

Energy Tidbits

Game Changer for LNG: ~6.2 bcf/d Russian LNG is at Risk with Reports Baker Hughes to Stop Providing Services/Equipment

Produced by: Dan Tsubouchi

June 19, 2022

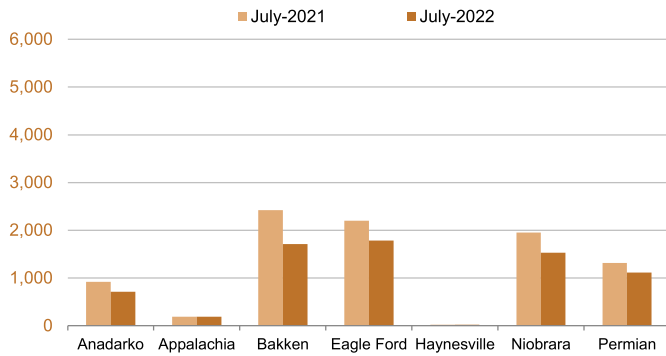
Dan Tsubouchi
Principal, Chief Market Strategist
dsubouchi@safgroup.ca

Ryan Dunfield
Principal, CEO
rdunfield@safgroup.ca

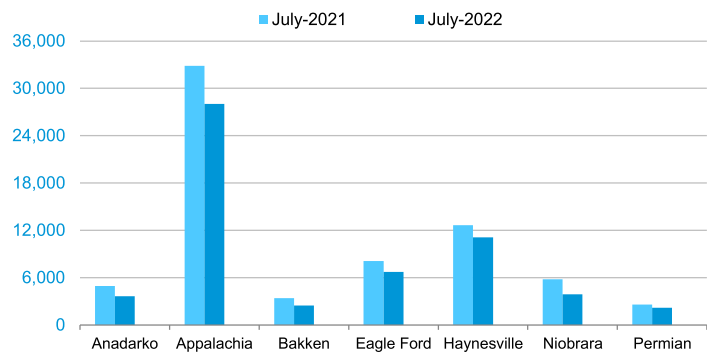
Aaron Bunting
Principal, COO, CFO
abunting@safgroup.ca

Ryan Haughn
Principal, Energy
rhaughn@safgroup.ca

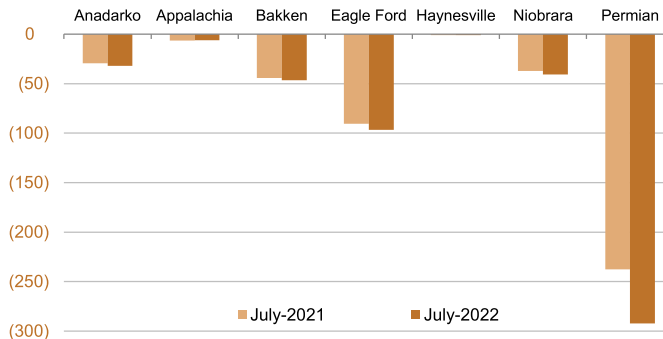
New-well oil production per rig
barrels/day



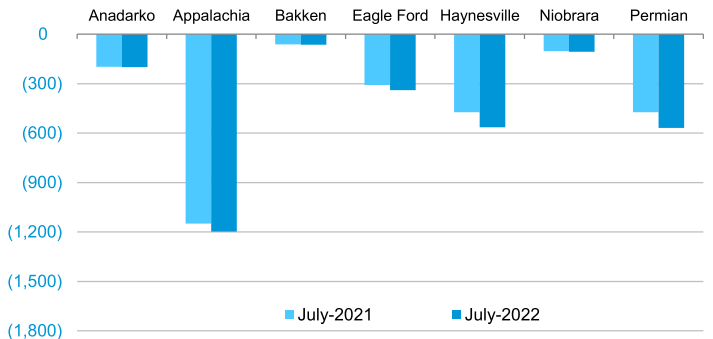
New-well gas production per rig
thousand cubic feet/day



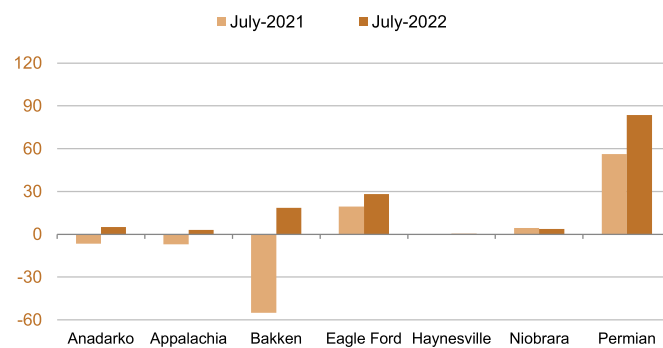
Legacy oil production change
thousand barrels/day



