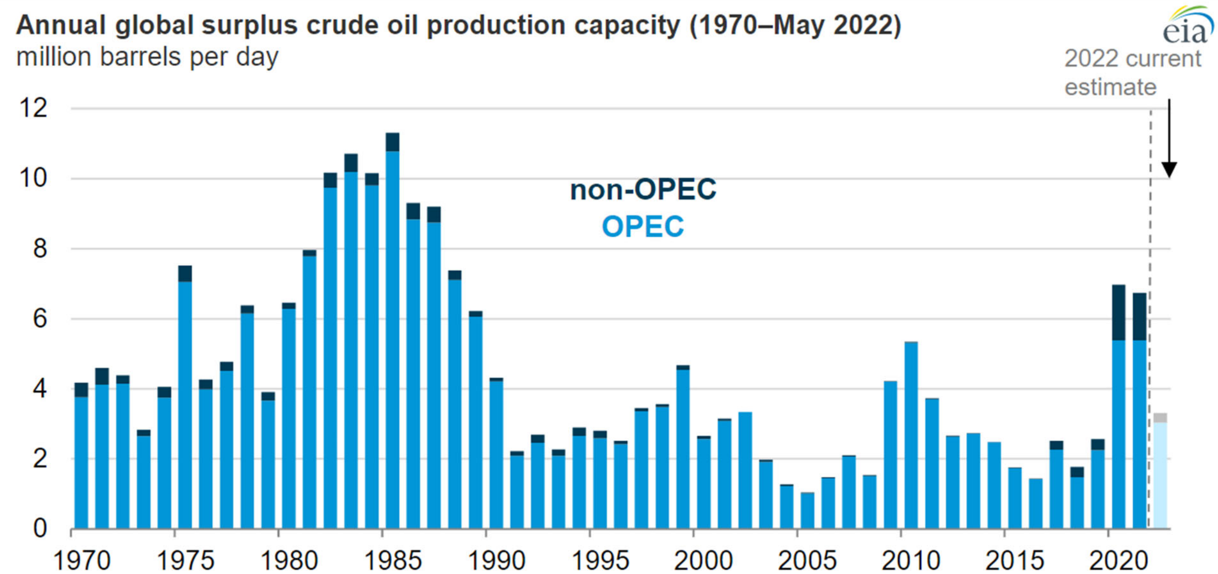
Libya's oil output was at 100,000-150,000 bpd, a spokesman for the oil ministry said last week.

Oun did not give details on when or how the output level had risen.

Reporting by Ayman Al-Warfalli; Writing by Alaa Swilam; Editing by Daniel Wallis https://www.eia.gov/todayinenergy/detail.php?id=52879#

JUNE 24, 2022

EIA estimates show a decrease in global surplus crude oil production capacity in 2022



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, *International Energy Outlook*, and International Energy Statistics Database

Our new report, titled *Global Surplus Crude Oil Production Capacity*, provides estimates of global surplus crude oil production capacity in both OPEC countries and non-OPEC countries. Preliminary estimates for these data show that, as of May 2022, surplus capacity in non-OPEC countries decreased by 80% compared with 2021. The data show that, in 2021, 1.4 million barrels per day (b/d) of surplus production capacity was available in non-OPEC countries, about 60% of which was in Russia. As of May 2022, we estimate that all surplus production capacity in Russia was eliminated due to the sanctions implemented after Russia's full-scale invasion of Ukraine. We determined that excess oil production capacity declined in other non-OPEC producing countries as well. We estimate that, as of May 2022, producers in non-OPEC countries had about 280,000 b/d of surplus production capacity.

We define surplus capacity as the maximum existing capacity that can be brought online within 30 days and sustained for at least 90 days. Our assessment of surplus crude oil production capacity does not include volumes of oil that are offline because of unplanned outages and disruptions, including sanctions, because these volumes cannot be brought to market voluntarily. For that reason, we exclude crude oil production that is offline in Iran, Libya, Venezuela, and now Russia, from surplus capacity estimates.

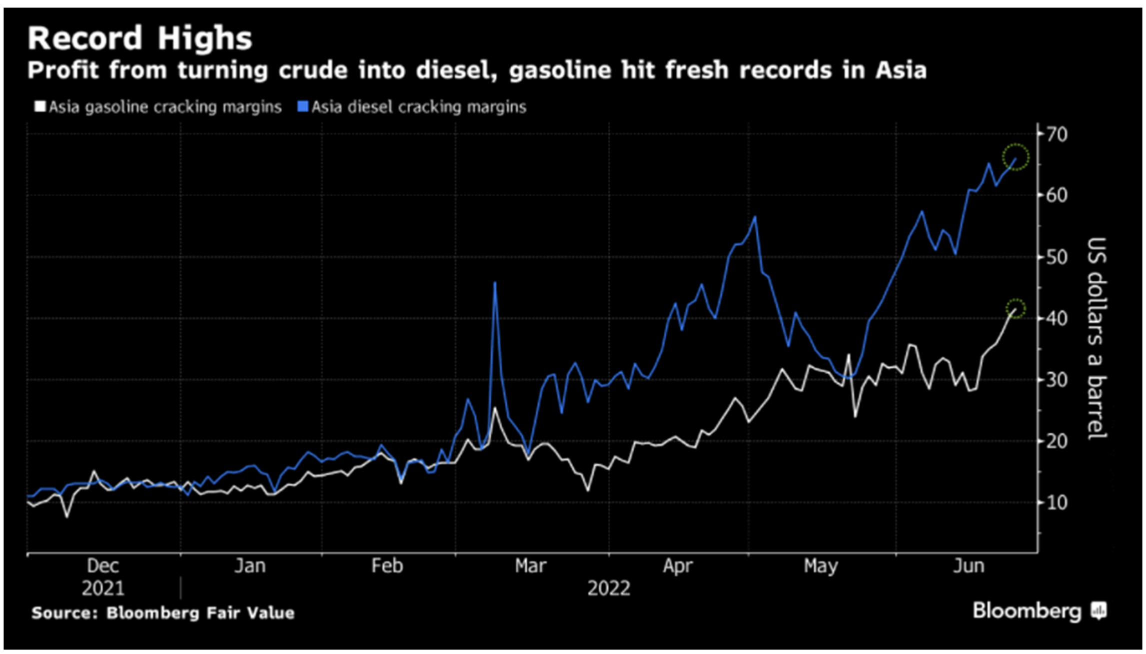
Since 2003, we have tracked OPEC surplus capacity in a separate publication: the *Short-Term Energy Outlook* (STEO). *Global Surplus Crude Oil Production Capacity* includes information about surplus production capacity located in both OPEC and non-OPEC member countries, based on STEO data. Our estimates of global surplus crude oil production capacity now date back to 1970 and provide a longer history of this measure. We define OPEC in terms of its current membership.

In our June STEO, we estimate that OPEC surplus capacity declined to 3.0 million b/d by May 2022 from 5.4 million b/d in 2021. As a result of the declines of surplus production capacity located in both OPEC and non-OPEC countries, global surplus crude oil production capacity in May 2022 was less than half of its 2021 average.

Principal contributor: Erik Kreil

Demand for Physical Oil Still Strong Despite Recession Fears (1)
2022-06-24 08:50:50.925 GMT

By Sharon Cho and Serene Cheong
(Bloomberg) -- Asian buyers are paying hefty premiums for physical barrels of crude, highlighting robust underlying demand for oil even as futures buckle under the weight of recessionary fears.
Most of the cargoes recently purchased by customers in the world's biggest oil-consuming region are for August loading, signaling confidence in demand over the next few months. Buyers are paying the biggest premiums for crude that yields more diesel or gasoline, as tight supplies underpin higher fuel prices.
Oil futures have tumbled in line with other commodities and stocks this month on concerns about a global economic slowdown. However, fuel markets remain under-supplied -- in part due to Russia's invasion of Ukraine -- just as demand climbs during the northern hemisphere summer. That's led to profit margins for refiners skyrocketing as they try and meet rising consumption.



A cargo of Vietnamese Ruby crude was sold at an unprecedented premium of more than $10 a barrel to Dated Brent this month, while Abu Dhabi's flagship Murban oil -- which yields more diesel -- was almost $19 higher than the Dubai benchmark on its exchange on Friday. That's a record premium, signaling a very strong market for physical supplies.
The current crude trading cycle in Asia kicked off earlier than usual this month as buyers from Japan, Thailand and South Korea snapped up cargoes from the Middle East. That's propped up demand from the region, which has lacked a strong presence from China and India. The two nations have ramped up their purchases of Russian oil, taking advantage of cheap prices.

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To view this story in Bloomberg click here:
https://blinks.bloomberg.com/news/stories/RDZ45JT1UM0X

Oil price outlook

Snapshot: January 10, 2022

Disclaimer: Please note that BNEF does not offer investment advice. Clients must decide for themselves whether current market prices fully reflect the issues discussed in this note.

Crude inventory data for Shandong teapots will be excluded from January 10.

Category	Indicator	Signal	Comment
Fundamentals	**Refinery margins**	↑	• Global refinery margins were slightly stronger over the past week due to lower natural gas prices and stronger middle distillate cracks.
Fundamentals	**Crude stocks**	↓	• In the week ending December 31, land crude-oil storage levels in BloombergNEF's tracked regions (U.S., ARA, Japan) dropped by 0.4% week-on-week to 520.9 million barrels (m bbl). The stockpile **deficit** against its five-year average (2015-19) **narrowed from 65.4m bbl to 59.3m bbl**. Including global floating crude stockpiles from the same week, total crude oil inventories increased by 0.4% to 623.1m bbl, with the stockpile **deficit of 5.4m bbl flipping to a surplus of 5.5m bbl.**
Fundamentals	**Product stocks**	↔	• In the week ending December 31, gasoline and light distillate stockpiles in BNEF's tracked regions (U.S., ARA, Singapore, Japan and Fujairah) were up 5.1% week-on-week to 270.1m bbl, with the stockpile **deficit** against its three-year average (2017-19) **narrowing from 20.6m bbl to 17.0m bbl**. Gasoil and middle distillate stockpiles in BNEF's tracked regions rose by 3.0% to 158.7m bbl, with the stockpile **deficit** against its three-year average **widening from 18.4m bbl to 23.0m bbl**. • Total oil product stockpiles in tracked regions increased by 1.9% to 938.6m bbl, with the stockpile **deficit** against its three-year seasonal average **narrowing from 54.4m bbl to 52.2m bbl**. All in all, crude and product stockpiles rose by 1.3% to 1,561.7m bbl, with the stockpile **deficit narrowing from 59.8m bbl to 46.7m bbl.**
Fundamentals	**Demand indicators**	↓	• Global jet fuel demand from commercial passenger flights rose by 23,800 barrels per day (or 0.5%) week-on-week, the sixth consecutive week of increase, partly aided by increased seasonal travel. Jet fuel consumption by international passenger departures was up 11,700 barrels per day (or 0.5%) week-on-week, while consumption by domestic passenger departures grew by 12,100 barrels per day (or 0.6%). • Global mobility indices moved lower again over the past week. Apple's global driving activity index dropped by 4.7% in the week to January 8, weighed down by a plunge in the Asia Pacific ex-China (-13.1%) and the Americas (-6.2%). Google's global mobility indices also fell by 0.6% in the week to January 6, driven by a drop in Asia Pacific ex-China (-4.6%). India, Japan and Thailand were key drivers of the decline in the APAC region as these countries saw a surge in Covid-19 cases. Road congestion in China rose by 0.6 percentage points to 98.3% of 2020 levels in the week to January 5, according to BNEF's calculation based on Baidu's data. • Daily average coronavirus cases was up 62% to almost 2.2 million in the week to January 8. Asia Pacific surged by 212% (India +520% to 72,000) to over 184,000 daily cases, the Americas jumped by 76% (U.S. +72% to 664,000) to just over 841,000 daily cases, while Europe was up 47% to over 996,000 daily cases. All numbers shown are the daily averages to the week ending January 8. • Weather forecasts showed that winter temperatures in key East Asian and European cities are becoming significantly milder.
Financial	**Macro indicators**	↔	• The dollar index averaged at 96.1 over the past week and was 0.2% higher from the week before.
Financial	**Hedge fund positioning**	↑	• In the week to January 4, Managed Money net positioning in the oil complex grew by 31.4m bbl (or 5.1%) week-on-week to 645.9m bbl, and was 87.5m bbl (or 15.7%) higher than four weeks ago.
Financial	**Options chains and volatility**	↑	• There was a notable pick-up in open interest for WTI and Brent Jun-22 to Dec-23 $100/bbl calls. WTI and Brent 1-month volatility skews rose over the past week, returning to November levels.
Outlook	**Weekly call**	↔	• BNEF is neutral on oil prices for the week ahead, with Brent Mar-22 trading at $81.34/bbl and WTI Feb-22 trading at $78.45/bbl at the time of writing. Surging virus cases globally could mean that an extension or addition of social restrictions (e.g. work-from-home policies) in key demand centers would keep mobility indicators suppressed in the meantime. However, oil prices are buoyed by supply disruptions in Libya causing the country's output to fall roughly 350,000 b/d month-on-month, and traders looking beyond the potential short-term demand impact due to the less severe nature of the omicron variant.

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Past outlooks

Disclaimer: Please note that BNEF does not offer investment advice. Clients must decide for themselves whether current market prices fully reflect the issues discussed in this note

Date of report	Refinery margins	Crude stocks	Product stocks	Demand indicators	Commitment of traders	Options chain and volatility	BNEF week ahead call	Brent/WTI price at time of writing ($/bbl)	Web Link
January 10	↑	↓	↔	↓	↑	↑	↔	Brent-Mar: 81.34 WTI-Feb: 78.45	
January 3	↔	↔	↑	↓	↔	↔	↑	Brent-Mar: 78.84 WTI-Feb: 76.14	🖥
December 13	↑	↑	↔	↑	↓	↔	↑	Brent-Feb: 75.25 WTI-Jan: 71.62	🖥
December 6	↑	↔	↔	↔	↓	↑	↔	Brent-Feb: 71.63 WTI-Jan: 68.05	🖥
November 29	↓	↔	↑	↔	↓	↓	↔	Brent-Feb: 74.47 WTI-Jan: 71.14	🖥
November 22	↓	↑	↔	↔	↓	↓	↓	Brent-Jan: 79.00 WTI-Jan: 76.06	🖥
November 15	↓	↔	↓	↔	↔	↓	↓	Brent-Jan: 81.27 WTI-Jan: 78.97	🖥
November 8	↓	↑	↔	↓	↓	↔	↓	Brent-Jan: 83.86 WTI-Dec: 82.47	🖥
November 1	↓	↔	↓	↔	↓	↓	↔	Brent-Jan: 84.70 WTI-Dec: 84.45	🖥
October 25	↓	↓	↔	↑	↔	↔	↔	Brent-Jan: 85.47 WTI-Dec: 84.61	🖥
October 18	↑	↔	↔	↑	↔	↔	↑	Brent-Dec: 84.70 WTI-Dec: 81.88	🖥
October 11	↑	↓	↔	↑	↑	↑	↔	Brent-Dec: 84.29 WTI-Nov: 81.73	🖥
October 4 (before OPEC+ meeting)	↑	↔	↔	↑	↔	↔	↔	Brent-Dec: 79.26 WTI-Nov: 75.80	🖥

To view past reports on terminal, go to NI BNEFOIL, search for the report and click on the icon to the far right:

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Fundamentals Financial

Crude stocks: Land

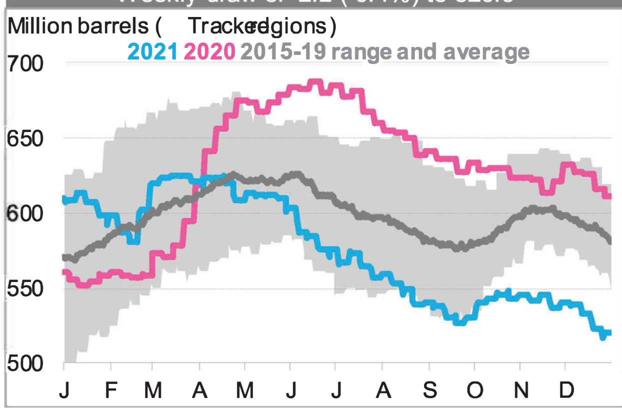
Crude inventory data for Shandong teapots will be excluded from January 10.

Neutral: Deficit narrowed from 65.4m bbl to 59.3m bbl against seasonal average

- Crude inventory rises when supply outstrips demand (meaning more physical oil is available than is needed). High or rising inventories are therefore a bearish factor for oil prices. Every year, storage levels fluctuate due to seasonal demand trends. The intra-year directional movement of stockpile levels is somewhat predictable, yet the magnitude of movement can differ significantly from expectations.
- A useful way to gauge if the intra-year storage levels differ from the norm is to measure the difference between the current and seasonal average inventory levels.

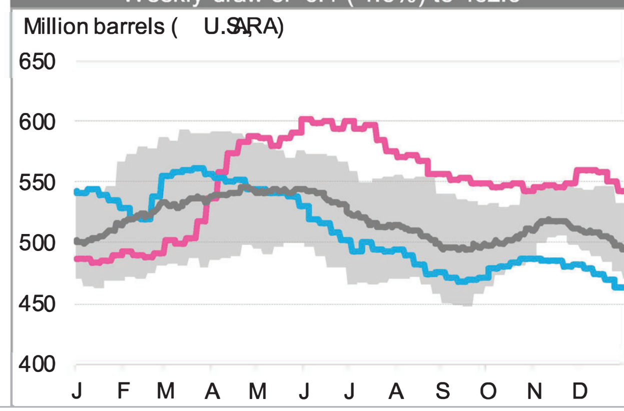
Land storage: Total

Weekly draw of -2.2 (-0.4%) to 520.9



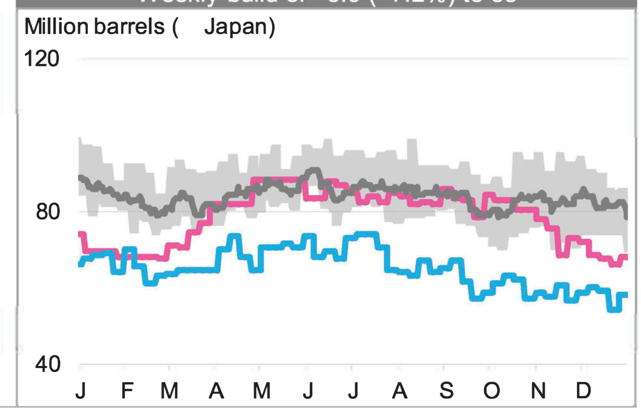
Land storage: West of Suez

Weekly draw of -6.1 (-1.3%) to 462.9



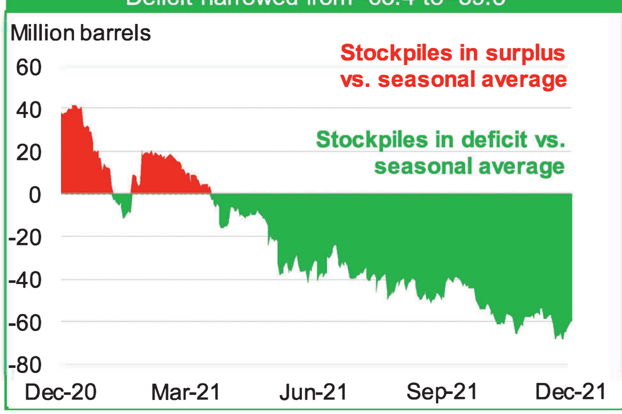
Land storage: East of Suez

Weekly build of +3.9 (+7.2%) to 58

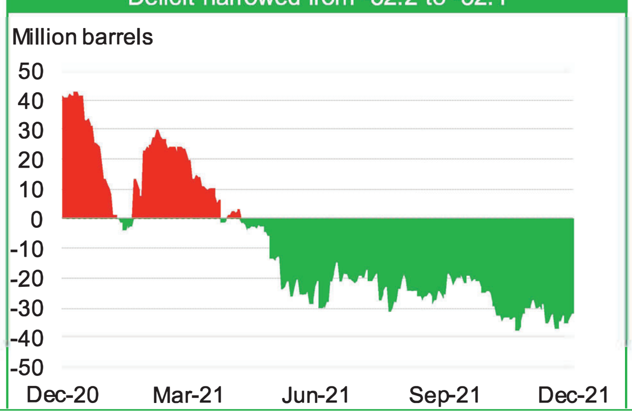


Charts below subtract current stockpiles by the 2015-19 (five-year) seasonal average

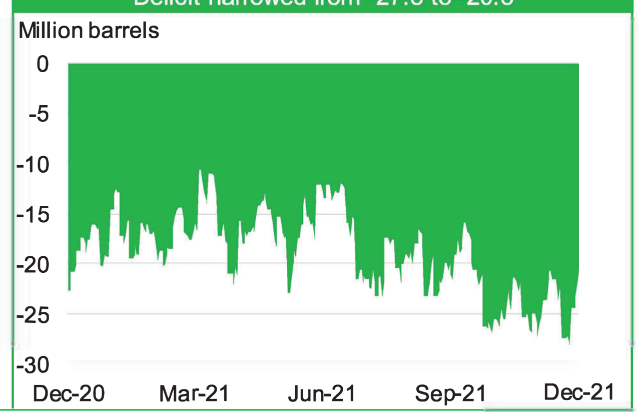
Deficit narrowed from -65.4 to -59.3



Deficit narrowed from -32.2 to -32.1



Deficit narrowed from -27.8 to -20.5



*Source: BloombergNEF, U.S. EIA, Genscape, PAJ, SCIG. Note: As of the **week ending Dec. 31.***

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Fundamentals | Financial

Crude stocks: Floating

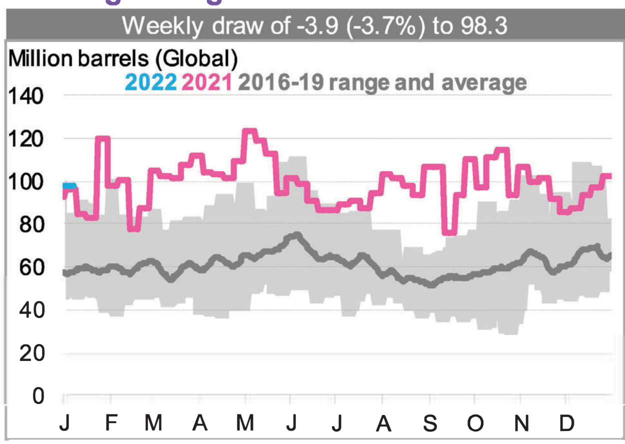
Bearish: Surplus remains high and volatile

- Floating storage is only profitable if the strength of contango (future vs. prompt price) is greater than the tanker costs. Therefore, tankers become floating storage when the profit from a storage play exceeds the cost of the forward freight agreement (FFA).
- The floating storage data used in the "Oil Price Outlook" slide is for the previous week (i.e. the week before the latest data shown below). That data is available in the table to the right.

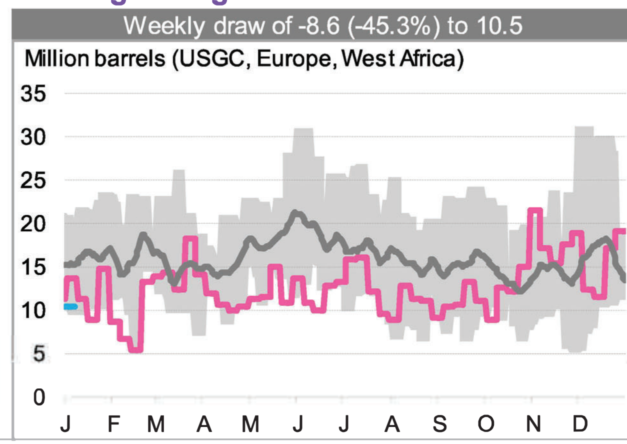
***Vortexa's revision to global floating crude inventories**

Million barrels	Previous report	Current report	*Vortexa's revision
Inventories in week of Dec. 31	97.3	102.2	+4.9

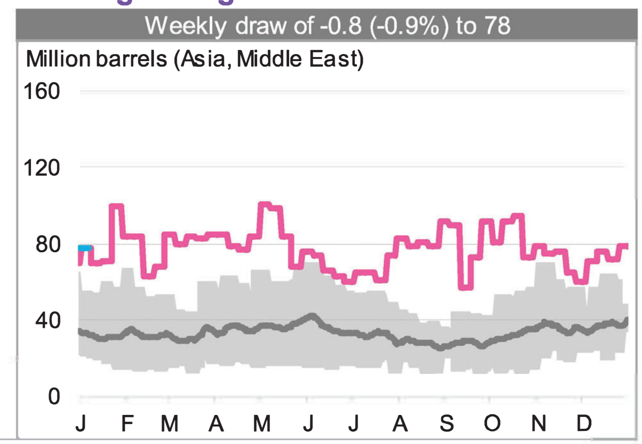
Floating storage: Total



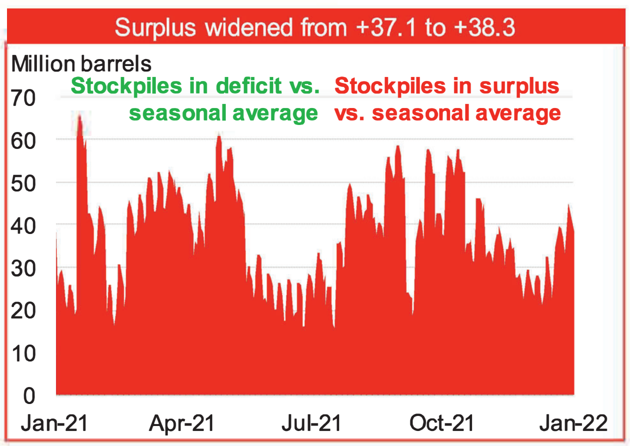
Floating storage: West of Suez

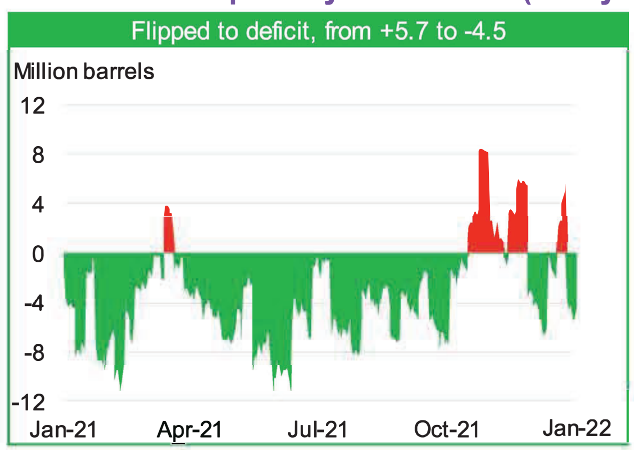


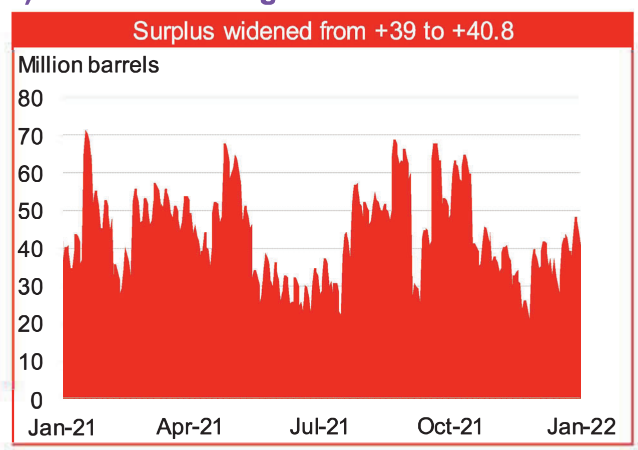
Floating storage: East of Suez



Charts below subtract current stockpiles by the 2016-19 (four-year) seasonal average





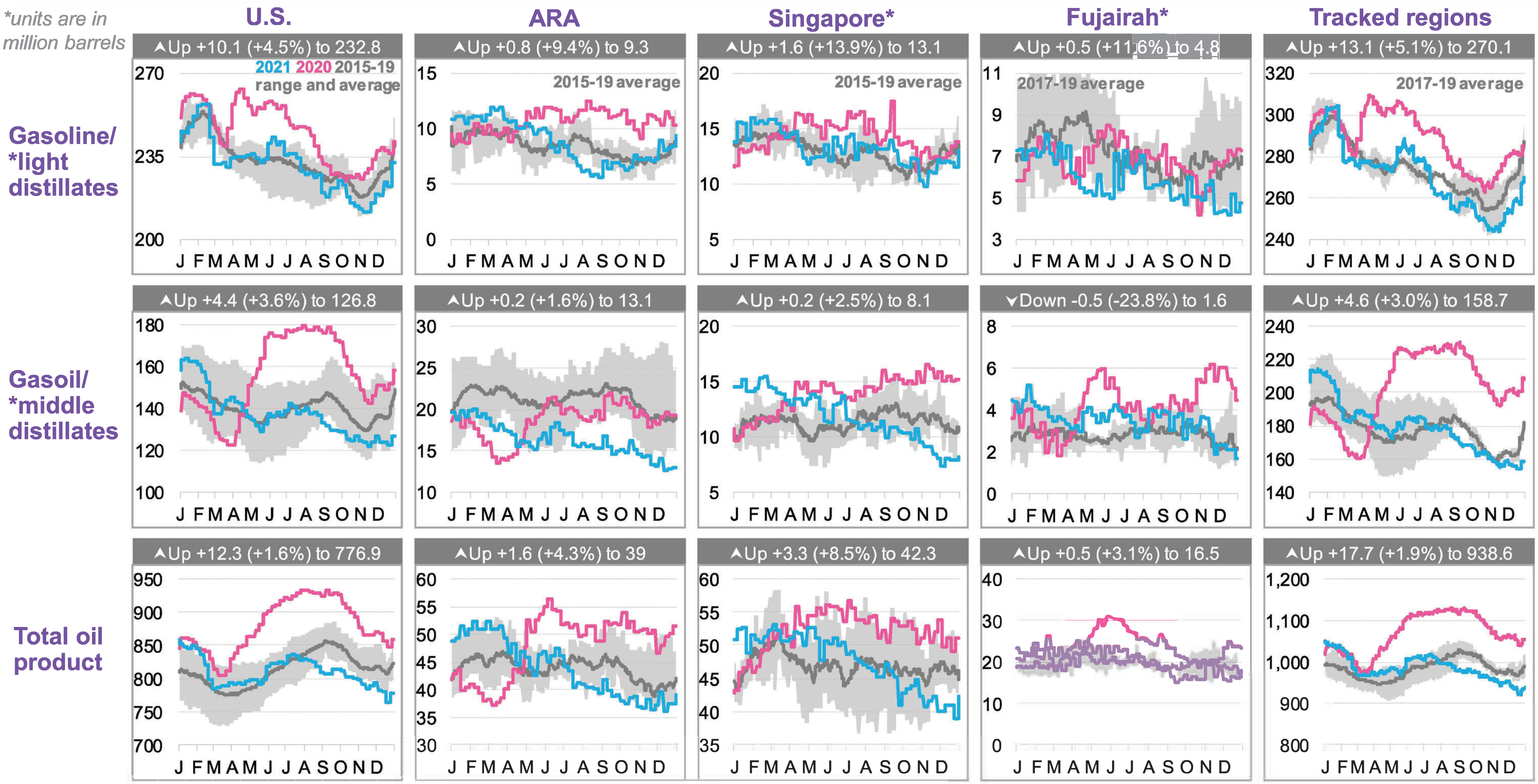


*Source: BloombergNEF, Vortexa. Note: As of the **week ending January 7**. ***Raw data from Vortexa is revised frequently, so the data in this report might change week-to-week.***

Product stocks: Current vs. seasonal average

Neutral: Oil product stockpiles in tracked regions rose by 1.9% week-on-week but remained significantly below the three-year seasonal lows

- Chart legend are as follows: 2021, 2020 and the 2015-19 range and average. For Fujairah and tracked regions, the **2017-19 (three-year) seasonal range** is shown. Tracked regions include U.S., ARA, Singapore, Japan and Fujairah



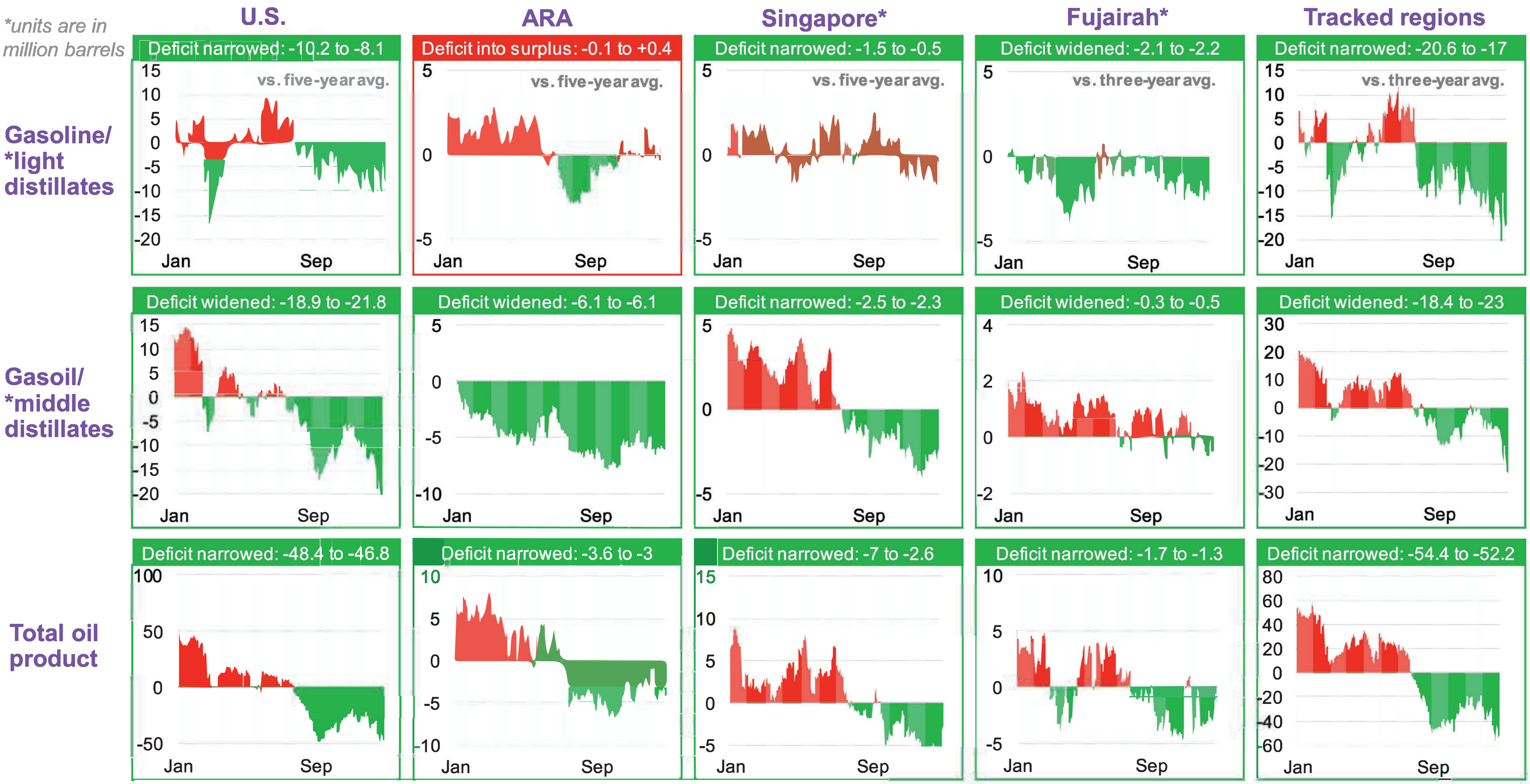
Source: BloombergNEF, U.S. EIA, PJK, IE Singapore, FEDCom/Platts, PAJ. Note: As of the ***week ending Dec. 31.***

Fundamentals | Financial

Product stocks: Current vs. seasonal average

Neutral: Oil product stockpile deficit against the seasonal average narrowed from 54.4m bbl to 52.2m bbl

- The charts below compare each respective regional product stockpile level against the seasonal average defined in the previous slide.
- **Red** signifies that the current stockpile levels are higher (in surplus) than the seasonal average, while **green** signals that the current stockpiles are lower (in deficit).



Source: BloombergNEF, U.S. EIA, PJK, IE Singapore, FEDCom/Platts, PAJ. Note: As of the ***week ending Dec. 31.***

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Fundamentals Financial

Aggregated oil stockpiles

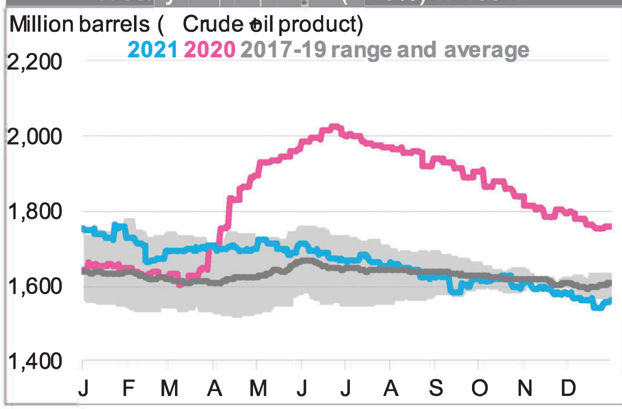
Neutral: Stockpiles deficit narrowed from 59.8m bbl to 46.7m bbl

Crude inventory data for Shandong teapots will be excluded from January 10.

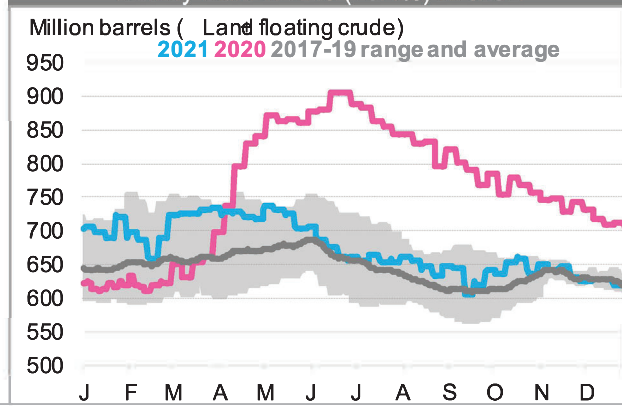
- Charts below use the **2017-19** (three-year) seasonal stockpiles. All calculations are recalibrated to measure against their respective three-year seasonal averages, so the values below might differ from the previous slides.
- Land crude inventories include the U.S., ARA, Japan and Shandong Teapots. Floating storage data is global. Oil product storage includes the U.S., ARA, Japan, Singapore, Shandong Teapots and Fujairah. Floating crude inventories might have been adjusted since the previous report – see slide 8 for more info.

Total oil and product stocks = Total crude stocks (land + floating) + Total oil product stockpiles

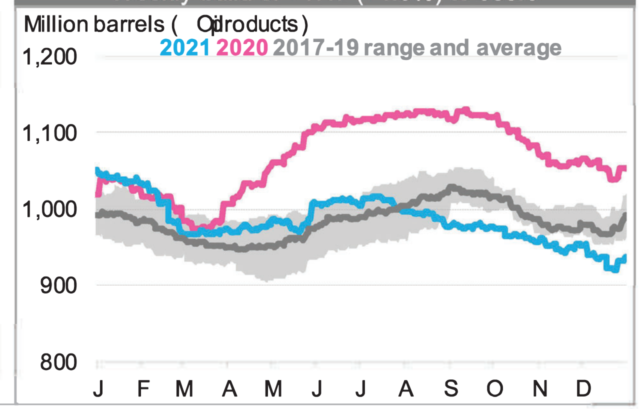
Weekly build of +20.3 (+1.3%) to 1561.7



Weekly build of +2.6 (+0.4%) to 623.1



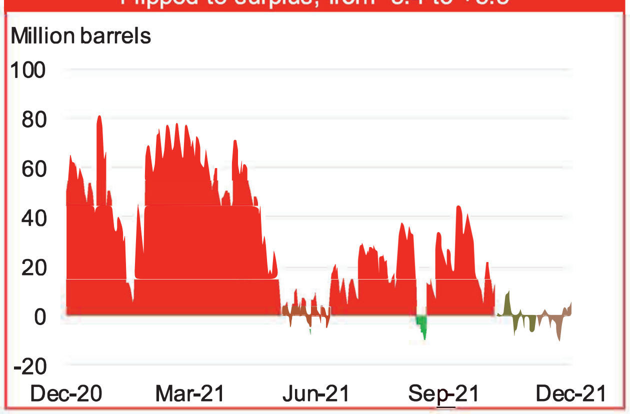
Weekly build of +17.7 (+1.9%) to 938.6



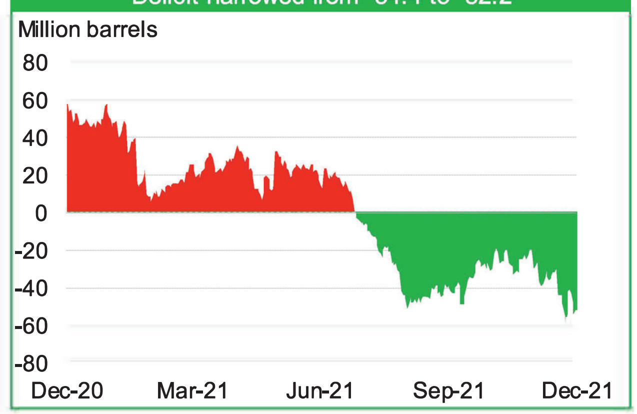
Charts below subtract current stockpiles by the 2017-19 (three-year) seasonal average

Deficit narrowed from -59.8 to -46.7

Flipped to surplus, from -5.4 to +5.5



Deficit narrowed from -54.4 to -52.2



*Source: BloombergNEF, U.S. EIA, PJK, IE Singapore, FEDCom/Platts, PAJ ,Vortexa, Genscape, SCIG. As of the **week ending Dec. 31.***

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Jun 23, 2022 06:44:20

OIL DEMAND MONITOR: China's Roads Get Busy as Planes Still Idled

Heathrow airport data shows lack of passengers from Asia

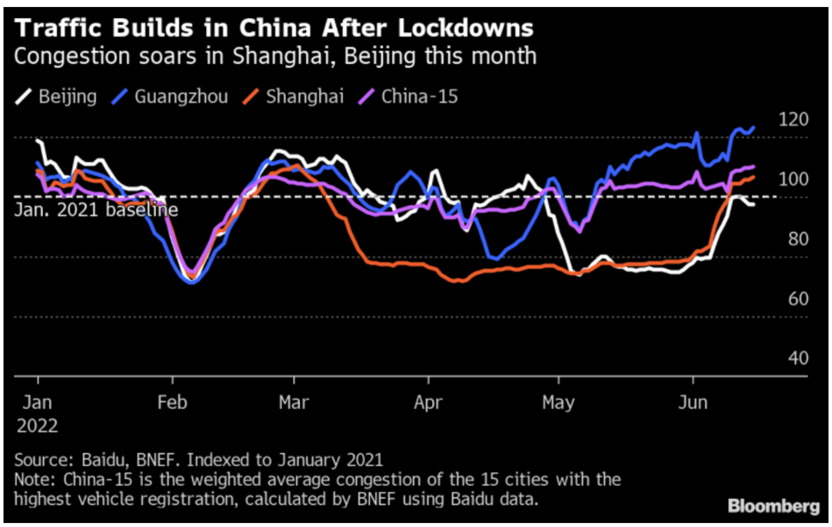
US refiners are operating near peak levels of capacity

By Stephen Voss

(Bloomberg) -- China's roads are getting busy again after major lockdowns in two of its biggest cities ended, though the country's air travel still lags behind other parts of the world, keeping a lid on demand for aviation fuel.