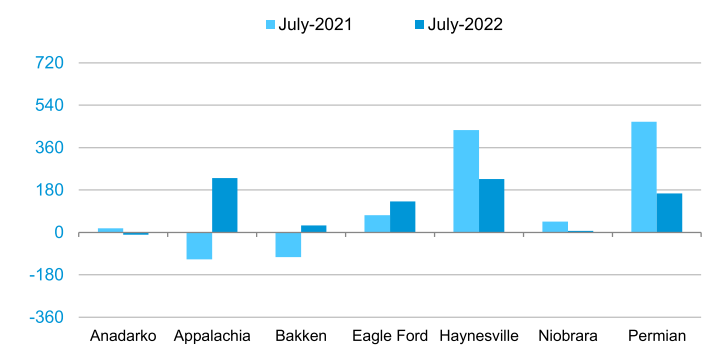
Legacy gas production change
million cubic feet/day



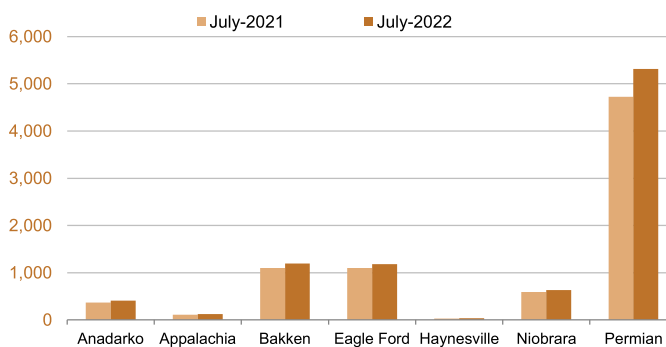
Indicated monthly change in oil production (Jul vs. Jun)
thousand barrels/day



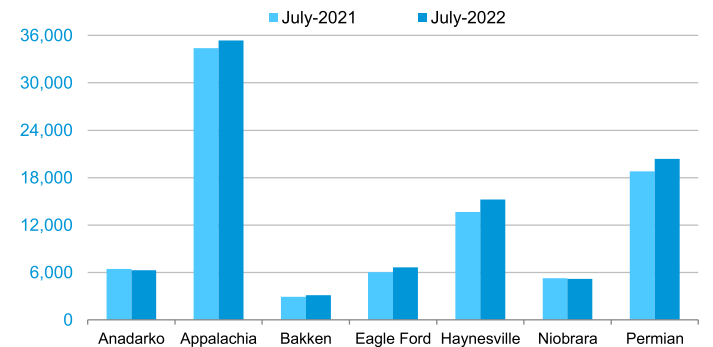
Indicated monthly change in gas production (Jul vs. Jun)
million cubic feet/day