Traffic congestion in Shanghai and Beijing has been rising since the start of June after the two cities ended strict movement restrictions. Authorities are still implementing mass testing and mini lockdowns in some areas to keep infection rates under control.

Average congestion in 15 Chinese cities with the highest vehicle registrations has now been above a January 2021 baseline for more than a month after spending much of April and March at reduced levels, according to BloombergNEF calculations using Baidu congestion data.



Gasoline and diesel demand has mostly recovered already in other parts of the world, though not all regions show consumption higher than pre-pandemic levels. UK road fuel sales were -- again --a few percentage points below a pre-Covid baseline, in the latest week of statistics from the Department for Business, Energy and Industrial Strategy. US gasoline demand, while rising, is still underperforming the pre-pandemic years of 2017, 2018 and 2019, according to the Energy Information Administration.

The Paris-based International Energy Agency expects global oil demand growth to get weaker in coming quarters, after strong year-on-year increases in early 2022. The agency also said that demand for road fuels in OECD nations may never return to pre-Covid levels as prices rise and more people work from home.

Europe, India

The latest monthly data for France and Italy provides some insight on the situation in continental Europe. Toll road volumes in both countries were higher in May than the equivalent month of 2019, as were gasoline sales. Jet fuel demand was substantially lower than pre-Covid in both countries by about 20%, while diesel was mixed: demand was 1% higher in Italy and 4.5% down in France. A small portion of the gasoline gains can be attributed to a gradual shift away from diesel motor engines, according to French industry group UFIP Energies et Mobilites.

Indian demand for gasoline, diesel and LPG in the first half of June was substantially higher than the equivalent period of 2019, while jet remained 16% below, according to a Bloomberg survey of refinery officials.

Air Travel Still 15% Down

Several pieces of high-frequency data show that the global airline industry is still about 15% less active than it was before the pandemic hit, with the main drag being the lack of international flights to and from China due to Covid-19 restrictions.

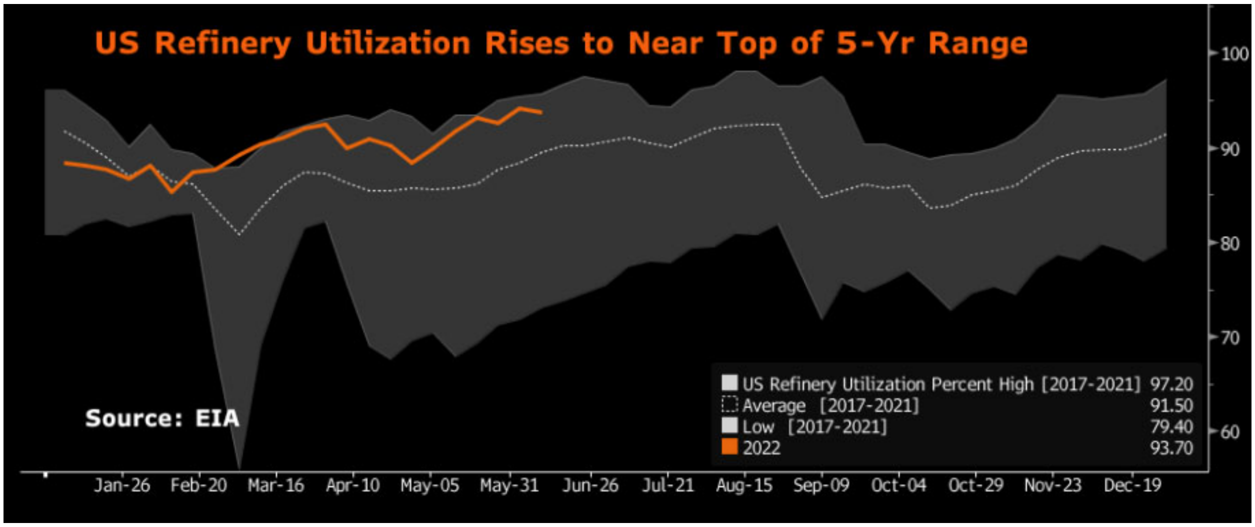
A breakdown of passenger numbers at London's Heathrow airport shows that while journeys to and from Europe and North America have roared back to life in the past three months, those involving the Asia-Pacific region remain subdued. The total number of passengers at Heathrow jumped 5% month-on-month in May to 5.34 million and now stand at more than double January's level. They're still about one-fifth smaller than in May 2019, long before the pandemic hit.

A steady recovery in European flights was notable during February, March and April, catching up with earlier gains in North America, though further increases appear to have stalled for now, according to a daily tally of arrival and departures recorded by Eurocontrol, which helps coordinate the region's air traffic.

The latest rolling average shows 30,399 flights per day in Europe in the seven days ended June 21, or 14% below the same period of 2019. That's little changed from a 15% deficit at the start of May, though much improved from late January when the gap was as large as 37%.

China's flight activity is difficult to predict since a large number of scheduled flights are routinely canceled. The number of seats offered on planes in North East Asia -- which includes China -- for the coming week rose by 4.4% from a week earlier, according to OAG Aviation. Seat capacity for international flights in the region is still massively down from pre-pandemic levels, by 86%. Domestic capacity is only 4% lower.

U.S. refineries have been steadily ramping up the amount of crude oil they process in recent months. Refiners were using 93.7% of available capacity as of June 10, near the top of the five-year range -- benefiting from the fat margins from producing fuels at the moment.



The Bloomberg weekly oil-demand monitor uses a range of high-frequency data to help identify emerging trends.

Following are the latest indicators. The first three tables shows fuel demand and road congestion, the next shows air travel globally and the fifth is refinery activity:

Demand Measure	Location	% y/y	% vs 2020	% vs 2019	% m/m	Freq	Latest Date	Latest Value	Source
Gasoline	US	-2.9	+16	-7.9	+0.7	w	June 10	9.09m b/d	EIA
Distillates	US	-17	+1.8	-17	-5.2	w	June 10	3.62m b/d	EIA
Jet fuel	US	+21	+93	-15	-6.6	w	June 10	1.52 b/d	EIA
Total oil products	US	-4.2	+14	-6.7	+0.2	w	June 10	19.7 b/d	EIA
All motor vehicle use index	UK	+1	+35	unch	+1	w	June 13	100	DfT
Car use	UK	unch	+36	-5	+1.1	w	June 13	95	DfT
Heavy goods vehicle use	UK	unch	+19	+9	+1.9	w	June 13	109	DfT
Gasoline (petrol) avg sales per filling station	UK	+0.2	+59	-5.7	+3	w	June 12	6,875 liters/d	BEIS
Diesel avg sales per station	UK	-3.9	+31	-11	+1.1	w	June 12	9,347 liters/d	BEIS
Total road fuels sales per station	UK	-2.2	+41	-8.6	+1.9	w	June 12	16,222 liters/d	BEIS
China 15 cities congestion	China				+5.9	d	June 13	109	Baidu / BNEF

Gasoline	India	+53		+21	+8	2/m	June 1-15	1.38m tons	Bberg
Diesel	India	+47		+16	+20	2/m	June 1-15	3.66m tons	Bberg
LPG	India	+4.5		+27	+9	2/m	June 1-15	1.15m tons	Bberg
Jet fuel	India	+125		-16	+4	2/m	June 1-15	263k tons	Bberg
Total Products	India	+24	+19	-4.9	+0.4	m	May	18.3m tons	PPAC
Toll roads volume	France	+22		+9		m	May	n/a	Atlantia
Toll roads volume	Italy	+13		+3.4		m	May	n/a	Atlantia
Toll roads volume	Spain	+14		-2.3		m	May	n/a	Atlantia
Toll roads volume	Brazil	+5		+6.9		m	May	n/a	Atlantia
Toll roads volume	Chile	+28		+13		m	May	n/a	Atlantia
Toll roads volume	Mexico	+7.6		+11		m	May	n/a	Atlantia
Gasoline	Spain	+9.9			-2	m	May	486 m3	Exolum
Diesel (and heating oil)	Spain	+7			-1.8	m	May	2231k m3	Exolum
Jet fuel	Spain	+190			+10	m	May	554 m3	Exolum
Road fuel sales	France	+13			+5.2	m	May	4.246m m3	UFIP
Gasoline	France	+25		+18		m	May	n/a	UFIP
Road diesel	France	+9.3		-4.5		m	May	n/a	UFIP
Jet fuel	France	+122		-19	+9.3	m	May	601k m3	UFIP
All petroleum products	France	+16		-3.4	+4	m	May	4.576m tons	UFIP
All vehicles traffic	Italy	+16			+3.6	m	May	n/a	Anas
Heavy vehicle traffic	Italy	+10			+14	m	May	n/a	Anas
Gasoline	Portugal	-4.4	+103	-22	-34	m	April	72k tons	ENSE
Diesel	Portugal	-14	+40	-23	-37	m	April	329k tons	ENSE
Jet fuel	Portugal	+273	+1395	-1	+28	m	April	124k tons	ENSE
Total fuel sales	Italy	+8.5	+49	-2.7	+6	m	May	4.49m tons	Ministry
Gasoline	Italy	+12	+80	+6.8	+6.3	m	May	658k tons	Ministry
Diesel /gasoil	Italy	+6.1	+42	+1	+5.5	m	May	2.29m tons	Ministry
Jet fuel	Italy	+165	+367	-22	+14	m	May	336k tons	Ministry

Notes: Click here for a PDF with more information on sources, methods. The frequency column shows w for data updated weekly, 2/m for twice a month and m for monthly. The column showing "vs 2020" is used for some data, such as comparing Italian jet fuel sales for May 2022 vs May 2020.

In Dff UK daily data, which is updated once a week, the column showing versus 2019 is actually showing the change versus the first week of February 2020, to represent the pre-Covid era.

In BEIS UK daily data, which is updated once a week, the column showing versus 2019 is actually showing the change versus the average of Jan. 27-March 22, 2020, to represent the pre-Covid era.

Atlantia is publishing toll road data on a monthly basis, rather than the weekly format seen in 2021, and DoT also switched to monthly data after the week ended April 3.

City congestion:

Measure	Location	% chg vs avg 2019	% chg m/m	June 20	June 13	June 6	May 30	May 23	May 16	May 9	May 2	Apr. 25
		(for June 20)		Congestion minutes added to 1 hr trip at 8am* local time								
Congestion	Tokyo	-23	-13	29	29	38	31	33	32	29	15	32
Congestion	Taipei	-34	+95	23	22	20	14	12	19	14	11	21
Congestion	Jakarta	-15	-15	33	37	43	41	39	zero	21	zero	40
Congestion	Mumbai	-38	+56	30	20	18	16	19	10	19	16	22
Congestion	New York	-65	-63	11	29	27	1	29	28	29	21	27
Congestion	Los Angeles	-66	-57	12	22	29	2	28	29	30	31	31
Congestion	London	+11	+9	42	44	43	18	38	42	43	2	38
Congestion	Rome	-12	-17	43	41	57	49	52	50	50	46	zero
Congestion	Madrid	-41	-27	21	27	28	29	29	1	30	zero	26
Congestion	Paris	-8	unch	41	49	2	40	41	43	43	14	21
Congestion	Berlin	+20	+49	40	27	1	26	27	29	37	29	28
Congestion	Mexico City	-40	-23	29	33	34	37	38	38	38	40	41
Congestion	Sao Paulo	-44	-13	24	25	29	30	28	30	29	34	31

Source: TomTom. Click here for a PDF with more information on sources, methods.

* 9am statistics are used for Mumbai, rather than 8am. All other cities, including Sao Paulo, use 8am.

NOTE: m/m comparisons are June 20 vs May 23. There were holidays in New York and Los Angeles on June 20 that likely reduced traffic flow. TomTom has been unable to provide Chinese data since April 2021. Taipei and Jakarta were added to the table in December 2021.

Chinese City Congestion:

Measure	Location	% chg vs Jan. 2021	% chg m/m	% chg w/w	June 13	June 6	May 30	May 23	May 16	May 9	May 2	Apr. 25	Apr. 18	Apr. 11
		(compare vs June 13)												
Congestion	Beijing	-1	+30	+18	99	84	76	76	76	77	84	105	101	92
Congestion	Guangzhou	+21	+10	+8.7	121	112	117	115	110	99	99	91	80	92
Congestion	Shanghai	+6	+37	+18	106	89	78	78	77	76	75	77	76	73
Congestion	China-15	+9	+5.9	+5.8	109	103	104	104	103	96	97	99	95	93

Source: BNEF calculations based on Baidu congestion data, showing a seven-day moving average indexed against a January 2021 baseline. China-15 is the weighted average of the 15 cities with the highest number of vehicle registrations. m/m comparisons are June 13 vs May 16

Air Travel:

Measure	Location	y/y	vs 2 yrs ago	vs 2019	m/m	w/w	Freq.	Latest Date	Latest Value	Source
		changes shown as %								
Airline passenger throughput	US	+19	+253	-21	+6.1	+1.2	d	June 21	2.14m	TSA
Airline passenger throughput (7d avg)	US	+18	+334	-12	+4.4	+2	d	June 21	2.31m	TSA
All flights	Worldwide	+13	+78	+7.2	+8	+4.6	d	June 21	218,726	Flightradar24
Commercial flights	Worldwide	+20	+120	-15	+7.3	+1.7	d	June 21	103,566	Flightradar24
Air traffic (flights)	Europe			-14	+10	+2.2	d	June 21	30,399	Eurocontrol
Air traffic (flights)	UK			-15	+6.5	+0.1	d	June 21	5,732	Eurocontrol
Air traffic (flights)	Germany			-18	+7.8	+0.7	d	June 21	5,181	Eurocontrol
Seat capacity	Worldwide	+36	+147	-16	+11	+2	w	June 20-26	98.5m	OAG
Seat capacity	North America			-9		+0.7	w	June 20-26	n/a	OAG
Seat capacity	North East Asia			-25		+4.4	w	June 20-26	n/a	OAG
Seat capacity	South East Asia			-32		+1	w	June 20-26	n/a	OAG
Seat capacity	South Asia			-1.2		+0.4	w	June 20-26	n/a	OAG
Seat capacity	Western Europe			-13		+0.7	w	June 20-26	n/a	OAG
Seat capacity	Central America			+3.2		+1.1	w	June 20-26	n/a	OAG
Heathrow airport passengers	UK	+691	+2243	-21	+5.1		m	May 2022	5.34m	Heathrow

NOTE: Comparisons versus 2019 are a better measure of a return to normal for most nations, rather than y/y comparisons.

FlightRadar 24 data shown above, and comparisons thereof, all use 7-day moving averages, except for w/w which uses single day data.

Refineries:

Measure	Location	y/y	chg vs 2019	m/m chg	Latest as of Date	Latest Value	Source
		Changes are in ppt unless noted					
Crude intake	US	-0.1%	-4.4%	+2.4%	June 10	16.3m b/d	EIA
Apparent Oil Demand	China	-8.3%	+4.5%	+3%	May 2022	12.45m b/d	NBS
Utilization	US	+1.1	+0.5	+1.9	June 10	93.7 %	EIA
Utilization	US Gulf	+3.5	+2.3	+1.3	June 10	96.5 %	EIA
Utilization	US East	+7.7	+6.1	+3.3	June 10	98.3 %	EIA
Utilization	US Midwest	-4.4	+4.8	+3.1	June 10	92.9 %	EIA

NOTE: All of the refinery data is weekly, except NBS apparent demand, which is usually monthly . Changes are shown in percentages for the rows on crude intake and Chinese apparent oil demand, while refinery utilization changes are shown in percentage points. SCI 99 data on Chinese refinery run rates was discontinued in late 2021.

US Oil Indicators Weekly

Takeaways: Crude oil prices dipped in the latter half of the week, with West Texas Intermediate front-month prices entering Friday, June 17 just under the $120 a barrel. Backwardation remains steep but stable – in the last few weeks, contracts settling six months and 12 months out have traded at around $14 and $23/barrel below spot prices respectively. US crude production finally hit the elusive 12 million barrel a day mark for the first time since April 2020.

While gasoline demand isn't likely to close the gap to pre-pandemic levels, growth is matching step with typical seasonal trends and is on pace to grow by another 200-300 thousand barrels a day by summer's end. Refiners operating at full tilt are struggling to meet demand with margins still near record highs but have limited short-term avenues to increase capacity, adding to the Biden administration's challenges in taming pump prices.

	Frequency	Source	Snapshot: June 17, 2022
Overall market indicators:			
Mobility	Daily	Google mobility	North American traffic levels have rebounded in the first weeks of June but have failed to surpass 80% of 2019 levels since last winter
Economic activity	Daily	New York MTA, Moovit, OpenTable, Prodco	NYC daily vehicle entries via bridges and tunnels are nearing record highs as the seven-day moving average approaches 1 million
Crude oil prices	Daily	Bloomberg	WTI prices dipped back below $120 heading into the weekend; backwardation has held stable this month, with contracts settling one year out trading at a $23 discount
Oil demand:			
Road congestion & gasoline	Weekly, Hourly	US EIA, TomTom	Gasoline demand edged lower based on the weekly figure, dampening the fresh optimism around its growth trajectory following the previous report's promising figures
Air travel & jet fuel	Daily	US TSA, FlightStats	Jet fuel demand mirrored gasoline's weak demand showing last week with the four-week average falling to the lowest for this time of year since 2012
Refinery operations	Daily	US EIA	US refiners are still operating at full tilt with utilization at 94% of capacity. With limited short-term avenues to add to capacity, rising fuel demand is poised to test fuel makers over the coming months
Crude/product inventories	Weekly	US EIA	Commercial oil inventories posted another larger-than-expected gain as Cushing stocks continue to sink toward operational lows
Oil production	Weekly	US EIA	Crude production finally hit 12 million barrels a day for the first time since April 2020, while the rig count got back on track after a brief pause in recent weeks

Source: BloombergNEF. Note: Green signals an upturn from the disruption caused by Covid-19, red indicates downturn, orange indicates no/mixed change. In most cases, the colors are indicative of changes from the prior week.

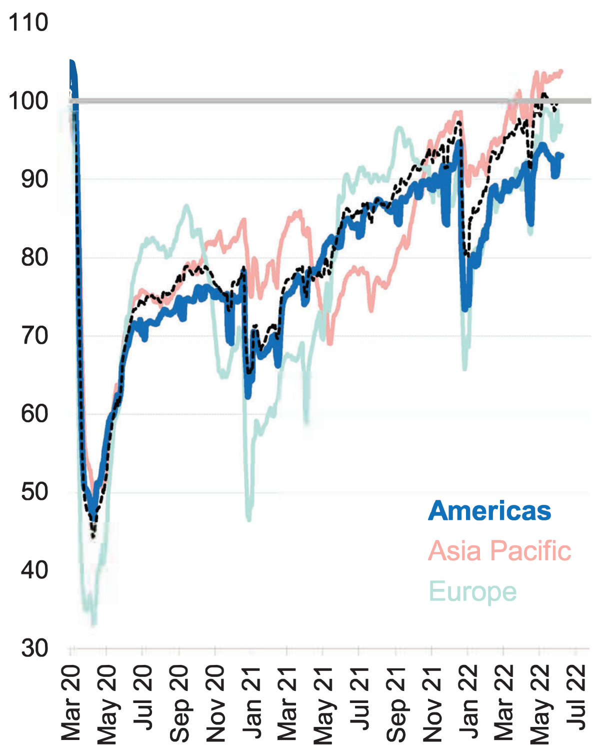
Mobility

Note: Apple Mobility reports were discontinued on April 14, 2022. We will resume updating TomTom congestion data, which were previously updated to March 16.

North American traffic levels have rebounded in the first weeks of June but failed to surpass 80% of 2019 levels since last winter

Google mobility index

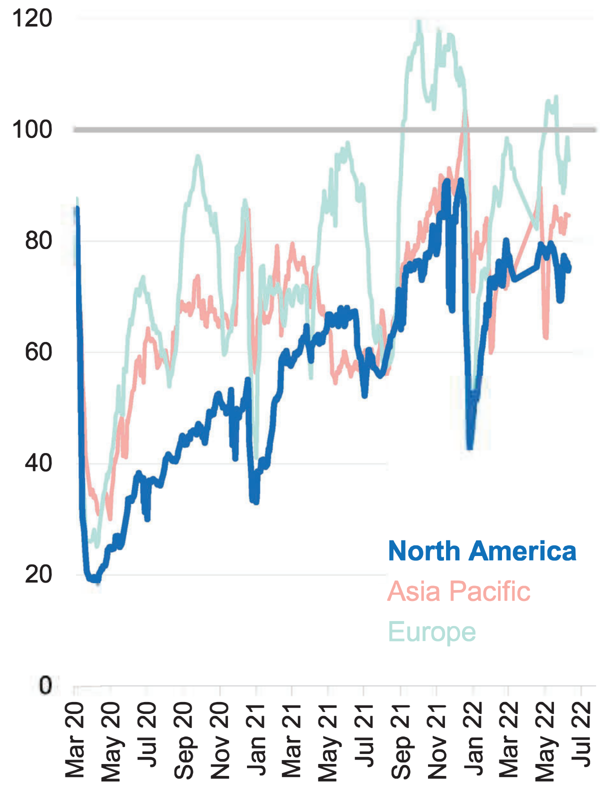
Indexed to Jan - Feb 2020 (seven day MA)



Source: Google Community Mobility Report, BloombergNEF. Note: Data exclude China and Russia. Calculation includes retail and recreation, workplaces, transport hubs. The world/regional index is weighted by the 2019 road fuels demand of each country. ***Data updated to June 12.***

TomTom congestion index

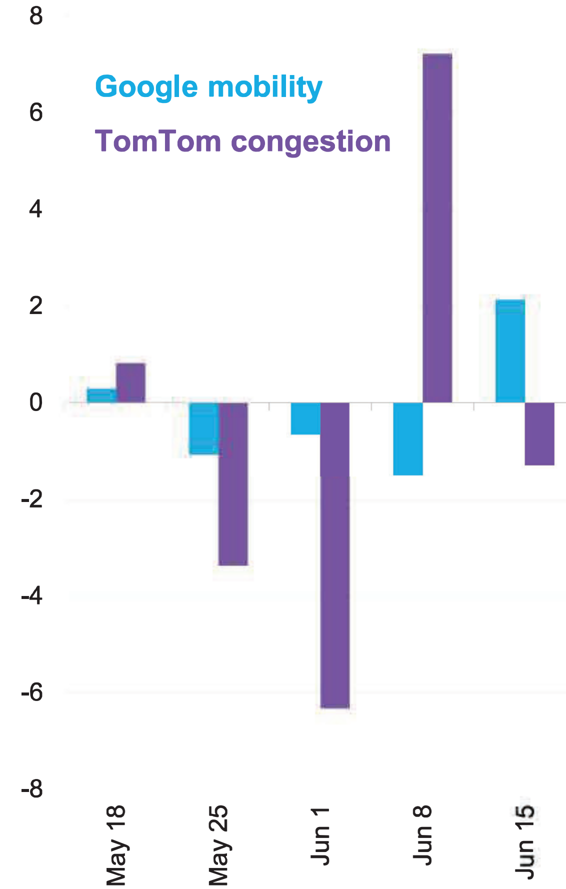
Indexed to peak congestion of average week in 2019 (five day MA)



Source: BloombergNEF, TomTom Traffic Index. Note: 'Peak congestion index' is calculated by BNEF. Index is the arithmetic daily average of the hourly weekday peak congestion data of various cities within the region, compared to the 2019 average values. ***Data updated to June 15.***

Americas week-on-week change

Weekly change in respective indexed value



Note: TomTom data not available for March 16-April 22 as noted above.

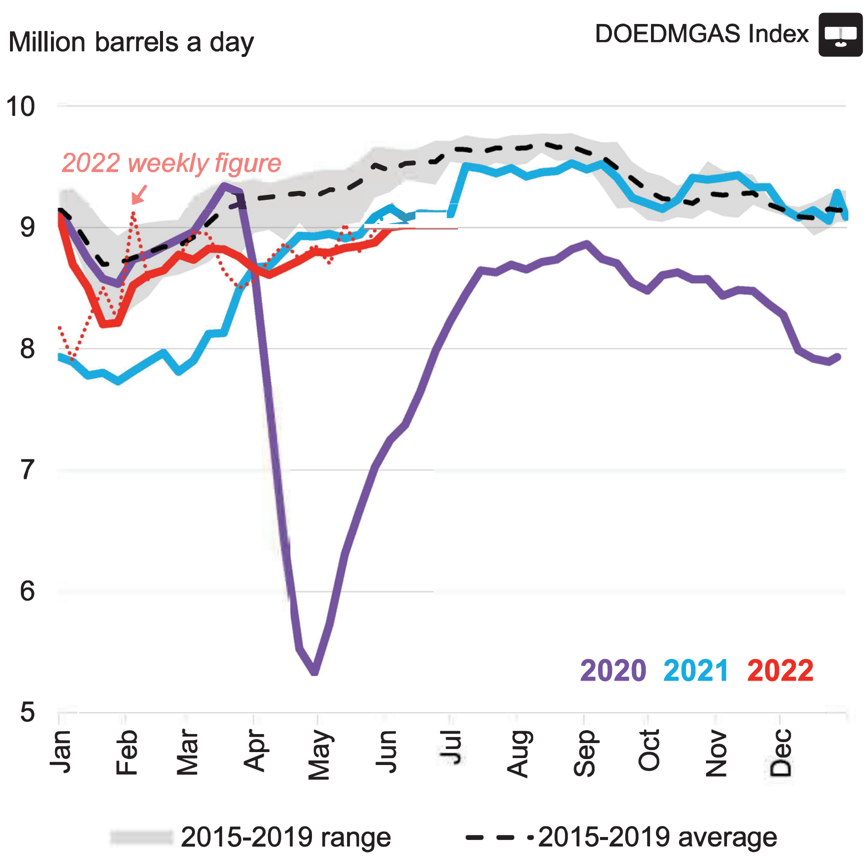
Oil markets

Gasoline demand

For more data on congestion around the world, see the BNEF Covid-19 Indicators: Road Traffic

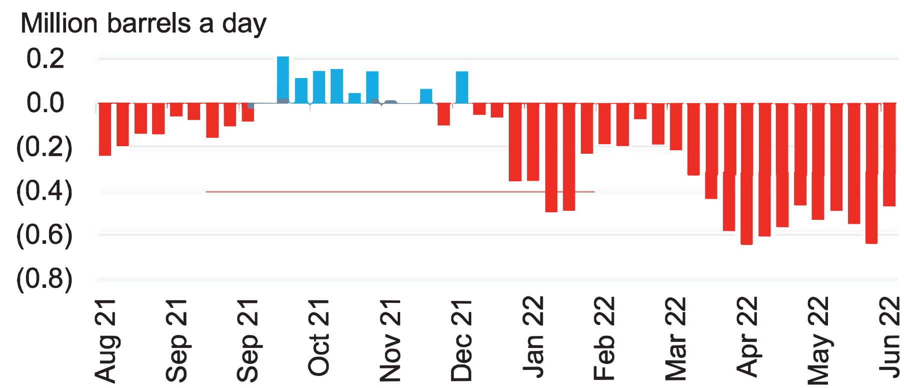
Gasoline demand edged lower based on the weekly figure, dampening the fresh optimism around its growth trajectory following the previous report's promising figures

Implied gasoline demand*

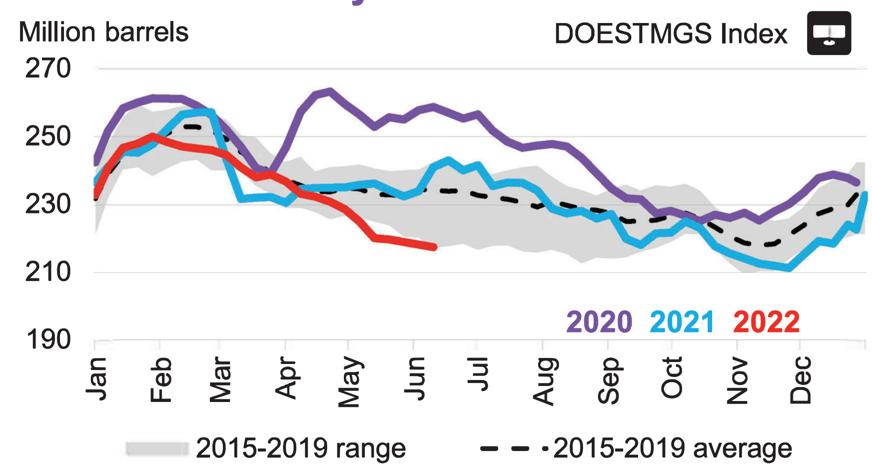


*Source: BloombergNEF, US Energy Information Administration; Note: *Based on the four-week moving average, except the 2022 weekly figure*

Demand difference to 5-year seasonal average



Gasoline inventory



Source: BloombergNEF, US EIA

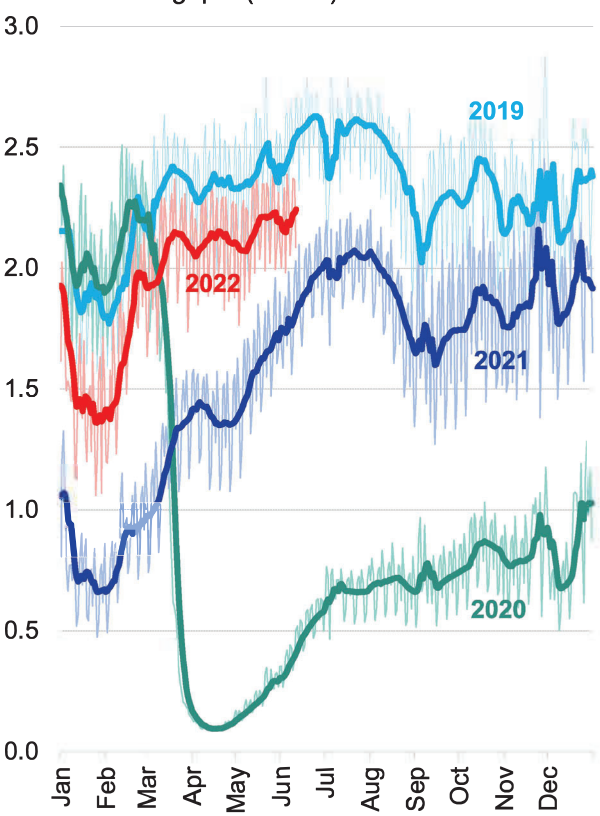
Oil markets

Jet fuel demand

Jet fuel demand mirrored gasoline's weak demand showing last week with the four-week average falling to the lowest for this time of year since 2012, barring 2020

TSA checkpoint traffic

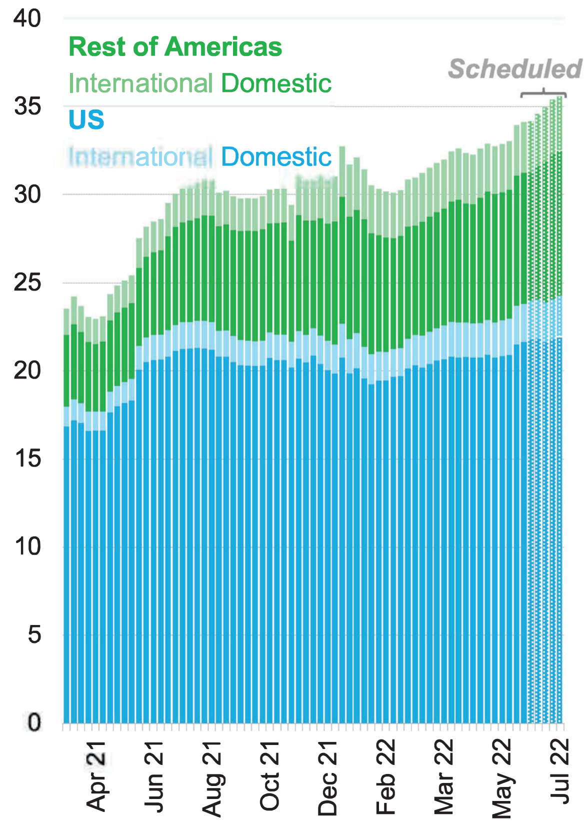
Traveler throughput (million)



Source: BloombergNEF, TSA

Daily flight departures

Thousand flights per day

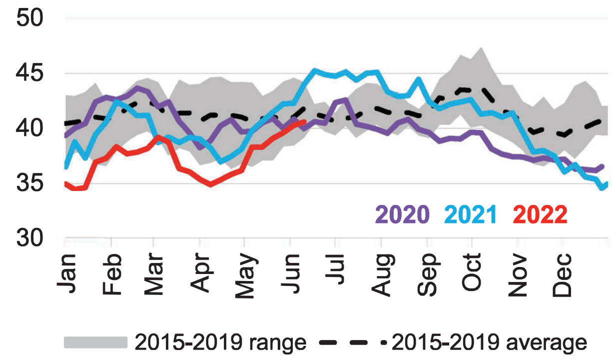


Source: BloombergNEF, FlightStats

Jet kerosene storage

Million barrels

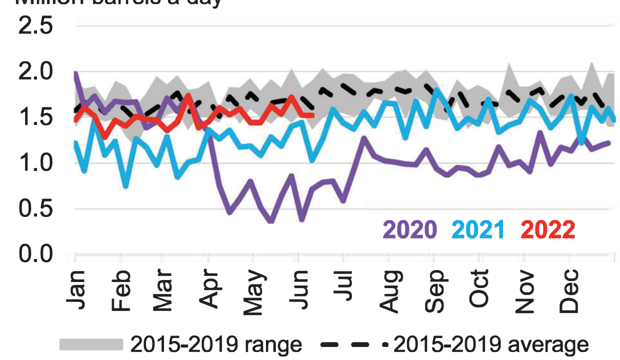
DOESJETK Index



Jet kerosene implied demand

Million barrels a day

DOEDJETK Index



Source: BloombergNEF, US EIA

For more data on congestion around the world, see the BNEF Covid-19 Indicators: Aviation https://newsroom.aaa.com/2022/06/from-sea-to-shining-sea-aaa-predicts-47-9-million-people-will-travel-this-july-4th/

From Sea to Shining Sea: AAA Predicts 47.9 Million People Will Travel This July 4th

Car travel expected to set a new record despite the historically high gas prices

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6/21/2022

ORLANDO, Fla. (Jun 21, 2022) – Summer travel is already in full swing and Independence Day will be no exception as AAA predicts 47.9 million people will travel 50 miles or more from home over the holiday weekend (June 30 – July 4). This is an increase of 3.7% over 2021, bringing travel volumes just shy of those seen in 2019. The biggest surprise – car travel – will set a new record despite historically high gas prices with 42 million people hitting the road. With crowded roads and busy airports, AAA wants to prepare travelers so they can have a stress-free July 4th celebration.

"The volume of travelers we expect to see over Independence Day is a definite sign that summer travel is kicking into high gear," said Paula Twidale, senior vice president, AAA Travel. "Earlier this year, we started seeing the demand for travel increase and it's not tapering off. People are ready for a break and despite things costing more, they are finding ways to still take that much needed vacation."

Car travel volume, even with national average gas prices going over the $5 mark, will break previous records as 42 million opt to drive this Independence Day. Recent issues with air travel and ongoing concerns of cancelations and delays may be driving this increase. In fact, the share of people traveling by air will be the lowest since 2011.

2022 Independence Day Holiday Travelers

	Total	Automobile	Air	Other (Bus, Train, Cruise)
2022 (Forecast)	**47.9M**	42.0M	3.55M	2.42M
2021 (Actual)	**46.2M**	41.8M	3.50M	900,000
2019 (Actual)	**49.0M**	41.5M	3.91M	3.54M
Change (2019 to 2022)	**-2.1%**	1.1%	-9.3%	-31.6%
Change (2021 to 2022)	**3.7%**	0.4%	1.5%	167.9%
Share of Travelers by Mode (2022)				
Automobile	**Air**	**Other**		
88%	7%	5%		

"Traveling by car does provide a level of comfort and flexibility that people may be looking for given the recent challenges with flying," continued Twidale. "But not all destinations are within driving distance, which doesn't mean you have to abandon your vacation plans. The best advice we can give travelers is to consider working with a travel agent who can help plan for the unexpected – like a flight cancelation. They are your best advocate."

This Summer, Travel Stress-Free

Independence Day will be the second busiest since 2000, as travel volumes continue to trend upwards with no sign of slowing down. It is important travelers are prepared and flexible to minimize stress and enjoy the holiday. AAA offers the following advice:

- **Have a plan A, B and C.** Flights, car rentals, accommodations, tours, cruises and other activities are in high demand and availability may be limited, which will impact pricing. Finding last-minute deals is unlikely so it's recommended to look for discounts and rewards, usually available through a membership like AAA. This is also another time when travel agents are a great resource since they may know of a deal that may not be readily available to the public.
  - **Air**—AAA finds that the **average lowest** airfare is 14% more than last year coming in at $201/ticket.
  - **Hotels**—Mid-range hotel rates have increased about 23%, with the **average lowest** nightly rates coming in at $244/night for AAA Approved Hotels.
  - **Car Rentals**— Since the holidays last year, the average daily rate for car rentals have continued to increase. With more people traveling, these prices remain on the rise due to continued supply chain issues coupled with growing demand. While daily car rental rates have decreased 34% compared to last year, with the **average lowest** rate coming in at $110/day, when compared to pre-pandemic years like 2019, rates are $40 more/day on average.
- **B-E-T on a breakdown-free trip.** AAA expects to respond to over 446,000 calls for roadside assistance over the Independence Day holiday weekend. Make sure to get a full vehicle inspection ahead of any long trip but especially for components like a vehicle's **b**attery, **e**ngine and **t** Even a vehicle in top shape can run into an issue so it's a good idea to pack a well-stocked emergency kit and have roadside assistance just in case.
- **Beat the rush.** Travel on off-peak times or days or pick a hidden gem closer to home. Based on AAA booking data, Friday, July 1 is shaping up to be the busiest day for air travel during the holiday weekend (June 30 – July 4) with Monday, July 4 being the lightest. For those hitting the road, the Thursday and Friday before the holiday are anticipated to be peak traffic days.

Top Destinations include Big Cities and International Favorites

AAA booking data reveals that big cities and international classics are top destinations this Independence Day. AAA data shows that bookings for air, car rentals, cruise, hotel, and tours are up 60% over last year for the top domestic Independence Day destinations and up 252% for international.

2022 Top Independence Day Destinations

U.S Destinations	International Destinations
Orlando, FL	Vancouver, BC, Canada
Seattle, WA	Paris, France
New York, NY	London, England
Anaheim, CA	Rome, Italy
Anchorage, AK	Amsterdam, Netherlands
Ft. Lauderdale, FL	Dublin, Ireland
Las Vegas, NV	Calgary, AB, Canada
Honolulu, HI	Punta Cana, Dominican Republic
Denver, CO	Cancun, Mexico
Chicago, IL	Nassau, Bahamas

Road Trips are King this Independence Day

Drivers should expect the longest travel delays heading into the holiday weekend, particularly during the afternoons on Thursday, June 30 and Friday, July 1 as commuters leave work early and mix with holiday travelers. Drivers in major U.S. metros could experience double the travel times compared to a normal trip.

"Even with gas hitting record prices, travelers are still eager to hit the road this summer. We expect nationwide travel times to increase about 50% compared to normal. Drivers around major metro areas must be prepared for significantly more delays," says Bob Pishue, Transportation Analyst, INRIX. "Knowing when and where congestion will build can help drivers avoid the stress of sitting in traffic. Our advice is to avoid traveling on Thursday and Friday afternoon."