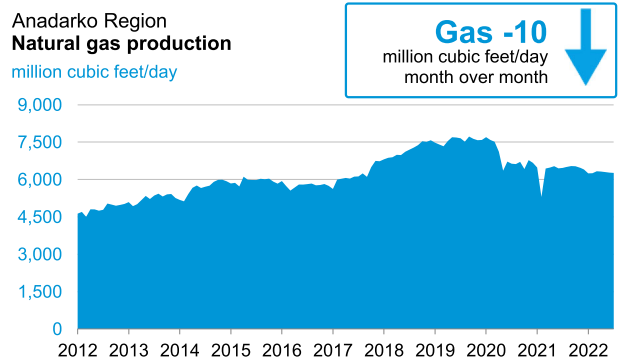
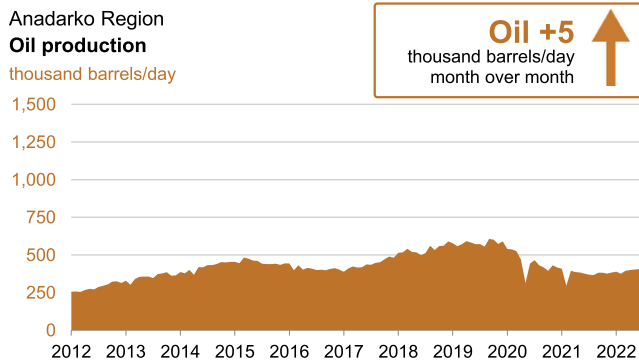
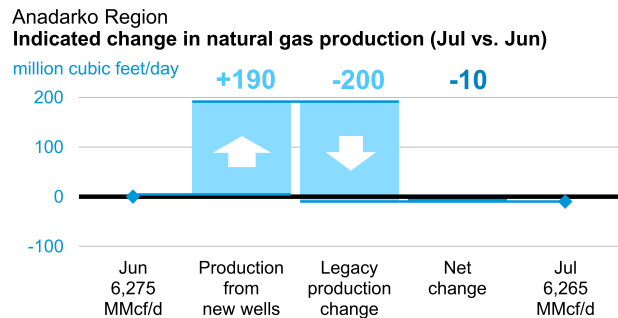
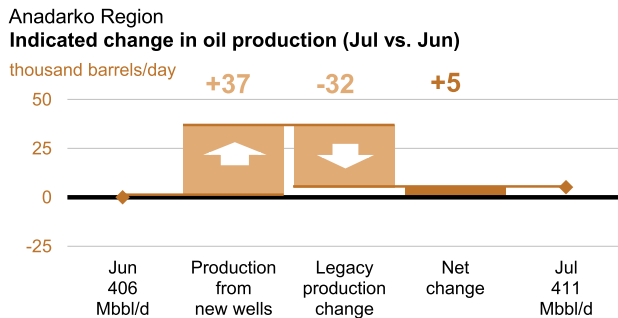
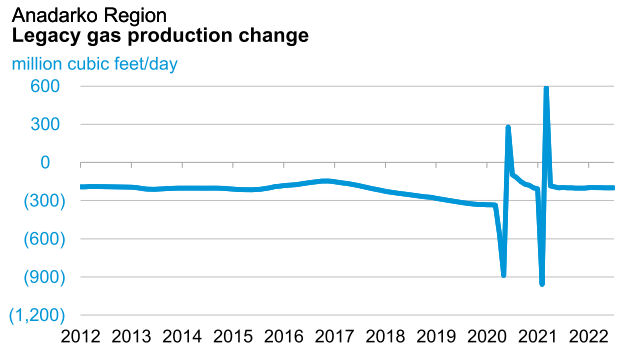
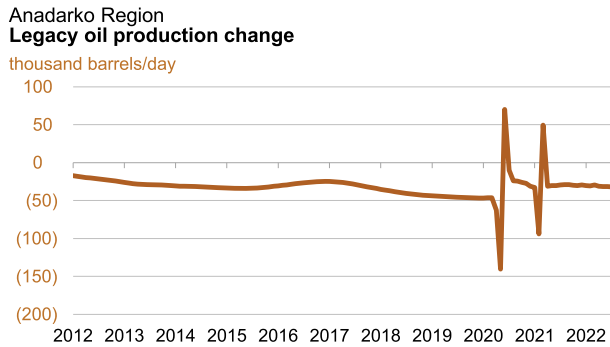
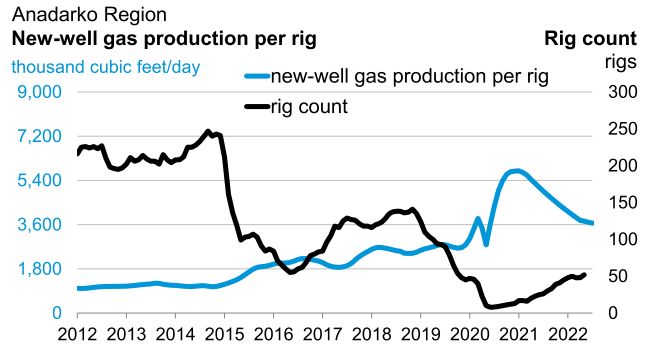
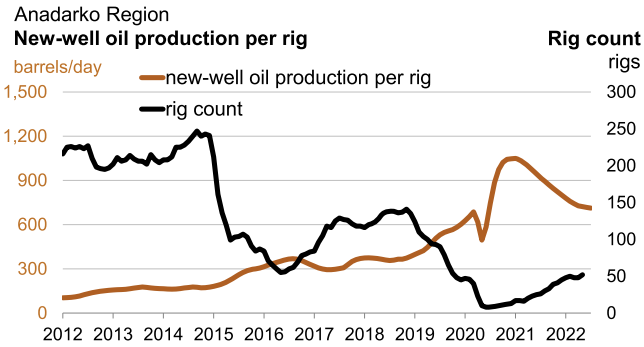