Worst Corridors and Times to Travel

Metro Area	Corridor	Peak Congestion	% Over Normal
Atlanta	I-85 S, Clairmont Rd to MLK Dr	Thursday, 2:30-4:30 PM	134%
Boston	I-93 S, Purchase St to MA-24	Thursday, 2:00-4:00 PM	103%
Chicago	I-290 W, Morgan St to Wolf Rd	Friday, 2:45-4:45 PM	100%
Detroit	I-696 W, MI-10 to I-275	Thursday, 3:30-5:30 PM	67%
Houston	I-69 N, I-610 to I-10	Friday, 3:30-5:30 PM	92%
Los Angeles	I-5 S, Colorado St to Florence Ave	Friday, 4:15-6:15 PM	147%
New York	Belt Parkway W, Cohancy St to I-278	Saturday, 10:30 AM-12:30 PM	142%
San Francisco	I-80 W, Maritime St to San Pablo Dam Rd	Thursday, 5:45-7:45 PM	75%
Seattle	I-5 S, WA-18 to WA-7	Friday, 4:00-6:00 PM	138%
Washington DC	I-495 Counterclockwise; New Hampshire Ave to I-267	Thursday, 3:15-5:15PM	63%

Source: INRIX

Daily Worst and Best Times to Travel

Day	Worst Time	Best Time
Thursday	2:00-8:00 PM	Before 7:00 AM / After 8:00 PM
Friday	12:00-9:00 PM	Before 10:00 AM / After 9:00 PM
Saturday	2:00-4:00 PM	Before 12:00 PM / After 7:00 PM
Sunday	Low congestion expected all day	
Monday	Low congestion expected all day	

Source: INRIX

Remember – Be Kind and Patient

For those traveling this Independence Day, it's important to keep safety in mind for yourself and others. It's easy to lose patience but remember, everyone has a common goal – kicking off their summer vacation safely.

Forecast Methodology:

In cooperation with AAA, S&P Global Market Intelligence, a world-leading provider of financial information and solutions, developed a unique methodology to forecast actual domestic travel volumes. The economic variables used to forecast travel for the current holiday are leveraged from S&P Global Market Intelligence's proprietary databases. These data include macroeconomic drivers such as employment; output; household net worth; asset prices including stock indices; interest rates; housing market indicators and variables related to travel and tourism, including prices of gasoline, airline travel and hotel stays. AAA and S&P Global Market Intelligence have quantified holiday travel volumes going back to 2000.

Historical travel volume estimates come from DK SHIFFLET's TRAVEL PERFORMANCE/Monitor^{sm}. The PERFORMANCE/Monitor^{sm} is a comprehensive study measuring the travel behavior of U.S. residents. DK SHIFFLET contacts over 50,000 U.S. households each month to obtain detailed travel data, resulting in the unique ability to estimate visitor volume and spending, identify trends, and forecast U.S. travel behavior —all after the trips have been taken.

The travel forecast is reported in person-trips. In particular, AAA and S&P Global Market Intelligence forecast the total U.S. holiday travel volume and expected mode of transportation. The travel forecast presented in this report was prepared the week of May 23, 2022.

Independence Day Holiday Travel Period

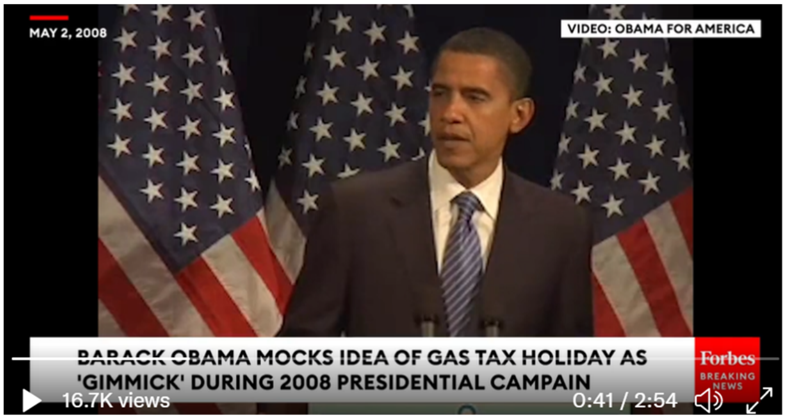
For purposes of this forecast, the Independence Day holiday travel period is defined as the five days from Thursday, June 30 to Monday, July 4. The five-day holiday length is consistent with previous holiday periods.

About AAA

Started in 1902 by automotive enthusiasts who wanted to chart a path for better roads in America and advocate for safe mobility, AAA has transformed into one of North America's largest membership organizations. Today, AAA provides roadside assistance, travel, discounts, financial and insurance services to enhance the life journey of 62 million members across North America, including 56 million in the United States. To learn more about all AAA has to offer or to become a member, visit AAA.com.

About INRIX

INRIX is the global leader in connected car services and transportation analytics. Leveraging big data and the cloud, INRIX delivers comprehensive services and solutions to help move people, cities and businesses forward. INRIX's partners are automakers, governments, mobile operators, developers, advertisers, as well as enterprises large and small.



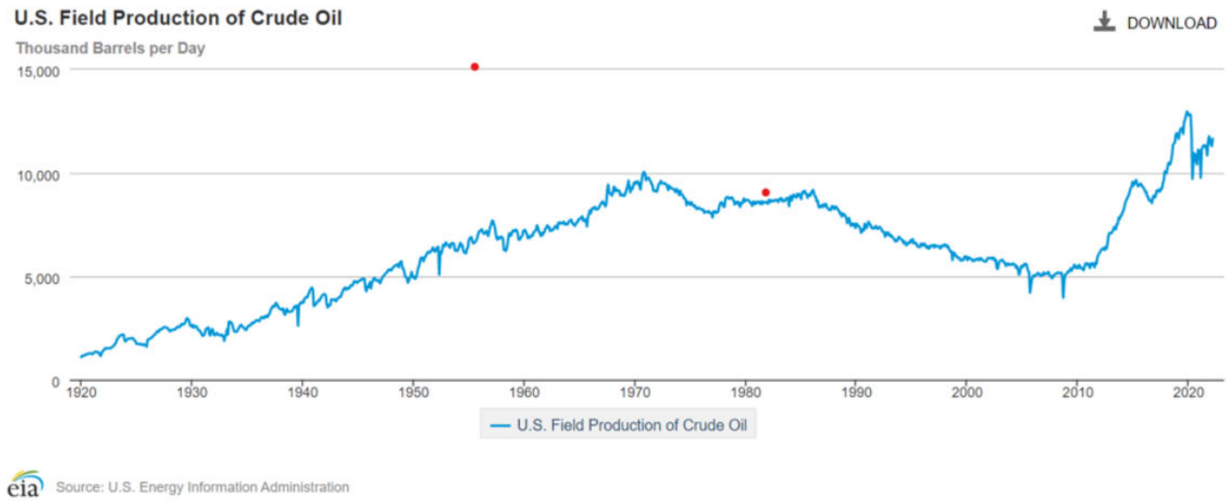
SAF Group created transcript of Obama's comments on Hillary Clinton's proposed suspension of the 18.4 cents per gallon federal gasoline tax on May 2, 2008 during the 2008 Democratic Presidential nomination campaign against Hillary Clinton and when John McCain who had effectively won the Republican nomination in March. https://twitter.com/Forbes/status/1539678574734712838

Forbes tweet with the video is titled "*FLASHBACK: Barack Obama in 2008 slams proposed gas tax holiday*"

Items in "*italics*" are SAF Group created transcript. SAF expanded on the quotes in the Forbes tweet.

Obama. "*you might think that there's more support for it in Senator Clinton's home state, but her own supporter, Governor Paterson, said he is against it because the benefits of the tax cut doesn't go directly to consumers, instead it goes to the oil company. Senator Clinton does have some support for her plan in Congress. After all, the person who first proposed it was John McCain. So I guess when she says are you with us or against us, Senator Clinton is referring to her and John McCain. That's one vote she's got. Because on this issue, Hillary Clinton and John McCain are reading from the same political playbook.*

This isn't a real solution. It's a political stunt. This is what Washington does whenever there's a big problem. Politicians pretend they're looking out for you but they're just looking out for their poll numbers. Senator Clinton's own staff even told the Washington Post that they knew the idea might not make much of a difference for you but it could make a big difference for her campaign. And when the Clinton campaign was pressed to find a single expert who supported her plan, I'm not making this up, they put her campaign pollster on the phone to talk about how the idea polls well. What Americans need isn't an idea that polls well, what you need is real change. What you need is leadership you can trust and that's what I am offering,"



https://www.energy.gov/articles/readout-energy-secretary-granholms-meeting-domestic-refiners

Department of Energy

Readout of Energy Secretary Granholm's Meeting with Domestic Refiners

JUNE 23, 2022

WASHINGTON, D.C. — At President Biden's direction, U.S. Secretary of Energy Jennifer M. Granholm this morning led an in-person meeting with CEOs and executives of the seven major U.S. oil companies at the U.S. Department of Energy headquarters in Washington, D.C.

Secretary Granholm reminded the companies that their consumers, workers, and communities are feeling the pain at the pump because of Putin's Price Hike, and that at a time when Putin is using energy as a weapon—oil companies must deliver solutions to ensure secure, affordable supply.

The Secretary made clear that the Administration believes it is imperative that companies bring supply online to get more gas to the pump at lower prices. She reiterated that the President is prepared to act quickly and decisively, using the tools available to him as appropriate, on sensible recommendations. At a time when the U.S. is achieving record oil production under the Biden administration, and President Biden is taking historic actions to add to that supply including releasing one million barrels a day from the Strategic Petroleum Reserve and rallying the world to add an additional 240 million barrels, she reiterated the President's call for them to do more to ensure that their companies are passing savings on to their customers.

The meeting took a productive focus on dissecting the current global problems of supply and refining, generating an opportunity for industry to work with government to help deliver needed relief to American consumers. The group discussed what the companies are doing to keep existing operations safely online; the technical, economic, and policy hurdles to increasing domestic refining capacity; and the need to reinvest into current and future technologies. They also delved into actions that could increase preparedness on the Eastern seaboard as the country moves deeper into Atlantic hurricane season.

The Secretary expressed that today's meeting will be part of an ongoing dialogue for more effective collaboration. She directed her team to continue working with these companies, along with any other interested companies, to pursue solutions that alleviate the current supply and price challenges, and how industry can be better prepared for the future to strengthen the country's energy security for the long haul.

https://www.chevron.com/newsroom/2022/q2/a-letter-to-president-biden-from-chevron-ceo-mike-wirth?utm_source=twitter&utm_medium=social&utm_campaign=corporate

Chevron 

a letter to president biden from chevron CEO mike wirth

3 min read | june 21, 2022

Dear Mr. President:

Thank you for your letter dated June 14, 2022. As industry leaders, academic experts and numerous policy makers have pointed out, there are no easy fixes nor any short-term answers to the global supply and demand imbalances aggravated by Russia's invasion of Ukraine. Addressing this situation requires thoughtful action and a willingness to work together, not political rhetoric. I look forward to meeting with Secretary Granholm and am hopeful for a constructive conversation about actions to address both near-term issues and the longer-term stability of energy markets.

In 2021, Chevron produced the highest volume of oil and gas in our 143-year history. In the first quarter of 2022, our U.S. production was 1.2 million barrels per day, up 109,000 barrels per day from the same quarter a year earlier. In the Permian Basin alone, we expect production to approach 750,000 barrels per day by the end of the year, an increase of more than 15 percent from 2021. And Chevron's U.S. refinery input grew to 915,000 barrels per day on average in the first quarter of this year from 881,000 in the same quarter last year.

In addition to increasing American oil and gas production, Chevron is also investing $10 billion to reduce greenhouse gas emissions and scale new advanced energy technologies, like carbon capture and hydrogen, along with growing our renewable liquid fuels production capacity to 100,000 barrels/day by 2030. America will lead in these critical new industries, creating jobs at home and exporting them to the world to meet energy and climate objectives.

American oil and gas supplies are among the most efficient, responsibly produced, and lowest carbon intensity supplies in the world. At roughly 15 kg of CO_2-equivalent per barrel, Chevron's Permian Basin carbon intensity is some two-thirds lower than the global industry average. U.S. Gulf of Mexico production has carbon intensity just a fraction of the global industry average. Increasing American production will offset barrels produced in other parts of the world that may not support America's energy security, economic competitiveness, or environmental goals.

I want to be clear that Chevron shares your concerns over the higher prices that Americans are experiencing. And I assure you that Chevron is doing its part to help address these challenges by increasing capital expenditures to $18 billion in 2022, more than 50% higher than last year.

Chevron and its 37,000 employees work every day to help provide the world with the energy it demands and to lift up the lives of billions of people who rely on these supplies. Notwithstanding these efforts, your Administration has largely sought to criticize, and at times vilify, our industry. These actions are not beneficial to meeting the challenges we face and are not what the American people deserve.

While today's geopolitical situation is contributing to this energy crisis, bringing prices down and increasing supply will require a change in approach. You have called on our industry to increase energy production. We agree. Let's work together. The U.S. energy sector needs cooperation and support from your Administration for our country to return to a path toward greater energy security, economic prosperity, and environmental protection.

We need clarity and consistency on policy matters ranging from leases and permits on federal lands, to the ability to permit and build critical infrastructure, to the proper role of regulation that considers both costs and benefits. Many of these elements are described in our industry's recently released 10-point plan. Most importantly, we need an honest dialogue on how to best balance energy, economic, and environmental objectives – one that recognizes our industry is a vital sector of the U.S. economy and is essential to our national security.

We can only meet these challenges by working together. Chevron will engage in this week's meeting with Secretary Granholm. I encourage you to also send your senior advisors to this meeting, so they too can engage in a robust conversation. Your "whole of government" philosophy in addressing major issues should apply here too, as a comprehensive approach is best to address the energy needs of our nation and of our allies.

The American people rightly expect our country's leaders and industry to address the challenges they are facing in a serious and resolute manner. We are a willing partner in that endeavor and trust your Administration will be the same.

Sincerely,

Michael K. Wirth
Chairman of the Board and Chief Executive Officer

Excerpt Michael Douglas as US President Andrew Shepherd in his big press conference speech on his competitor Senator Bob Rumson (Richard Dreyfuss) in The American President 1995

https://www.youtube.com/watch?v=-__djIQgBJc

“I've known Bob Rumson for years. And I've been operating under the assumption that the reason Bob devotes so much time and energy to shouting at the rain was that he simply didn't get it. Well, I was wrong. Bob's problem isn't that he doesn't get it. Bob's problem is that he can't sell it!

We have serious problems to solve, and we need serious people to solve them. And whatever your particular problem is, I promise you Bob Rumson is not the least bit interested in solving it. He is interested in two things, and two things only: making you afraid of it, and telling you who's to blame for it. That, ladies and gentlemen, is how you win elections.”

https://www.tipro.org/newsroom/tipro-news/texas-production-and-severance-taxes-expand-while-upstream-employment-dips-in-may

TIPRO NEWS RELEASES AND STATEMENTS

JUNE 17, 2022

TEXAS PRODUCTION AND SEVERANCE TAXES EXPAND WHILE UPSTREAM EMPLOYMENT DIPS IN MAY

Subscribe to this blog post

Print

Austin, Texas - Citing the latest Current Employment Statistics (CES) report from the U.S. Bureau of Labor Statistics (BLS), the Texas Independent Producers and Royalty Owners Association (TIPRO) today highlighted new employment figures showing a decrease in monthly employment for the Texas upstream sector following three consecutive months of job gains this year. According to TIPRO's analysis, direct Texas upstream employment for May 2022 totaled 188,700, a decrease of 1,400 jobs from April numbers, subject to revisions. Texas upstream employment in May 2022 represented an increase of 25,500 positions compared to May 2021, including an increase of 5,700 in oil and natural gas extraction and 19,800 jobs in the services sector.

The Houston metropolitan area, the largest region in the state for industry employment, showed a decrease of 1,600 upstream jobs last month compared to April, for a total of 64,800 direct positions, according to TIPRO. Houston metro upstream employment in May 2022 represented an increase of 7,500 jobs compared to May 2021, including an increase of 3,300 in oil and natural gas extraction and 4,200 jobs in the services sector.

TIPRO once again noted strong job posting data for upstream, midstream and downstream sectors for the month of May showing a continued demand for talent and increasing exploration and production activities in the Texas oil and natural gas industry. According to the association, there were 11,695 active unique job postings for the Texas oil and natural gas industry in May of 2022.

Among the 14 specific industry sectors TIPRO uses to define the Texas oil and natural gas industry, Support Activities for Oil and Gas Operations once again ranked the highest in May for unique job listings with 3,211 postings, followed by Crude Petroleum Extraction (1,625 postings) and Oil and Gas Field Machinery and Equipment Manufacturing (1,188 postings). The leading three cities by total unique oil and natural gas job postings were Houston (4,051), Midland (1,228) and Odessa (528), said TIPRO.

The top three companies ranked by unique job postings in May were Baker Hughes with 650 positions, National Oilwell Varco (635) and Weatherford International (464), according to TIPRO's analysis. Of the top ten companies listed by unique job postings last month, five companies were in the services sector, followed by three companies in midstream and two in oil and natural gas extraction.

Top posted industry occupations for May included heavy tractor-trailer truck drivers (462), personal service managers (285) and software developers and software quality assurance analysts and testers (278). Top qualifications for unique job postings included Commercial Driver's License (556), Master of Business Administration (211) and Bachelor of Science in Business (179). When analyzing education and experience requirements for unique industry job postings last month, TIPRO reports that 38 percent required a bachelor's degree, 36 percent a high school diploma or GED, and 28 percent had no education requirement listed.

Despite facing a number of challenges, including workforce shortages, rising material costs and an adversarial federal policy environment, TIPRO says Texas operators are responding to the call for increased production to meet growing global demand. According to the U.S. Energy Information Administration (EIA), oil output in the Permian Basin is projected to increase by 84,000 barrels per day (bpd) to a record 5.316 million bpd in July. Total output in the major U.S. shale oil basins is forecasted to rise 143,000 bpd to 8.901 million bpd in July, the highest since March 2020.

TIPRO also highlights new data released from the Texas Comptroller's office showing record levels of severance taxes paid by Texas oil and natural gas producers. In April, Texas oil producers paid a record $666 million to the state in oil production taxes, the highest amount in history, representing a 99 percent increase from April 2021. In May, oil producers paid $595 million in taxes, an increase of 64 percent from May 2021.

Natural gas producers also paid $413 million in taxes in May, the highest monthly total on record, up 216 percent from May 2021. With three months left in the current fiscal year, the industry has already contributed a record $4.48 billion in taxes. TIPRO says this critical source of revenue supports all aspects of the state economy, including schools and education, transportation infrastructure and first responders, to name a few."Texas upstream employment figures show a decline in May, following three months of significant growth this year, but job postings remain strong for the Texas oil and natural gas industry as companies continue to increase exploration and production activity in the state of Texas," said Ed Longanecker, president of TIPRO. "The decrease in industry employment last month could be an anomaly and subject to further revisions or could also be attributable to workforce shortages facing many companies as they compete to fill open positions in a tight labor market. Regardless, we project continued employment growth for this sector in the coming months, and this data once again illustrates the enormous economic contributions made by the Texas oil and natural gas industry. Instead of proposing anti-American energy policies, federal elected officials should work collaboratively with U.S. producers and develop a coherent strategy to unleash domestic production, including lifting restrictions on federal lands and waters, accelerating LNG exports and approving pending LNG applications. The Federal Energy Regulatory Commission (FERC) should also end efforts to overstep its permitting authority, which will not only further delay currently proposed infrastructure projects, but also stymie billions of dollars in economic investments and drive energy prices up further," concluded Longanecker.

https://www.hagerty.senate.gov/press-releases/2022/06/22/fed-chair-to-hagerty-inflation-was-high-before-certainly-before-the-war-in-ukraine-broke-out/

FED CHAIR TO HAGERTY: INFLATION WAS HIGH BEFORE, CERTAINLY BEFORE THE WAR IN UKRAINE BROKE OUT

June 22, 2022

Chair Powell's answer debunks the White House's so-called "Putin Price Hike"

WASHINGTON—United States Senator Bill Hagerty (R-TN), a member of the Senate Banking Committee, today secured an answer from Federal Reserve Chair Jerome Powell that debunks the misinformation messaging coming from President Joe Biden and his Administration that Vladimir Putin's invasion of Ukraine is the cause of historic inflation—the so-called "Putin Price Hike."

Hagerty acknowledged to Powell that a number of factors have led to this historic inflation, including supply chain disruptions, overregulation, rising inflation expectations, and excessive fiscal spending, but no one can dispute the rate with which inflation has risen.

"In January of 2021, inflation was at 1.4 percent. By December of 2021, it had risen to 7 percent—a fivefold increase. Now, since the war in Ukraine began in late February, the rate of inflation has risen incrementally another 1.6 percent to a current level of 8.6 percent…Given how inflation has escalated over the past 18 months, would you say that the war in Ukraine is the primary driver of inflation in America?" **Hagerty asked**. **Powell responded**, "No, inflation was high before, certainly before the war in Ukraine broke out."

Hagerty praised Powell for acknowledging the truth and helping expose this misinformation coming from the Biden Administration.

"I'm glad to hear you say that. The Biden Administration seems to be intent on deflecting blame and, as recently as just this past Sunday, spread the misinformation that Putin's invasion of Ukraine is the 'biggest single driver of inflation.' I'm glad you agree with me that that is not the truth," **Hagerty said.**

Dan Tsubouchi @Energy_Tidbits · 4h

No @Pemex word yet on Cadereyta oil refinery operations. Q1/22, #Pemex refineries processed 822,000 b/d: Salina Cruz 178,000, Tula 176,000, Salamanca 134,000, Minatitlan 123,000, Cadereyta 115,000 & Madero 95,000. Last thing Mexico needs is more #Gasoline #Diesel imports. #OOTT

> **EL NORTE** @elnorte · 21h
>
> #LoÚltimo: Cuerpos de rescate se movilizan hacia la refinería de @Pemex en #Cadereyta ante el reporte de un incendio al interior de las instalaciones.

Dan Tsubouchi @Energy_Tidbits · 5h

Fears or expectations of #NatGas #LNG shortage this winter? "We must initiate a major energy efficiency program and a national waste hunt. The effort must be immediate, collective and massive" @TotalEnergies @ENGIEgroup @EDFofficiel CEOs. #OOTT

Google Translate of Le Journal du Dimanche report [illegible]

GRANDSTAND. "The price of energy threatens our cohesion", by the bosses of Engie, EDF and TotalEnergies

10:35 p.m., June 25, 2022

By Catherine MacGregor, Jean-Bernard Lévy, Patrick Pouyanné

SUBSCRIBERS Catherine MacGregor, Managing Director of Engie, Jean-Bernard Lévy, Chairman and Chief Executive Officer of EDF, Patrick Pouyanné, Chairman and Chief Executive Officer of TotalEnergies call for emergency sobriety in the face of soaring energy prices.

Patrick Pouyanné, Catherine MacGregor, and Jean-Bernard Lévy. [illegible]

Here is their platform: "For months now, the European energy system has been under great strain and the French energy system has not been spared. Deliveries of Russian gas by pipeline have fallen sharply for some countries, including France. [illegible] The level of alert on gas stocks at European level is therefore high and rationing measures are put in place in some countries. Controllable electricity production capacities in Europe are also under strain following national choices or for maintenance programs. Climatic conditions and drought have reduced hydropower production.

The [illegible]

This is why we are launching this joint appeal.

We want to help meet these short-term deadlines with determination, alongside the public authorities who have been able, since the start of this crisis, to courageously take easing measures that are a step in the right direction.

We, energy companies, take our responsibilities by acting on the offer. We have already implemented short-term actions to respond to this emergency: the diversification of gas supplies, the proactive filling of storage facilities, the ongoing installation of a floating storage and regasification unit (FSRU) in the port of Le Havre to speed up LNG imports, the re-commissioning of "mothballed" facilities. Our human and financial resources are mobilized with the greatest determination to increase the offer.

[illegible] We must, collectively, act on energy demand by reducing our consumption to restore our room for manoeuvre. We will need it to manage future peaks in consumption and to [illegible]

Make no mistake: saving energy means increasing purchasing power and also reducing greenhouse gas emissions.

We therefore call for awareness and collective and individual action so that each of us – [illegible]

[illegible] And make no mistake: saving energy means increasing purchasing power and also reducing greenhouse gas emissions.

This call is obvious to us, energy companies, who are committed to serving our individual customers, companies or communities as well as possible. To support our fellow citizens in this necessary exceptional sobriety, we have tools, expertise, which we intend to mobilize to achieve this sobriety over the long term without significantly affecting our lifestyles.

[illegible] It is no longer just an imperative in the face of the climate emergency, but a response to the challenges of energy sovereignty. It requires massive investments in energy efficiency and in all low-carbon energy sources, electricity and gas. And asks, in a transparent dialogue, the support of the populations, the elected officials who represent them and the administration which applies the law.

We must also act on a European scale and show solidarity. Our markets are interdependent. This European electricity and gas interconnection is more fundamental than ever. Targeted investments will make it possible to strengthen the balance between countries and to sustain

Dan Tsubouchi @Energy_Tidbits · 19h

tropical storm celia is 300 miles south of #SanJosedelCabo but seeing the impact with big waves and overcast skies.

Dan Tsubouchi @Energy_Tidbits · 20h

#CNRailStrike. CN says "plan is DESIGNED to keep the railroad operating normally & safely". Seems carefully drafted to infer no change to @CNRailway volumes. How can they move same volumes safely if #IBEW is on strike? Thx @StaceyHein_. #OOTT

https://regina.ctvnews.ca/we-re-trying-to-keep-up-cn-signal-workers-on-strike-across-canada-1.5960216

'We're trying to keep up': CN signal workers on strike across Canada

- Stacey Hein
- CTV News Yorkton Video Journalist

Published June 23, 2022 12:02 p.m. MDT

Signal and communication workers for the Canadian National Railway Company are on strike as of Saturday, which included a group of workers who walked off the job in Melville.

The workers are part of a group called the International Brotherhood of Electrical Workers. It represents more than 700 CN employees across the country, something stand-in representative Blair Mason said CN doesn't have enough of.

"We are very short staffed. We are on call 24/7 and more employees would help us with a work-life balance," said Mason.

He explained that they can't ask for more employees but they can ask for a two day weekend, and fair wages.

"We're trying to keep up. We're not even asking for the inflation rate. We're just asking for a fair wage increase," Mason added.

While the workers are on strike, CN has a contingency plan.

"The plan is designed to keep the railroad operating normally and safely," CN spokesperson Jonathan Abecassis said in an emailed statement.

However, some employees are skeptical.

"The contingency plan for CN is suspect at best. All the members we have are very skilled at what they do," said IBEW General Chairman for Western Canada, Lee Hooper.

"I know how much work me and the guys put in everyday," he added.

"I can't see how it's all getting done the way it's supposed to be," said Signal Maintainer Richard Andres.

"Right now they've got replacement workers in there. I don't know if they're qualified or not. It's impacting the public safety," Mason said.

"CN's operational contingency plan uses managers and contractors that are qualified to do the work they are doing," Abecassis said.

The workers are hoping their demands are met soon they can get back on track.

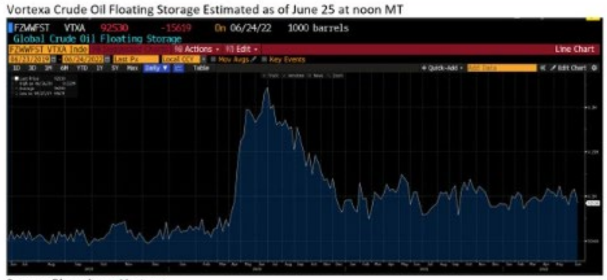
Dan Tsubouchi @Energy_Tidbits · Jun 20

#CN says keeping railroad operating safely. Sure mgmt & maybe replacement workers can fill some of the capacity, but how can they operate safely at the same pre-strike volume if #IBEW is on strike? If volume cuts inevitable, how does CN prioritize? #OOTT ...

Dan Tsubouchi @Energy_Tidbits · 20h

#Vortexa crude #Oil floating storage at 06/24 est 92.53 mmb, -15.62 mmb WoW vs revised up +7.74 mmb of 108.15 mmb as of 06/17. Last few months generally 100-105 mmb range. Thx @Vortexa @business. #OOTT

Vortexa Crude Oil Floating Storage Estimated as of June 25 at noon MT



Source: Bloomberg, Vortexa

Est as of June 25, noon MT

FZWWFST VTXA Inde 06/23/2019 - 06/24/2022

	Date	FZWWFST VT... Last Px
Fr	06/24/2022	92530
Fr	06/17/2022	108.149k
Fr	06/10/2022	104.819k
Fr	06/03/2022	90401
Fr	05/27/2022	100.2k
Fr	05/20/2022	97852
Fr	05/13/2022	111.555k
Fr	05/06/2022	99756
Fr	04/29/2022	103.893k
Fr	04/22/2022	104.963k
Fr	04/15/2022	108.712k

Est as of June 18, noon MT

FZWWFST VTXA Inde 06/16/2019 - 06/17/2022

	Date	FZWWFST VT... Last Px
Fr	06/17/2022	100.413k
Fr	06/10/2022	102.742k
Fr	06/03/2022	87852
Fr	05/27/2022	95454
Fr	05/20/2022	95365
Fr	05/13/2022	108.5k
Fr	05/06/2022	94502
Fr	04/29/2022	100.133k
Fr	04/22/2022	100.452k
Fr	04/15/2022	103.696k
Fr	04/08/2022	96650

Est as of June 11, noon MT

FZWWFST VTXA Inde 06/09/2019 - 06/10/2022

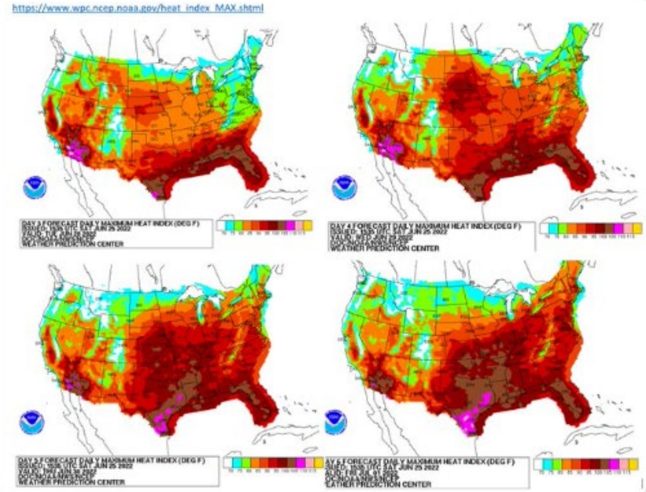
	Date	FZWWFST VT... Last Px
Fr	06/10/2022	94260
Fr	06/03/2022	92415
Fr	05/27/2022	99911
Fr	05/20/2022	98358
Fr	05/13/2022	110.132k
Fr	05/06/2022	97831
Fr	04/29/2022	102.054k
Fr	04/22/2022	102.07k
Fr	04/15/2022	106.081k
Fr	04/08/2022	99352
Fr	04/01/2022	92359

Source: Bloomberg, Vortexa

Dan Tsubouchi @Energy_Tidbits · 22h

Same story as last week. Continued weather related demand for #Natgas. A hot June is also ending hot with warm temps across most of the US. Let's hope Americans set their AC to 64 degrees F. Thx @NOAA. #OOTT wpc.ncep.noaa.gov/heat_index_MAX...

https://www.wpc.ncep.noaa.gov/heat_index_MAX.shtml



Dan Tsubouchi @Energy_Tidbits · 22h

"According to the survey, the perfect temperature to keep the AC running at during the summer months is 64 degrees Fahrenheit". If accurate, the expected hot summer in US should be good for #NatGas. #OOTT

...

Dan Tsubouchi @Energy_Tidbits · 22h

"According to the survey, the perfect temperature to keep the AC running at during the summer months is 64 degrees Fahrenheit". If accurate, the expected hot summer in US should be good for #NatGas. #OOTT

newsweek.com

Nearly half of Americans prefer to have fun indoors this summer: Poll

A survey of 2,000 Americans looked at the downsides of summer and found that on average, people said that five hours a day outside in the...

Dan Tsubouchi @Energy_Tidbits · Jun 25

#G7 dilemma this weekend. how to craft a communique at the end of June 26-28 leaders meeting that has stance of unchanged commitment to #NetZero, BUT deals with the reality that they need way more #Oil #NatGas #Coal and for a lot longer. Thx @Jess_Shankleman. #OOTT

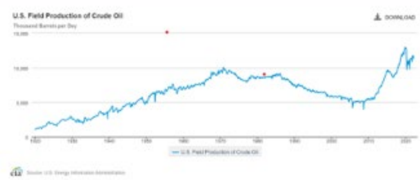
> **Jess Shankleman** @Jess_Shankleman · Jun 25
>
> At the start of the year, Olaf Scholz said he wanted to use Germany's #G7 presidency to boost climate action. Now he's trying to weaken it, by proposing language that would allow new fossil fuel financing overseas
> bloomberg.com/news/articles/...

Dan Tsubouchi @Energy_Tidbits · Jun 24

sunrise in san jose del cabo. even though tropical storm celia is far south, seeing some impact with clouds and a little bit of rain

Dan Tsubouchi @Energy_Tidbits · Jun 24

Crafty drafting, or @SullyCNBC just called it political #Wordle. "At a time when the U.S. is achieving record oil production UNDER the Biden administration" from @ENERGY readout of @SecGranholm oil co meet. It's true, but record #Oil production was Nov 2019. @SquawkCNBC #OOTT



https://www.energy.gov/articles/readout-energy-secretary-granholms-meeting-domestic-refiners
Department of Energy
Readout of Energy Secretary Granholm's Meeting with Domestic Refiners
JUNE 23, 2022

WASHINGTON, D.C. — At President Biden's direction, U.S. Secretary of Energy Jennifer M. Granholm this morning led an in-person meeting with CEOs and executives of the seven major U.S. oil companies at the U.S. Department of Energy headquarters in Washington, D.C.

Secretary Granholm reminded the companies that their consumers, workers, and communities are feeling the pain at the pump because of Putin's Price Hike, and that at a time when Putin is using energy as a weapon—oil companies must deliver solutions to ensure secure, affordable supply.

The Secretary made clear that the Administration believes it is imperative that companies bring supply online to get more gas to the pump at lower prices. She reiterated that the President is prepared to act quickly and decisively, using the tools available to him as appropriate, on sensible recommendations. At a time when the U.S. is achieving record oil production under the Biden administration, and President Biden is taking historic actions to add to that supply including releasing one million barrels a day from the Strategic Petroleum Reserve and rallying the world to add an additional 240 million barrels, she reiterated the President's call for them to do more to ensure that their companies are passing savings on to their customers.

The meeting took a productive focus on dissecting the current global problems of supply and refining, generating an opportunity for industry to work with government to help deliver needed relief to American consumers. The group discussed what the companies are doing to keep existing operations safely online; the technical, economic, and policy hurdles to increasing domestic refining capacity; and the need to reinvest into current and future technologies. They also delved into actions that could increase preparedness on the Eastern seaboard as the country moves deeper into Atlantic hurricane season.

The Secretary expressed that today's meeting will be part of an ongoing dialogue for more effective collaboration. She directed her team to continue working with these companies, along with any other interested companies, to pursue solutions that alleviate the current supply and price challenges, and how industry can be better prepared for the future to strengthen the country's energy security for the long haul.

Dan Tsubouchi @Energy_Tidbits · Jun 24

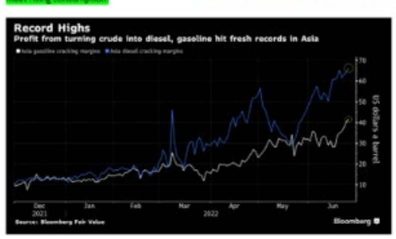
Asian demand for physical #Oil still strong despite recession fears. Good reminder from @iamsharoncho @helloimserene Asian refiners are, like US refiners, seeing record crack spreads ie. making record profits by buying #CrudeOil & producing #Gasoline #Distillates. #OOTT

Demand for Physical Oil Still Strong Despite Recession Fears (1)
2022-06-24 08:50:50.925 GMT

By Sharon Cho and Serene Cheong
(Bloomberg) -- Asian buyers are paying hefty premiums for physical barrels of crude, highlighting robust underlying demand for oil even as futures buckle under the weight of recessionary fears.

Most of the cargoes recently purchased by customers in the world's biggest oil-consuming region are for August loading, signaling confidence in demand over the next few months. Buyers are paying the biggest premiums for crude that yields more diesel or gasoline, as tight supplies underpin higher fuel prices.

Oil futures have tumbled in line with other commodities and stocks this month on concerns about a global economic slowdown. However, fuel markets remain under-supplied -- in part due to Russia's invasion of Ukraine -- just as demand climbs during the northern hemisphere summer. That's led to profit margins for refiners skyrocketing as they try and meet rising consumption.



A cargo of Vietnamese Ruby crude was sold at an unprecedented premium of more than $10 a barrel to Dated Brent this month, while Abu Dhabi's flagship Murban oil -- which yields more diesel -- was almost $19 higher than the Dubai benchmark on its exchange on Friday. That's a record premium, signaling a very strong market for physical supplies.

The current crude trading cycle in Asia kicked off earlier than usual this month as buyers from Japan, Thailand and South Korea snapped up cargoes from the Middle East. That's propped up demand from the region, which has lacked a strong presence from China and India. The two nations have ramped up their purchases of Russian oil, taking advantage of cheap prices.

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Ben Sharples, Andrew Janes

To view this story in Bloomberg click here:
https://blinks.bloomberg.com/news/stories/RDZ45JT1UM0X

Dan Tsubouchi @Energy_Tidbits · Jun 23

For those who like "gotcha" moments, @SenatorHagerty got one on #Biden Admin. He asks inflation was 7% in 12/21, now 8.6%, is war on Ukraine the primary driver of inflation in US? #Powell "No, inflation was high before, certainly before the war in Ukraine broke out." Ouch! #OOTT

https://www.hagerty.senate.gov/press-releases/2022/06/22/fed-chair-to-hagerty-inflation-was-high-before-certainly-before-the-war-in-ukraine-broke-out/

FED CHAIR TO HAGERTY: INFLATION WAS HIGH BEFORE, CERTAINLY BEFORE THE WAR IN UKRAINE BROKE OUT

June 22, 2022

Chair Powell's answer debunks the White House's so-called "Putin Price Hike"

WASHINGTON—United States Senator Bill Hagerty (R-TN), a member of the Senate Banking Committee, today secured an answer from Federal Reserve Chair Jerome Powell that debunks the misinformation messaging coming from President Joe Biden and his Administration that Vladimir Putin's invasion of Ukraine i the cause of historic inflation—the so-called "Putin Price Hike."

Hagerty acknowledged to Powell that a number of factors have led to this historic inflation, including supply chain disruptions, overregulation, rising inflation expectations, and excessive fiscal spending, but no one can dispute the rate with which inflation has risen.

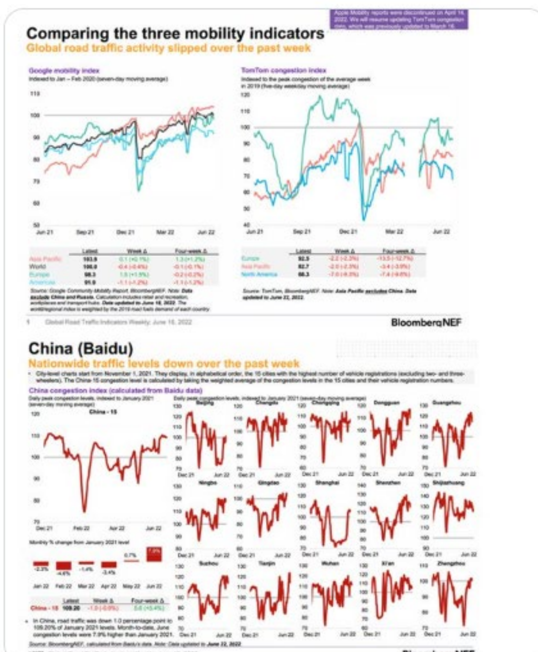
"In January of 2021, inflation was at 1.4 percent. By December of 2021, it had risen to 7 percent—a fivefold increase. Now, since the war in Ukraine began in late February, the rate of inflation has risen incrementally another 1.6 percent to a current level of 8.6 percent…Given how inflation has escalated over the past 18 months, would you say that the war in Ukraine is the primary driver of inflation in America?" **Hagerty asked. Powell responded**, "No, inflation was high before, certainly before the war in Ukraine broke out."

Hagerty praised Powell for acknowledging the truth and helping expose this misinformation coming from the Biden Administration.

"I'm glad to hear you say that. The Biden Administration seems to be intent on deflecting blame and, as recently as just this past Sunday, spread the misinformation that Putin's invasion of Ukraine is the 'biggest single driver of inflation.' I'm glad you agree with me that that is not the truth," **Hagerty said.**

Dan Tsubouchi @Energy_Tidbits · Jun 23

Looks like some demand response in EU & US to high #Gasoline #Diesel. But shouldn't make that assumption for China where Covid restrictions/lockdowns are still key consumption factor. And China has yet to have the post Covid reopening & travel rush. Thx @BloombergNEF team. #OOTT



Dan Tsubouchi @Energy_Tidbits · Jun 23

should be very big demand for #Coal #Diesel or for that matter any emergency fuel that can be delivered anywhere. thx @ArneDelfs for report. #OOTT

Arne Delfs @ArneDelfs · Jun 23

Germany Warns of Lehman-Like Contagion From Russian Gas Squeeze bloomberg.com/news/articles/… via @bpolitics

Dan Tsubouchi @Energy_Tidbits · Jun 23

Best validation of #LNGSupplyGap - buyers lock up long term #LNG supply. @pat_syk graph notes average term of 2022 deals not >17 yrs. Abrupt change to long term started July 2021, see SAF Group July 14/21 blog safgroup.ca/news-insights/. LNG, #NatGas looks strong thru 2030 #OOTT

SAF | GROUP

Blog Summary

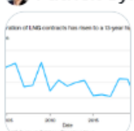
Asian LNG Buyers Abruptly Change and Lock in Long Term Supply – Validates Supply Gap, Provides Support For Brownfield LNG FIDs

Posted Wednesday, July 14, 2021 at 10:00 MT

The last 7 days has shown there is a sea change as Asian LNG buyers have made an abrupt change in their LNG contracting and are moving to lock in long term LNG supply. This is the complete opposite of what they were doing pre-Covid when they were trying to renegotiate Qatar LNG long term deals lower and moving away from long term deals to spot/short term sales. Why? We think they did the same math we did in our April 28 blog "Multiple Brownfield LNG FIDs Now Needed To Fill New LNG Supply Gap From Mozambique Chaos? How About LNG Canada Phase 2?" and saw a much bigger and sooner LNG supply gap driven by the delay of 5 bcf/d of Mozambique LNG that was built into most, if not all LNG supply forecasts. Asian LNG buyers are committing real dollars to long term LNG deals, which we believe is the best validation for the LNG supply gap. Another validation, Shell, Total and others are aggressively competing to invest long term capital to partner in Qatar Petroleum's massive 4.3 bcf/d LNG expansion despite plans to reduce fossil fuels production in the 2020s. And even more importantly to LNG suppliers, the return to long term LNG contracts provides the financing capacity to commit to brownfield LNG FIDs. The abrupt change by Asian LNG buyers to long term contracts is a game changer for LNG markets and sets the stage for brownfield LNG FIDs likely as soon as before year end 2021. It has to be brownfield LNG FIDs if the gap is coming bigger and sooner. And we return to our April 28 blog point, if brownfield LNG is needed, what about Shell looking at 1.8 bcf/d brownfield LNG Canada Phase 2? LNG Canada Phase 1 at 1.8 bcf/d capacity is already a material positive for Cdn natural gas producers. A FID on LNG Canada Phase 2 would be huge, meaning 3.6 bcf/d of Cdn natural gas will be tied to Asian LNG markets and not competing in the US against Henry Hub. And with a much shorter distance to Asian LNG markets. This is why we focus on global LNG markets for our views on the future value of Canadian natural gas.