Oil production
thousand barrels/day



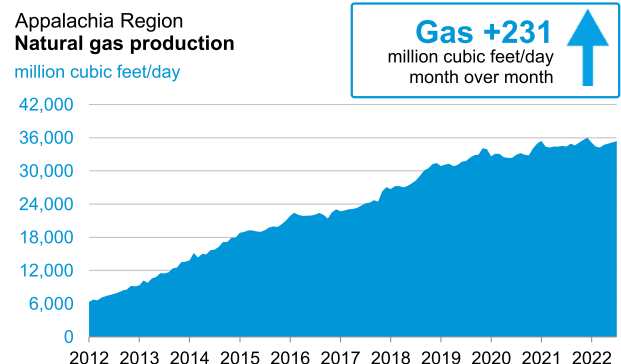
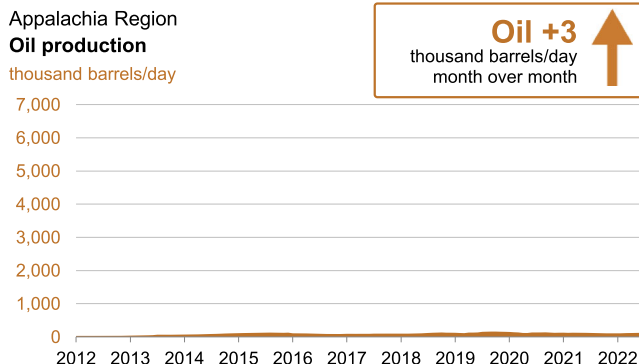
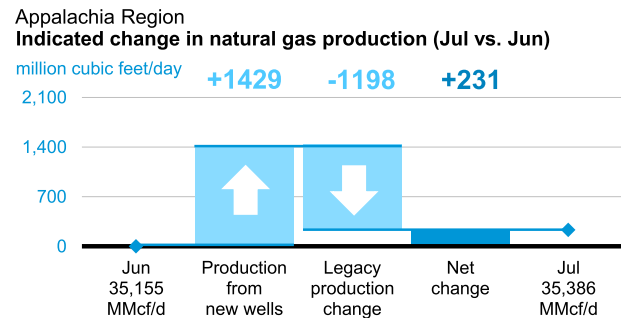
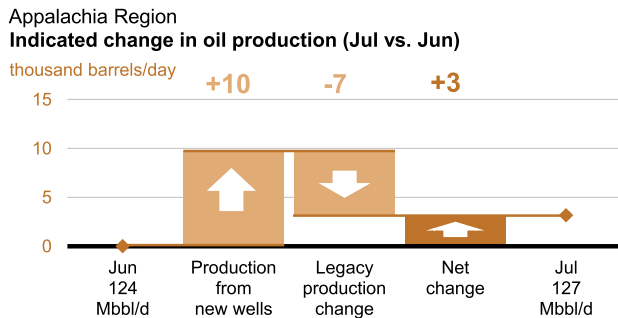
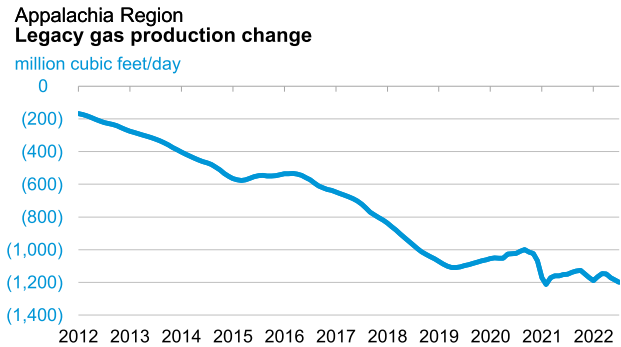
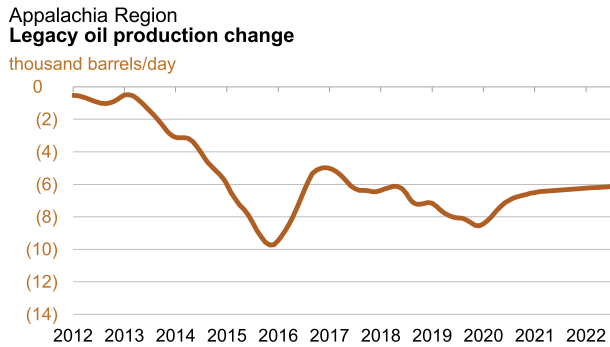
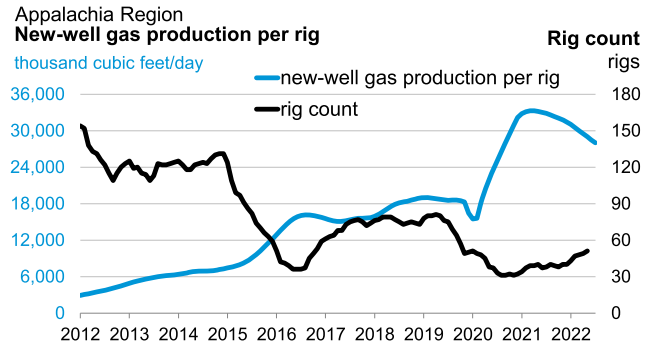
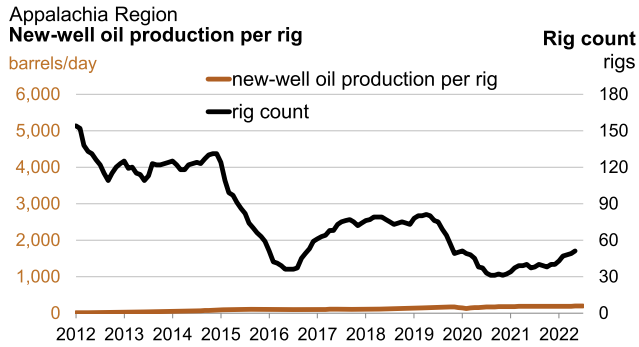
Natural gas production
million cubic feet/day