For Details, Please See The 8 Page Blog
http://www.safgroup.ca/research/trends-in-the-market/

Patrick Sykes @pat_syk · Jun 23



📈The duration of LNG supply contracts is rising just as Europe tries to cut reliance on Russian pipeline gas.

Good news for sellers trying to finance projects. Bad for EU buyers hoping gas is a short bridge to ...

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Dan Tsubouchi @Energy_Tidbits · Jun 22

Re #Biden's proposed suspension of fed govt 18.4 cents/gallon #Gasoline tax. Great flashback from @Forbes 2008 Democrat Presidential nomination race, with Obama slamming Clinton's proposal to do exactly this. #OOTT

SAF Group created transcript of Obama's comments on Hillary Clinton's proposed suspension of the 18.4 cents per gallon federal gasoline tax on May 2, 2008 during the 2008 Democratic Presidential nomination campaign against Hillary Clinton and when John McCain who had effectively won the Republican nomination in March. https://twitter.com/Forbes/status/1539678574734712838

Forbes tweet with the video is titled "*FLASHBACK: Barack Obama in 2008 slams proposed gas tax holiday*"

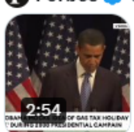
Items in "*italics*" are SAF Group created transcript. SAF expanded on the quotes in the Forbes tweet.

Obama. "*you might think that there's more support for it in Senator Clinton's home state, but her own supporter, Governor Paterson, said he is against it because the benefits of the tax cut doesn't go directly to consumers, instead it goes to the oil company. Senator Clinton does have some support for her plan in Congress. After all, the person who first proposed it was John McCain. So I guess when she says are you with us or against us, Senator Clinton is referring to her and John McCain. That's one vote she's got. Because on this issue, Hillary Clinton and John McCain are reading from the same political playbook.*

This isn't a real solution. It's a political stunt. This is what Washington does whenever there's a big problem. Politicians pretend they're looking out for you but they're just looking out for their poll numbers. Senator Clinton's own staff even told the Washington Post that they knew the idea might not make much of a difference for you but it could make a big difference for her campaign. And when the Clinton campaign was pressed to find a single expert who supported her plan, I'm not making this up, they put her campaign pollster on the phone to talk about how the idea polls well. What Americans need isn't an idea that polls well, what you need is real change. What you need is leadership you can trust and that's what I am offering,"

Prepared by SAF Group https://safgroup.ca/news-insights/

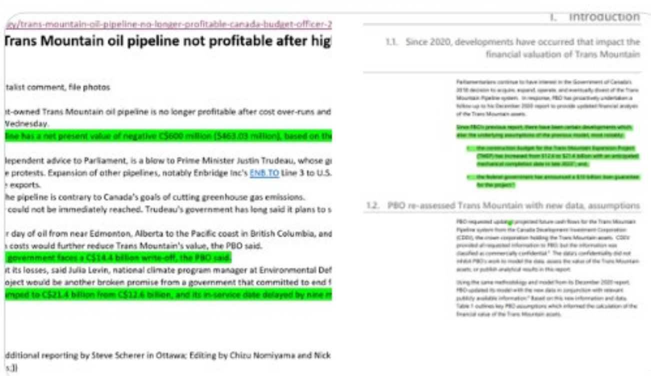
Forbes @Forbes · Jun 22



FLASHBACK: Barack Obama in 2008 slams proposed gas tax holiday: "This isn't a real solution. It's a political stunt. This is what Washington does whenever there's a big problem. Politicians pretend they're looking out for you but they're just looking out for thei...

Dan Tsubouchi @Energy_Tidbits · Jun 22

PBO: #TransMountain assets will have negative $0.6b NPV for federal govt. Surprised it's not more w/ key assumptions change #TMX expansion cost from $12.6b to $21.4b, startup delayed 1 yr. Doesn't look like any change in tolling assumption. Thx @RodNickel_Rtrs @ismail__s. #OOTT



gy/trans-mountain-oil-pipeline-no-longer-profitable-canada-budget-officer-2

Trans Mountain oil pipeline not profitable after hig

talist comment, file photos

t-owned Trans Mountain oil pipeline is no longer profitable after cost over-runs and Wednesday.

line has a net present value of negative C$600 million ($463.03 million), based on th

lependent advice to Parliament, is a blow to Prime Minister Justin Trudeau, whose g
e protests. Expansion of other pipelines, notably Enbridge Inc's ENB.TO Line 3 to U.S.
exports.
he pipeline is contrary to Canada's goals of cutting greenhouse gas emissions.
could not be immediately reached. Trudeau's government has long said it plans to s

r day of oil from near Edmonton, Alberta to the Pacific coast in British Columbia, and
costs would further reduce Trans Mountain's value, the PBO said.
government faces a C$14.4 billion write-off, the PBO said.
t its losses, said Julia Levin, national climate program manager at Environmental Def
oject would be another broken promise from a government that committed to end f
mped to C$21.4 billion from C$12.6 billion, and its in-service date delayed by nine m

dditional reporting by Steve Scherer in Ottawa; Editing by Chizu Nomiyama and Nick
s:))

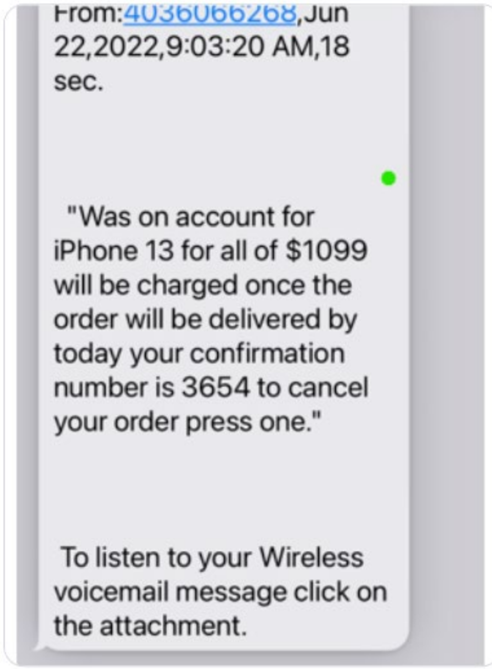
1. Introduction

1.1. Since 2020, developments have occurred that impact the financial valuation of Trans Mountain

1.2. PBO re-assessed Trans Mountain with new data, assumptions

Dan Tsubouchi @Energy_Tidbits · Jun 22

now i know who is tracking my whereabouts. was at Apple store yesterday afternoon picking up my wife's new laptop. while waiting for service, they put me at the table with the iphones incl the 13. And got this crank call a few minutes ago.



Dan Tsubouchi @Energy_Tidbits · Jun 22

FED chair Powell just now. appropriate to move rates above neutral level to a restrictive level. it's been surprisingly good to watch and not just for us market nerds. #OOTT

Dan Tsubouchi @Energy_Tidbits · Jun 22

#LNGSupplyGap. A 2nd @Chevron deal today. This time, #Chevron locks up 0.26 bcf/d in 20 yr deal from @VentureGlobal for their supply portfolio. #NatGas & #LNG look good thru 2030. #OOTT

https://ventureglobalIng.com/press/venture-global-announces-lng-sales-and-purchase-agreements-with-chevron/

JUNE 22, 2022

VENTURE GLOBAL ANNOUNCES LNG SALES AND PURCHASE AGREEMENTS WITH CHEVRON

Arlington, Virginia – Today Venture Global announced the execution of two long-term Sales and Purchase Agreements (SPAs) for the purchase of two million tonnes per annum (2MTPA) of liquefied natural gas (LNG) for 20 years. Under the agreements, Chevron U.S.A. Inc. will purchase 1MTPA from the Plaquemines LNG facility and 1MTPA from CP2 LNG. Plaquemines LNG has been under full construction since August of 2021 and the construction of CP2 LNG is expected to commence in 2023.

"Venture Global is delighted to begin a long-term LNG agreement with Chevron, one of the world's premier integrated energy companies," said **Venture Global CEO Mike Sabel**. "This is an outstanding addition to our growing customer portfolio at CP2. Our innovative and proven approach for the deployment of LNG trains enables us to deliver energy to our customers faster and at the lowest cost. As we prepare to roll out trains number 55 through 90 at CP2, we are honored that this competitive advantage has been recognized by Chevron."

"Our agreements with Venture Global allow Chevron to deliver affordable, reliable, and ever cleaner energy to meet long-term demand," said **Colin Parfitt, Chevron Vice President, Midstream**. "This is part of Chevron's strategy to connect and strengthen relationships across the natural gas value chain – from natural gas production and lower carbon initiatives, to transportation, marketing and delivery to the customers who need it most."

About Venture Global LNG

Venture Global is a long-term, low-cost provider of U.S. LNG sourced from resource rich North American natural gas basins. Venture Global's first facility, Calcasieu Pass, commenced producing LNG in January 2022. The company is also constructing or developing an additional 60 MTPA of production capacity in Louisiana to provide clean, affordable energy to the world. The company is developing Carbon Capture and Sequestration (CCS) projects at each of its LNG facilities.

Dan Tsubouchi @Energy_Tidbits · Jun 22

#LNGSupplyGap. @exxomobil, @shell previously, @Chevron latest of #LNG supply leaders to lock up long term supply for their supply portfolios. #Chevron locking up 0.26 bcf/d for 15 yrs from @Cheniere. #NatGas & LNG look good thru 2030. #OOTT

SAF GROUP

Dan Tsubouchi @Energy_Tidbits · Jun 22

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https://lngir.cheniere.com/news-events/press-releases/detail/253/cheniere-and-chevron-sign-long-term-lng-sale-and-purchase

Cheniere and Chevron Sign Long-Term LNG Sale and Purchase Agreements

JUNE 22, 2022 8:00AM EDT

HOUSTON--(BUSINESS WIRE)-- Cheniere Energy, Inc. ("Cheniere" or the "Company") (NYSE American: LNG) announced today that two of its subsidiaries, Sabine Pass Liquefaction, LLC ("SPL") and Cheniere Marketing, LLC ("Cheniere Marketing"), have each entered into long-term liquefied natural gas ("LNG") sale and purchase agreements (each, an "SPA") with Chevron U.S.A. Inc. ("Chevron"), a wholly-owned subsidiary of Chevron Corporation (NYSE: CVX). At plateau, Chevron will purchase a combined 2.0 million tonnes per annum ("mtpa") of LNG from Cheniere subsidiaries, subject to certain conditions described below.

Under the first SPA, Chevron has agreed to purchase approximately 1.0 mtpa of LNG from SPL on a free-on-board ("FOB") basis. Deliveries under the SPA will begin in 2026, reach the full 1.0 mtpa during 2027 and continue until mid-2042. Under the second SPA, Chevron has agreed to purchase approximately 1.0 mtpa of LNG from Cheniere Marketing on an FOB basis with deliveries beginning in 2027 and continuing for approximately 15 years. The Cheniere Marketing SPA is subject to Cheniere making a positive final investment decision to construct additional liquefaction capacity at the Corpus Christi LNG Terminal beyond the seven-train Corpus Christi Stage III Project. The purchase price for LNG under the SPAs is indexed to the Henry Hub price, plus a fixed liquefaction fee.

Additionally, Cheniere's subsidiary, Sabine Pass LNG, L.P. ("SPLNG"), and Chevron have agreed to terms for the early termination of their LNG Terminal Use Agreement (the "TUA") in return for a lump sum payment to be made by Chevron to SPLNG during calendar year 2022. Termination of the TUA is subject to the consent of certain lenders to Cheniere Energy Partners, L.P., expected during the third quarter of 2022.

"We are pleased to welcome Chevron, one of the world's premier integrated energy companies, as a valued long-term LNG offtaker," said Anatol Feygin, Cheniere's Executive Vice President and Chief Commercial Officer. "These long-term SPAs underscore the growing demand for reliable, cleaner burning LNG supply beyond 2040 and further support investment in additional LNG capacity beyond our Corpus Christi Stage III Project. We look forward to leveraging our market-leading LNG platform to explore opportunities to collaborate with Chevron on lower-carbon initiatives in the future."

"Our strategy is to deliver lower carbon energy to a growing world," said Colin Parfitt, Chevron Vice President, Midstream. "Our agreements with Cheniere allow us to harness growing U.S. natural gas production and Gulf Coast LNG export capacity to help meet long-term demand for affordable, reliable, and ever cleaner energy."

About Cheniere

Cheniere Energy, Inc. is the leading producer and exporter of liquefied natural gas (LNG) in the United States, reliably providing a clean, secure, and affordable solution to the growing global need for natural gas. Cheniere is a full-service LNG provider, with capabilities that include gas procurement and transportation, liquefaction, vessel chartering, and LNG delivery. Cheniere has one of the largest liquefaction platforms in the world, consisting of the Sabine Pass and Corpus Christi liquefaction facilities on the U.S. Gulf Coast, with total production capacity of approximately 45 mtpa of LNG in operation and an additional 10+ mtpa of expected production capacity under construction. Cheniere is also pursuing liquefaction expansion opportunities and other projects along the LNG value chain. Cheniere is headquartered in Houston, Texas, and has additional offices in London, Singapore, Beijing, Tokyo, and Washington, D.C.

SAF GROUP

Dan Tsubouchi @Energy_Tidbits · Jun 22

Regardless if EU or RUS doing the cutting of RUS #NatGas into EU, it's having a huge negative impact & pricing out many #LNG buyers. JKM futures $37 Aug, $36 Sep make it too pricey for Thailand, India, Pakistan, etc. Thx @MessageAnnKoh. #OOTT

LNG WRAP: High Prices in Asia Curb Spot Buying Activity

- Thailand cuts spot purchases of LNG due to surging prices
- Gail doesn't award tender seeking cargo for July to India

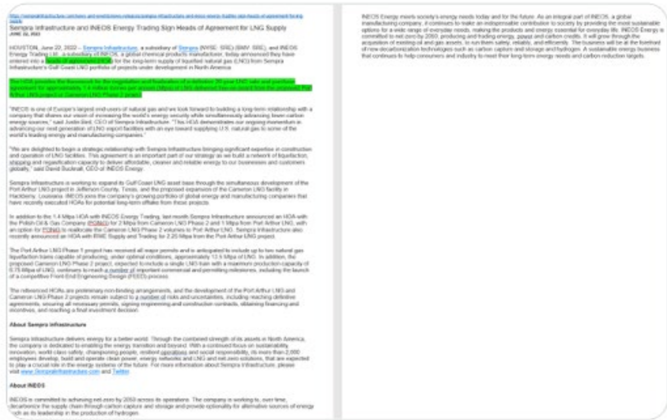
By Ann Koh

(Bloomberg) -- High LNG prices in the $30/mmbtu range are curbing spot demand from price-sensitive buyers in South and Southeast Asia, while floods in China risk reducing power consumption.

- Gail didn't award a tender seeking to purchase an LNG cargo on a DES basis for July 15-17 delivery to the Hazira terminal in India
- Petronet didn't award a tender seeking an LNG cargo on a DES basis for July 1-10 delivery to the Dahej terminal in western India
- Thailand's state-run importers are cutting spot purchases of liquefied natural gas due to surging prices, potentially putting the country at risk of fuel shortages
- High LNG spot prices will curb demand growth in Asia, especially in price-sensitive countries like Pakistan and Bangladesh, according to a Fitch Solutions note published June 17

Dan Tsubouchi @Energy_Tidbits · Jun 22

#LNGSupplyGap forcing #LNG users/traders to lock up long term supply. EU's INEOS Energy Trading is latest, HOA to lock up 0.18 bcf/d for 20 yrs from #Sempra proposed #PortArthurLNG or #CameronLNG Phase 2. #NatGas #LNG look strong thru 2030. #OOTT


Sempra Infrastructure and INEOS Energy Trading Sign Heads of Agreement for LNG Supply

Dan Tsubouchi @Energy_Tidbits · Jun 22

Good video of drone hitting RUS 110,000 b/d Novoshakhtinsk #Oil refinery. Mon, attack on RUS #NatGas rig in Black Sea. What will Putin do with Ukraine fighting back and striking "in" Russia? #OOTT

tass.ru/proisshestviya...

Stay informed
This Tweet links to a Russia state-affiliated media website.
Find out more

Ukraine Weapons Tracker @UAWeapons · Jun 22

#Ukraine: A Kamikaze drone struck the Novoshakhtinsk oil refinery, in #Rostov Oblast, Russia; causing a large fire.

Although the precise type is unclear, it appears to be based on the UA PD-1 or PD-2 series of reconnaissance UAVs. The area is around 150km from the front line.

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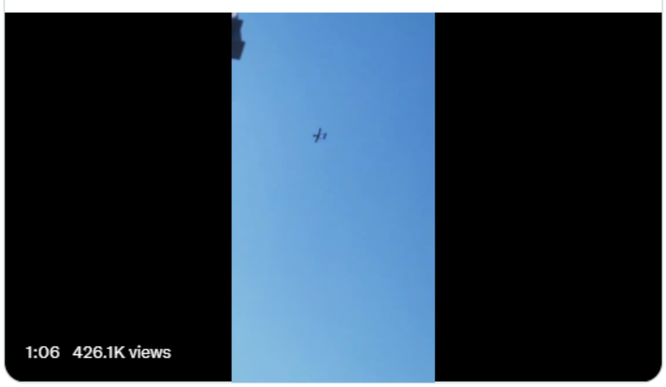

Dan Tsubouchi @Energy_Tidbits · Jun 21

Too bad @Chevron CEO Wirth letter ddn't channel some @KDouglasMichael American President & say your Administration "is interested in two things, & two things only. making you afraid of it, & telling you who's to blame for it.That ladies & gentlemen is how you win elections" #OOTT

Excerpt Michael Douglas as US President Andrew Shepherd in his big press conference speech on his competitor Senator Bob Rumson (Richard Dreyfuss) in The American President 1995

https://www.youtube.com/watch?v=-__djlQqBJc

"I've known Bob Rumson for years. And I've been operating under the assumption that the reason Bob devotes so much time and energy to shouting at the rain was that he simply didn't get it. Well, I was wrong. Bob's problem isn't that he doesn't get it. Bob's problem is that he can't sell it!

We have serious problems to solve, and we need serious people to solve them. And whatever your particular problem is, I promise you Bob Rumson is not the least bit interested in solving it. He is interested in two things, and two things only: making you afraid of it, and telling you who's to blame for it. That, ladies and gentlemen, is how you win elections."

Dan Tsubouchi @Energy_Tidbits · Jun 21

Headline from @Chevron CEO letter. #Biden admin "largely sought to criticize, and at times vilify, our industry". Note he calls out in advance, don't make this just a political meeting with only @SecGranholm "i encourage you to also send our senior advisors to this...

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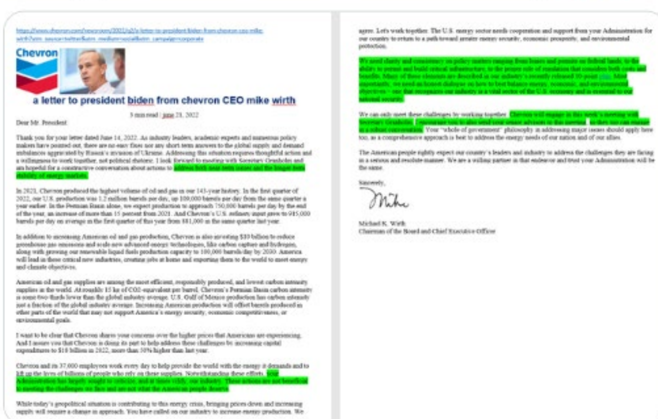


a letter to president biden from chevron CEO mike wirth

Dan Tsubouchi @Energy_Tidbits · Jun 21

"risk management is difficult and learned by experience" @ThomasFarley to @JoeSquawk on @SquawkCNBC. unfortunately the "learned by experience" is the norm. Even if you made the right call, a great reminder to look at what didn't work for others & why. #OOTT

Dan Tsubouchi @Energy_Tidbits · Jun 21

"sustainable investment will continue to increase, but it's something that will take time in order for it to take a share of hydrocarbon demand in EU" @vitolnews CEO to @haslindatv. @BernsteinBuzz 👇 reminds #EnergyTransition will take a lot longer ie. big + to #Oil #NatGas. #OOTT

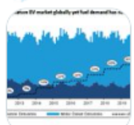
eated transcript of excerpts from Russell Hardy (Group CEO of Vitol) with Bloomberg's Haslinda A
mic Forum on June 21, 2022 https://www.bloomberg.com/news/videos/2022-06-21/vitol-s-hard
y-video

lics" are SAF Group created transcript

mark, Amin *"... in terms of energy security for the future, how will this play out?"* Hardy *"so I think
security, energy security has come to the fore. Affordability is still a government priority. And in c
. So how do you solve all three of these problems. And I think governments are just recalibrating
hat we're going to need over the next 5 to 10 years because a certain amount of investment is ne
unt of rebalancing of supply and demand of hydrocarbons is needed and the sustainability agenda
e latest crisis does support sustainables and that sustainable investment will continue to increase
hat will take time in order for it to take a share of hydrocarbon demand in Europe."*

SAF Group https://safgroup.ca/news-insights/

Sanford Bernstein Research @BernsteinBuzz · Jun 20



EVs are almost 90% of Norwegian car sales, but gasoline demand has barely budged.

Dan Tsubouchi @Energy_Tidbits · Jun 21

"tough to see [#Oil] markets really giving up much ground until we see some abatement in demand.. not back to 2019 demand levels for #Gasoline & #JetFuel .. still 2-3 mmb/d of demand to come back next year. that's fairly supportive of prices" @vitolnews CEO to @haslindatv #OOTT

created transcript of excerpts from Russell Hardy (Group CEO of Vitol) with Bloomberg's Haslinda Ar
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ergy-video

italics" are SAF Group created transcript

in mark, Amin *"your thoughts on when you expect the energy crisis to ease, what would it take?"* Har
*ee, it's tough to see markets really giving up much ground until we see some abatement in demand. V
back to 2019 demand levels for gasoline and for jet fuel. There's still 2 to 3 million barrels a day of der
k next year. So all and all, that's fairly supportive of prices. It just means we've got to keep, keep a litt
he supply side. So reasonably support for prices going forward and the one thing that obviously everyb
d about is runaway prices would make recessions more likely".*

by SAF Group https://safgroup.ca/news-insights/

Dan Tsubouchi @Energy_Tidbits · Jun 21

#LNGSupplyGap forcing LNG users to lock up long term supply. Germany's EnBW is latest, "binding agreement" to lock up 0.2 bcfd for 20 yrs from #VentureGlobalLNG. #EnBW says LNG "..builds a bridge to a green energy supply". #LNG #NatGas looks good thru 2030. #OOTT

ttps://ventureglobalng.com/press/venture-global-and-enbw-announce-lng-sales-and-purchase-agreements/

Venture Global and EnBW announce LNG Sales and Purchase Agreements

JUNE 21, 2022

Arlington, Virginia/Stuttgart, Germany. Today, Venture Global LNG and EnBW announced the execution of two long-term Sales and Purchase Agreements (SPAs) for 1.5 million tonnes per annum (MTPA) of liquefied natural gas (LNG) from Venture Global's Plaquemines and CP2 facilities, starting 2026. According to the agreement, EnBW will purchase 0.75 MTPA from Plaquemines LNG and 0.75 MTPA from CP2 LNG for 20 years. EnBW becomes the next European customer of Venture Global, who already announced agreements with PGNiG, BP, Shell, Repsol, Edison and GALP.

"Venture Global is thrilled to welcome EnBW as a long-term customer for both our Plaquemines and CP2 LNG facilities," said Mike Sabel, CEO of Venture Global LNG. "This is the first direct binding offtake agreement for long-term US LNG signed by a German company, an important step that manifests Germany's strategy to diversify its energy mix. Our company is honored to become a major provider of LNG to Germany, providing security of supply on a competitive, long-term basis."

"EnBW looks forward to a long-term LNG partnership with Venture Global", says Georg Stamatelopoulos, Chief Operating Officer Generation & Trading at EnBW. "We have expanded our LNG activities step by step in the recent years. Liquefied natural gas plays a key role in the diversification of our fuels for electricity and heat generation: It opens up the possibility of new sources to secure Germany's gas supply in the current energy transition phase and builds a bridge to a green energy supply."

About Venture Global LNG

Venture Global is a long-term, low-cost provider of U.S. LNG sourced from resource rich North American natural gas basins. Venture Global's first facility, Calcasieu Pass, commenced producing LNG in January 2022. The company is also constructing or developing an additional 60 MTPA of production capacity in Louisiana to provide clean, affordable energy to the world. The company is developing Carbon Capture and Sequestration (CCS) projects at each of its LNG facilities

www.ventureglobalIng.com

About EnBW

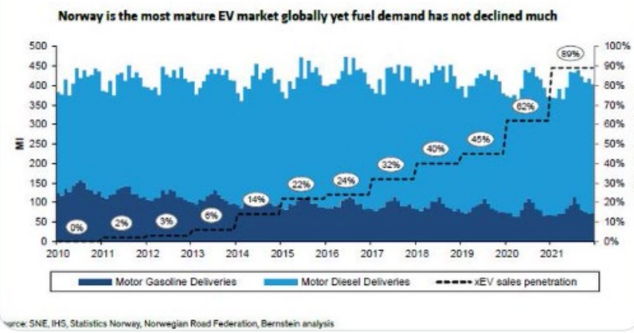
With over 24,000 employees, EnBW is one of the largest energy companies in Germany and Europe. It supplies around 5.5 million customers with electricity, gas, water as well as services and products in the areas of infrastructure and energy. The expansion of renewable energies is a cornerstone of the growth strategy and a focus of investment. EnBW will invest around 4 billion euros in the further expansion of wind and solar energy by 2025. By the end of 2025, more than half of the generation portfolio is to consist of renewable energies. This is already having a noticeable effect on reducing CO2 emissions, which EnBW aims to halve by 2030. EnBW is aiming for climate neutrality by 2035.

www.enbw.com

Dan Tsubouchi @Energy_Tidbits · Jun 20

Hmmm! Reminds the #EnergyTransition will take longer. #OOTT #Gasoline

> **Sanford Bernstein Research** @BernsteinBuzz · Jun 20
>
> EVs are almost 90% of Norwegian car sales, but gasoline demand has barely budged.



Dan Tsubouchi @Energy_Tidbits · Jun 20

#Oil demand response. "#Gasoline demand edged lower .. dampening the fresh optimism around its growth trajectory" "#JetFuel demand mirrored gasoline's weak demand". Thx @BloombergNEF Danny Adkins. #OOTT

Dan Tsubouchi @Energy_Tidbits · Jun 20

#RUS #NatGas supply squeeze is real. NLD lets 4 #Coal-fired power generators go at 100% capacity vs current 35% restriction. Urge Dutch to cut back on consumption now ie. take shorter showers. Thx @DutchNewsNL Robin Pascoe. No wonder JKM #LNG futures are ~$39 in Aug/Sep. #OOTT

https://www.dutchnews.nl/news/2022/06/dutch-to-boost-coal-fired-electricity-production-to-save-gas/

Dutch to boost coal-fired electricity production to save gas

Business June 20, 2022 - By Robin Pascoe

Dutch cabinet plans to use coal-fired power stations at full capacity in the coming period to make sure that there is enough gas left to heat homes in the coming winter.

The decision has been taken despite the option of using gas from under Groningen province. Those fields are currently being wound down because of the resulting earthquakes.

The Dutch decision, which goes against official government policy, comes a day after Germany said it too would fire up coal-fired power stations to conserve gas stocks for central heating.

That decision was prompted by an announcement by Russian gas giant Gazprom last week, which said it was reducing supplies through the Nord Streat 1 pipeline for technical reasons.

Although there is no acute shortage of gas at the moment the step needs to be taken to ensure that there is enough gas for the winter, climate minister Rob Jetten told a press conference late on Monday afternoon.

'If these were not special times, we would never do this,' he said. 'This is an important step to ensure the security of supply.' Gas storage is currently at between 45% and 55% capacity.

Coal-fired power stations are currently restricted to 35% of capacity to reduce carbon dioxide emissions. Measures are now being worked out to compensate for this, Jetten said. The Netherlands has four coal-fired power stations and all are supposed to have switched to non-fossil sources by 2030.

Big users

Big gas users will be able to get a financial incentive to use less gas and extra measures will be announced in the September budget, he said. This would also include extra help for low income households.

Some of the funding for this would come from savings made on compensation for the owners of coal-fired power stations when production was cut.

In the meantime, Jetten urged people to do all they could to cut back on gas usage. 'It might be an odd thing to ask in the summer, but every cubic metre of gas counts,' he said. 'So take shorter showers and increase your home insulation now, to use less gas in the winter.'

Groningen

Using more gas from Groningen would be a very last resort, Jetten said.

Mines minister Hans Vijlbrief said that he still planned to officially close down the Groningen fields in 2023 or 2024, but that all 11 would be kept open in the meantime in case of an emergency.

'Groningen gas cannot be used safely,' he said. 'The mining inspectorate is very clear about this. It can only be used when public safety is under threat.'

Russia has threatened to cut gas deliveries to countries which refuse to pay in roubles and last month Gazprom said it would no longer deliver to Dutch trading giant GasTerra because of the payment dispute.

Read more at DutchNews.nl:

Dan Tsubouchi @Energy_Tidbits · Jun 20

#CN says keeping railroad operating safely. Sure mgmt & maybe replacement workers can fill some of the capacity, but how can they operate safely at the same pre-strike volume if #IBEW is on strike? If volume cuts inevitable, how does CN prioritize? #OOTT #CrudebyRail

IBEW CANADA

RAILROADS

We are a Union representing over 1400 Signal and Communications employees throughout Canada. Our members work on railroad signal systems to improve safety and efficiency of their operation.

Although jet travel has supplanted railroads as the passenger mode of choice, and the highway system is the principal venue for product transportation, railroads are still alive and well in North America. In Canada, approximately 71% of all freight is shipped by rail. IBEW members play a major role in keeping this vital mode of transportation rolling.

Railroad Signal and Communication members inspect, test, assemble, install, dismantle, rebuild, overhaul, adjust, wire, and calibrate all electrical and electronic equipment and components throughout the country that serve for the protection of the population at large. One of the significant tasks is making certain that all railroad crossings in Canada function properly.

IBEW railroad communications technicians perform all types of work generally recognized as communications work per their agreements with various carriers. They work with microwave, radio, fiber optics, telephone and other communications devices, apparatus, and equipment in the course of operating, maintaining and repairing these systems in shops, yards, buildings, locomotives and all areas necessary for proper communication in Canada. The IBEW also represents several other classes of railroad workers as certified and per agreements with particular carriers.

Canadian National @CNRailway · Jun 20

CN Maintains Normal Rail Operations Across Canada as IBEW Strikes: COO Addresses Employees Directly in Letter as Contingency Plan keeps Railroad Operating Safely. Read the letter here: cn.ca/-/media/Files/...

Dan Tsubouchi @Energy_Tidbits · Jun 20

Reminder refiners still have huge incentive to keep buying crude #Oil and producing #Gasoline #Distilliates #Diesel. crack spreads up a few dollars since this reminder from @ARaj_Energy a week ago. #OOTT

> **Dan Tsubouchi** @Energy_Tidbits · Jun 13
>
> Yes $5 #Gasoline, but huge crack spreads are key to near term #Oil demand. Consumers don't buy oil, they buy gasoline, diesel. refiners have no incentive to stop buying oil, if cracks fall by $25, they will keep buying more & more oil. Great reminder from @ARaj_Energy. #OOTT
>
> 
>
>
> SAF Group created transcript of comments by Abhi Rajendran (Head of Global Oil/Downstream Markets, North America Energy Research, Energy Intelligence) on Gulf Intelligence Daily Energy Markets – June 13 podcast hosted by Dyala Sabbagh (Partner & COO, Gulf Intelligence). https://soundcloud.com/user-846530307/podcast-daily-energy-markets-june-13
>
> Items in "italics" are SAF Group created transcript
>
> At 10:30 min mark, Rajendran "*.... I agree with Omar, I think oil is headed higher. if you look at the fundamentals of oil and demand and talk about China Covid and talk about you know inventories building, I think you are looking at the wrong things. Consumers don't buy oil. Trucking markets, cars don't buy oil. They buy gasoline, they buy diesel. Refiners buy oil. And refiners have no incentive to stop buying oil. They don't have an incentive to stop buying oil if cracks fall by 5, 10, 15, 20, 25 dollars, they will keep buying more and more oil. I think that's the reality, the backdrop.*"
>
> Prepared by SAF Group

Dan Tsubouchi @Energy_Tidbits · Jun 20

Hmmm! #Biden/#MBS meet. "i think what MBS ultimately gets, in my opinion is the final blessing of Washington to ascend to become King. I think that is the real big prize here for him. Because up to know, they haven't given that" said @sean_evers. MBS is a positive for #Oil. #OOTT

> **Dan Tsubouchi** @Energy_Tidbits · Jun 19
>
> ICYMI. KSA says 1-on-1 Biden/MBS official talks. @SaudiEmbassyUSA "Following that, President Biden will meet with His Royal Highness Crown Prince Mohammed bin Salman bin Abdulaziz. The Crown Prince and President Biden will hold official talks". Will both smile at photo-op? #OOTT
>
> The Embassy of the Kingdom of Saudi Arabia Washington, DC
>
> https://www.saudiembassy.net/news/saudi-arabia-looks-forward-welcoming-president-biden
>
> **Saudi Arabia Looks Forward to Welcoming President Biden**
>
> **June 14, 2022**
>
> Upon the invitation of the Custodian of the Two Holy Mosques King Salman bin Abdulaziz Al Saud of the Kingdom of Saudi Arabia, President Joseph R. Biden Jr. of the United States of America will be conducting an official visit to the Kingdom of Saudi Arabia on July 15-16.
>
> The visit will enhance the historic and strategic partnership between the Kingdom of Saudi Arabia and the United States of America, as both countries aim to deepen and strengthen the existing areas of cooperation, and lay the foundations for the future of this strategic partnership.
>
> The first day of the visit will include a meeting between the Custodian of the Two Holy Mosques King Salman bin Abdulaziz Al-Saud and President Biden. Following that, President Biden will meet with His Royal Highness Crown Prince Mohammed bin Salman bin Abdulaziz. The Crown Prince and President Biden will hold official talks that will focus on various areas of bilateral cooperation and joint efforts to address regional and global challenges, exploring cooperation on emerging technologies, economic investment, space, renewable energy, cybersecurity, climate and environmental initiatives, food and energy security, and expanding trade and commercial ties to enable both countries to confront mutual challenges and seize the opportunities of the 21st century.
>
> Additionally, the visit will include a summit meeting convened by The Custodian of the Two Holy Mosques, which will bring together the leaders of the Gulf Cooperation Council, His Majesty the King of Jordan, His Excellency the President of Egypt, His Excellency the Prime Minister of Iraq, and the President of the United States on July 16th to discuss regional challenges.
>
> The Kingdom of Saudi Arabia looks forward to welcoming President Biden and defining the next chapters of our partnership. At a time of global challenges related to the global economy, health, climate and international conflict, the partnership between our two countries is as critical as ever to the promotion of peace, prosperity and stability around the world.

Dan Tsubouchi @Energy_Tidbits · Jun 20

Breaking: #Conoco wins 3.125% in @qatar_energy North Field East #LNG expansion that adds ~4.3 bcf/d by end 2025 report @V_Ratcliffe @SimoneFoxman. No word yet if in North Field South that adds ~2.2 bcf/d in 2027. Current Qatar 10.1 bcfd reaches ~16.6 bcfd in 2027. #NatGas #OOTT

Dan Tsubouchi @Energy_Tidbits · Jun 19

#RUS #NatGas Supply Squeeze is real. @ReutersCarrel reports Austria agreed with utility Verbund to convert a reserve, gas-fired power plant so that it can produce electricity with coal should restricted gas supplies from Russia result in an energy emergency. #NatGas #OOTT

https://www.reuters.com/business/energy/austria-revives-coal-fired-power-option-russia-cuts-gas-supply-2022-06-19/?taid=62af8e5883c4c6000105aa9b&utm_campaign=trueAnthem:+Trending+Content&utm_medium=trueAnthem&utm_source=twitter

June 19, 20222:24 PM MDTLast Updated 4 hours ago

Austria revives coal-fired power option as Russia cuts gas supply

Reuters

VIENNA, June 19 (Reuters) - Austria's government agreed with utility Verbund (VERB.VI) on Sunday to convert a reserve, gas-fired power plant so that it can produce electricity with coal should restricted gas supplies from Russia result in an energy emergency.

The decision, taken by a "small crisis cabinet" led by Chancellor Karl Nehammer, came after neighbouring Germany announced steps to address reduced Russian gas deliveries including increased reliance on coal-fired power plants. read more

The European Union's reliance on Russian gas and the risk that Moscow could cut supplies in retaliation for economic sanctions imposed after its invasion of Ukraine has been a headache for the bloc, prompting it to build up inventories and seek alternative supplies.

Nehammer's office said that majority state-owned utility Verbund had agreed to convert the Mellach power plant in the southern Styria region, which has been shut down but kept on stand-by, for renewed use of coal.

It was Austria's last coal-fired power plant before being converted into a gas-fired plant for use when needed.

"The federal government and the energy group VERBUND have agreed to convert the Mellach (Styria) district heating power plant, which is currently shut down, so that in an emergency it can once again produce electricity from coal (not gas)," Nehammer's office said in a statement.

It added that the government was examining further legal measures to diversify gas supplies with the aim of reducing dependence on Russian supplies.

Russian gas flows to Europe fell short of demand on Friday, coinciding with an early heatwave gripping its south and boosting benchmark prices already lifted by concerns the continent may struggle to build up storage in time for winter. read more

Austria gets 80% of its gas from Russia and since the war in Ukraine it has been scrambling to find alternative suppliers.

Writing by Paul Carrel; Editing by Chizu Nomiyama

Our Standards: The Thomson Reuters Trust Principles.

SAF GROUP

Dan Tsubouchi @Energy_Tidbits · Jun 19

ICYMI. KSA says 1-on-1 Biden/MBS official talks. @SaudiEmbassyUSA "Following that, President Biden will meet with His Royal Highness Crown Prince Mohammed bin Salman bin Abdulaziz. The Crown Prince and President Biden will hold official talks". Will both smile at photo-op? #OOTT

The Embassy of the Kingdom of
Saudi Arabia
Washington, DC

https://www.saudiembassy.net/news/saudi-arabia-looks-forward-welcoming-president-biden

Saudi Arabia Looks Forward to Welcoming President Biden

June 14, 2022

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SAF GROUP

Dan Tsubouchi @Energy_Tidbits · Jun 19

Our weekly SAF June 19, 2022 Energy Tidbits memo is posted on our SAF Group website. his 47-pg energy research memo expands upon & covers more items than tweeted this week. See news/insights section of SAF website #Oil #OOTT #LNG #NatGas #EnergyTransition safgroup.ca/news-insights/

SAF GROUP

Energy Tidbits

June 19, 2022

Produced by: Dan Tsubouchi

Game Changer for LNG: ~6.2 bcf/d Russian LNG is at Risk with Reports Baker Hughes to Stop Providing Services/Equipment

Welcome to new Energy Tidbits memo readers. We are continuing to add new readers to our Energy Tidbits memo, energy blogs and tweets. The focus and concept for the memo was set in 1999 with input from PMs, who were looking for research (both positive and negative items) that helped them shape their investment thesis to the energy space, and not just focusing on daily trading. Our priority was and still is to not just report on events, but also try to interpret and point out implications therefrom. The best example is our review of investor days, conferences and earnings calls focusing on sector developments that are relevant to the sector. Our target is to write on 48 to 50 weekends per year and to post by noon MT on Sunday. The Sunday noon timing was because PMs said they didn't have research to read on Sundays and Sundays are a day when they start to think about the investing week ahead.

This week's memo highlights:

1. Game changer for LNG As 6.2 bcf/d of Russian LNG put at risk with reports Baker Hughes will stop providing services/equipment [LINK]
2. Freeport LNG's 2.2 bcf/d LNG exports to only partially restart in 90 days, full restart around year end [LINK]
3. Russia starts its natural gas squeeze play on Europe setting up an urgency to cut natural gas consumption [LINK]
4. Gazprom says Nord Stream available capacity reduced by 2.4 bcf/d as Siemens hasn't returned compressors [LINK]
5. Novak says Russian oil production to be +600,000 b/d MoM in June, and almost back to Feb levels [LINK]
6. Please follow us on Twitter at [LINK] for breaking news that ultimately ends up in the weekly Energy Tidbits memo that doesn't get posted until Sunday noon MT.
7. For new readers to our Energy Tidbits and our blogs, you will need to sign up at our blog sign up to receive future Energy Tidbits memos. The sign up is available at [LINK].

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