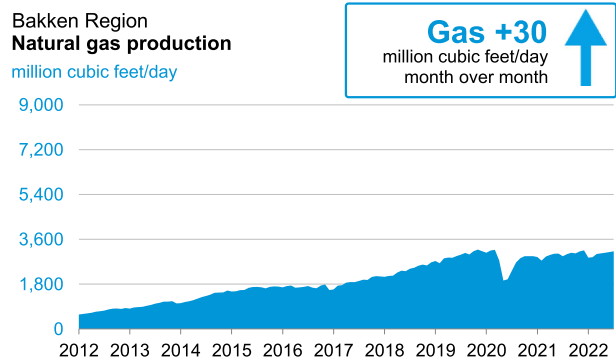
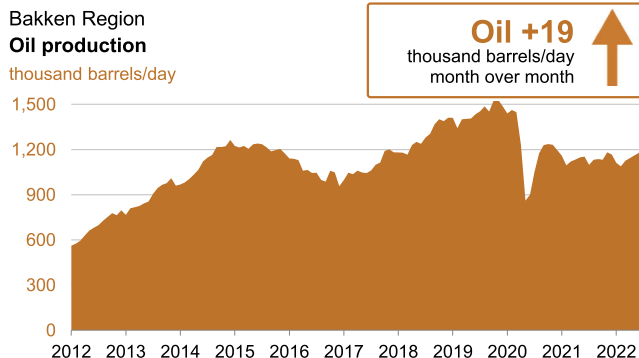
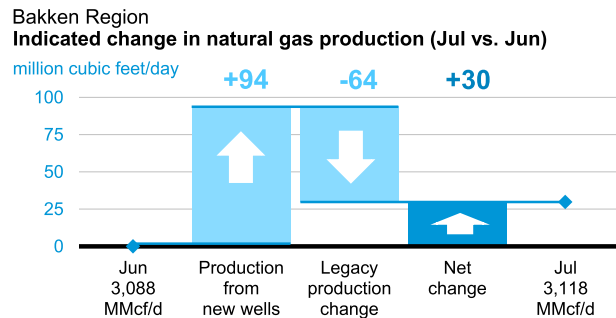
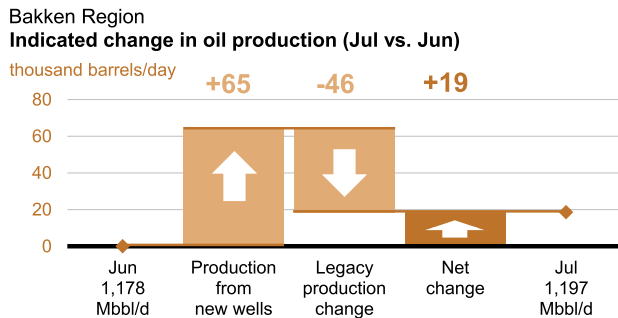
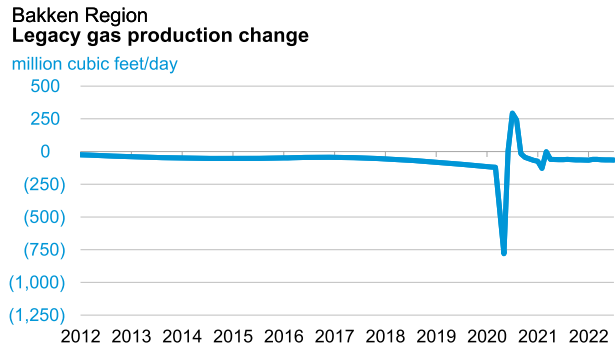
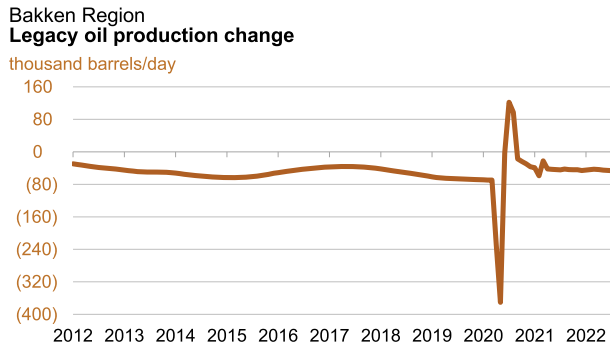
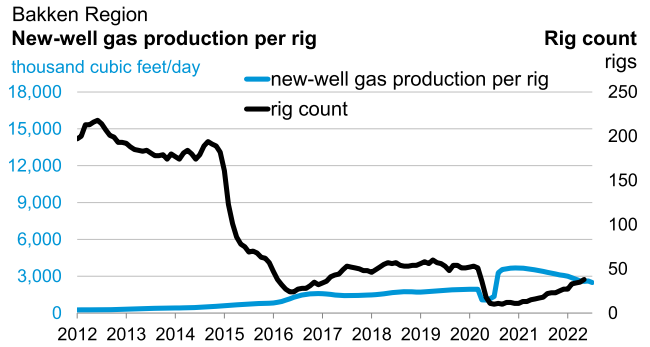
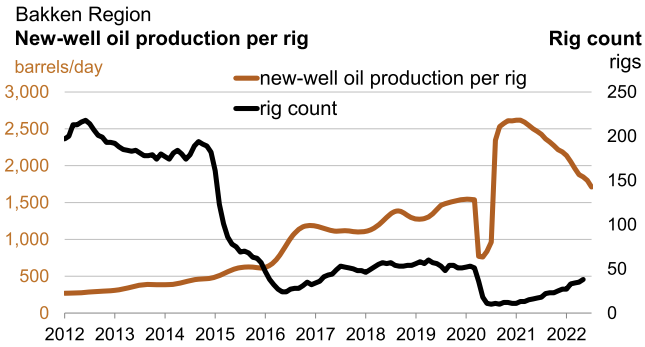
Monthly additions from one average rig

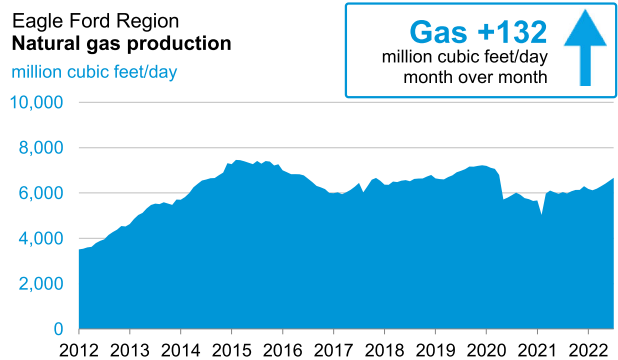
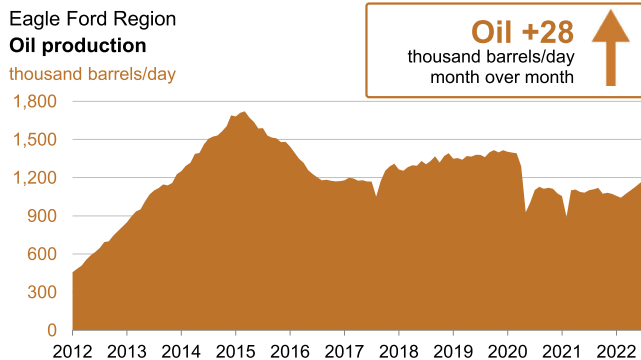
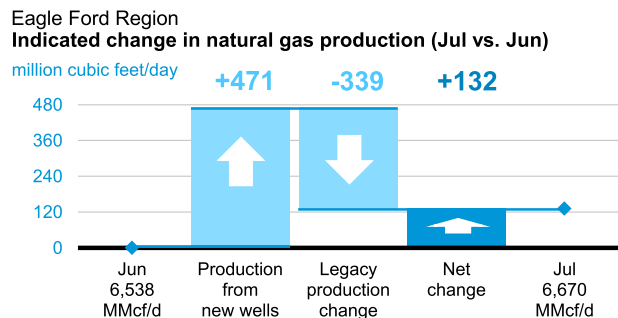
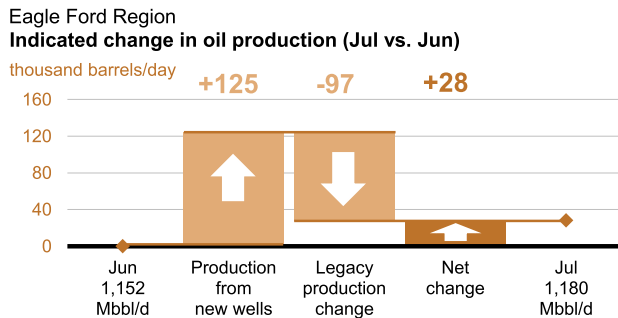
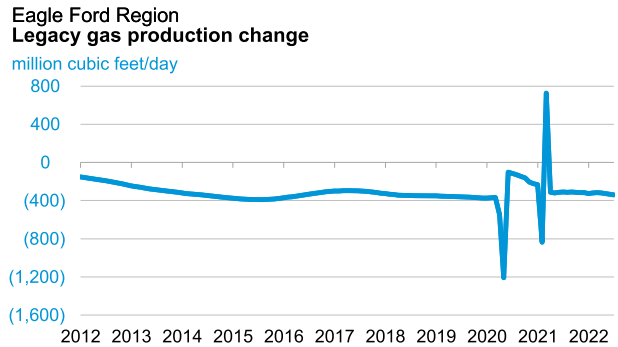
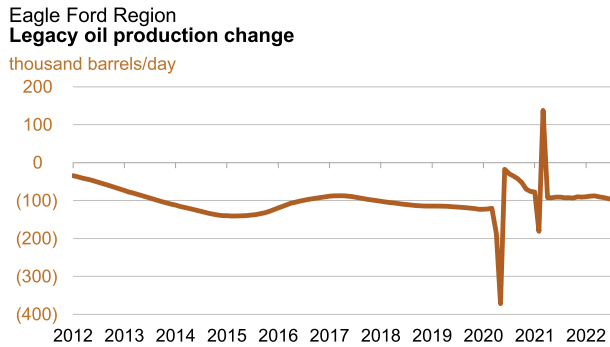
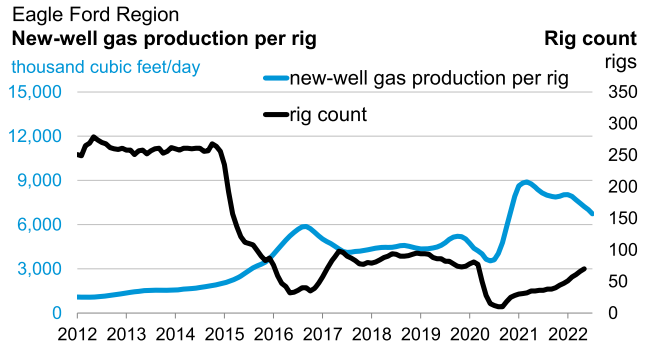
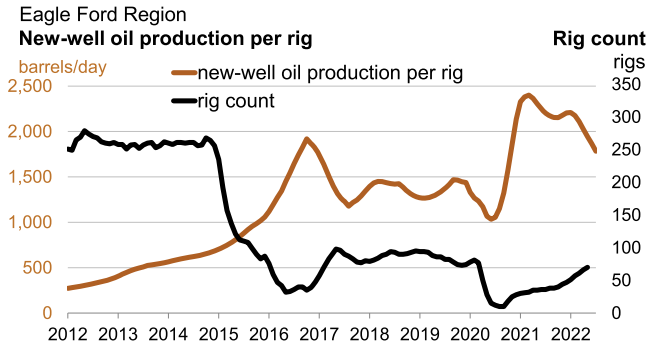


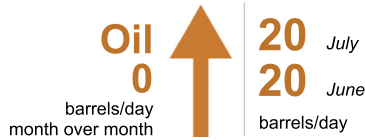
eia Bakken Region

Drilling Productivity Report

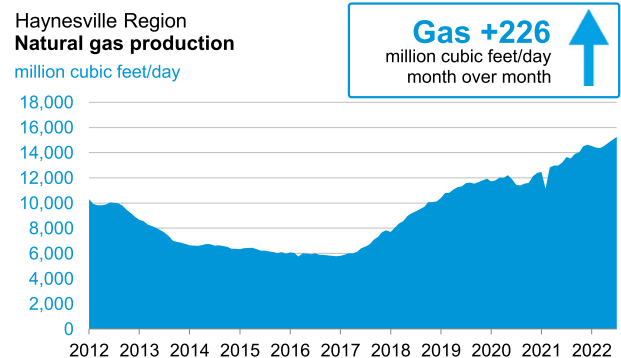
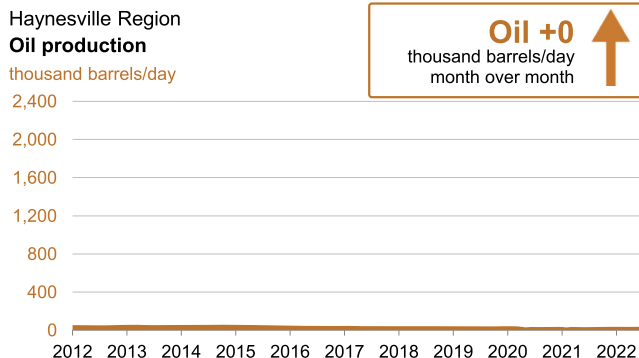
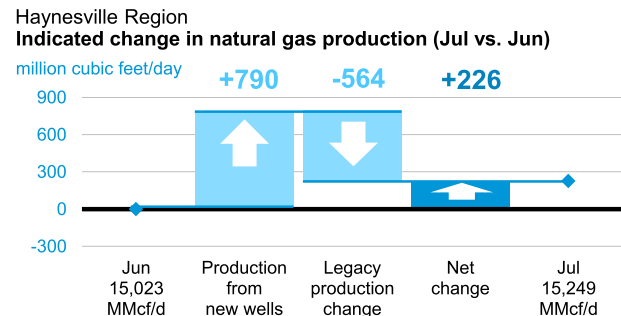
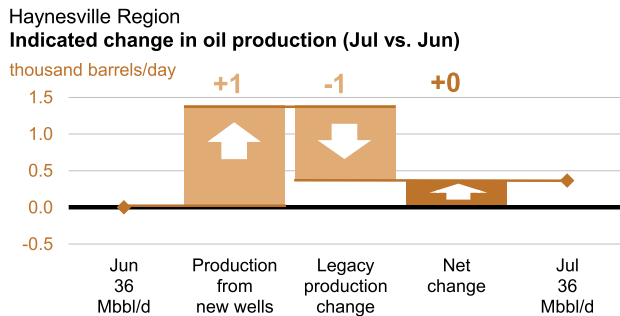
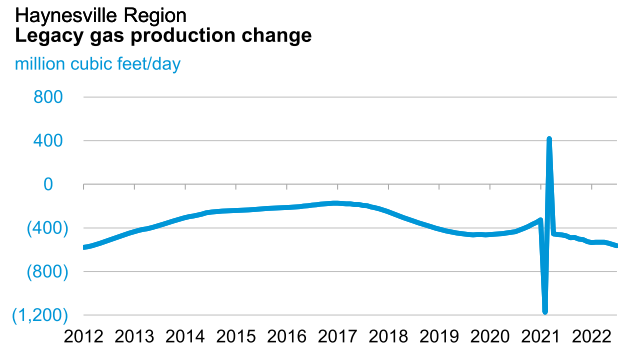
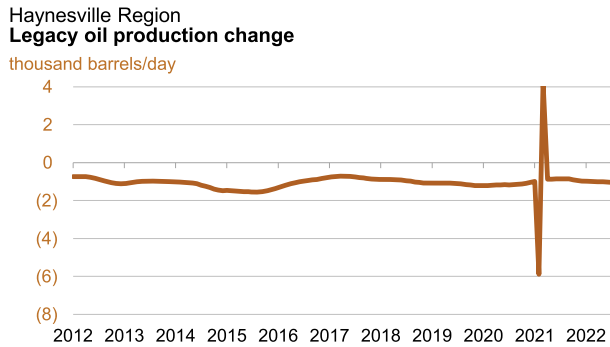
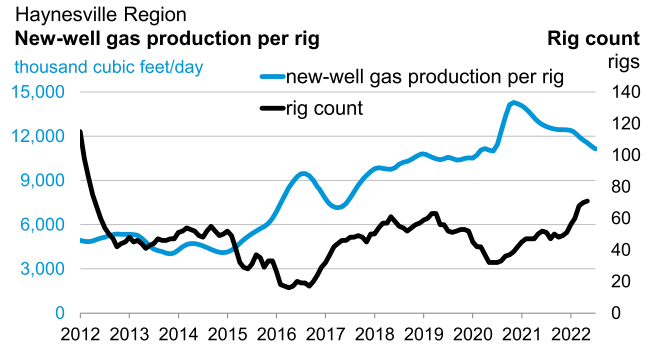
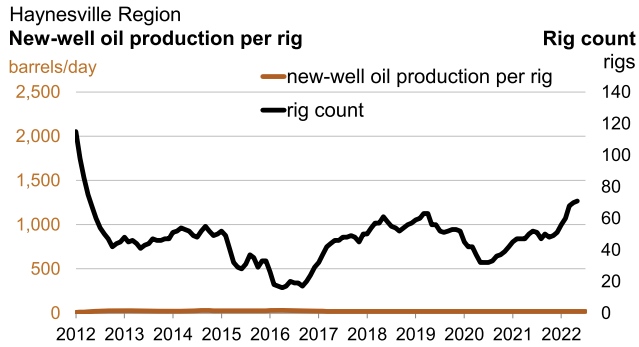
June 2022
drilling data through May
projected production through July

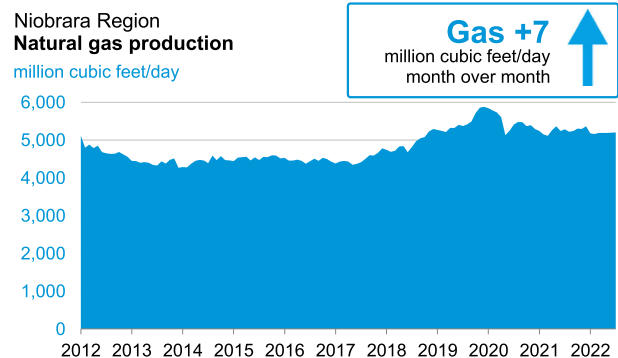
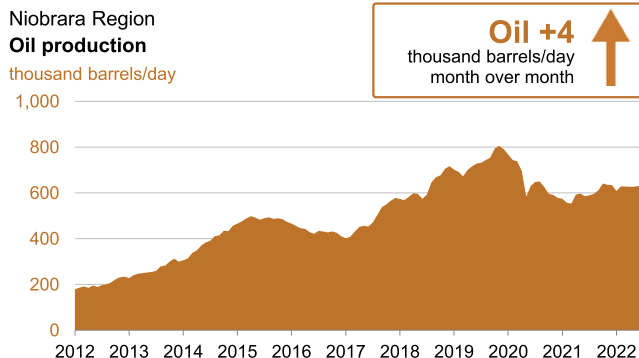
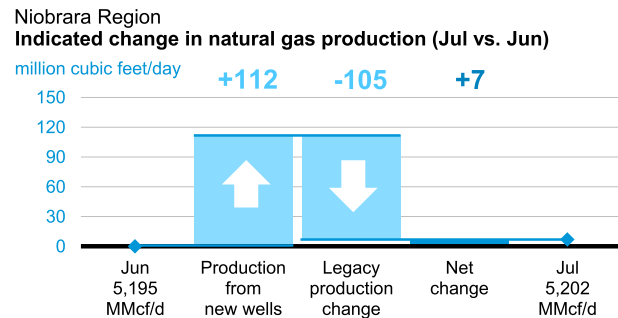
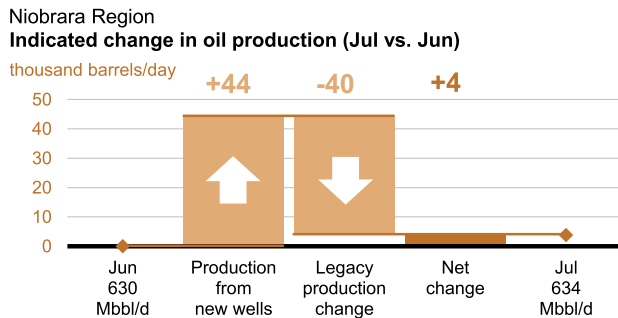
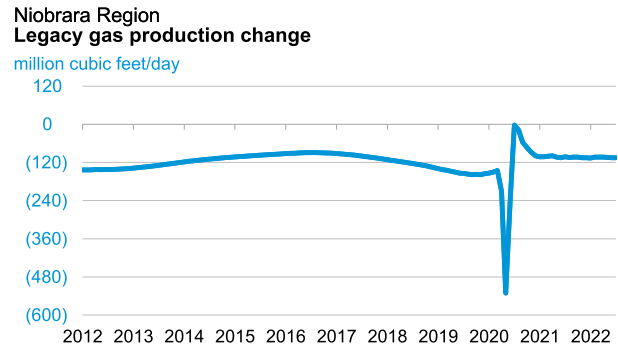
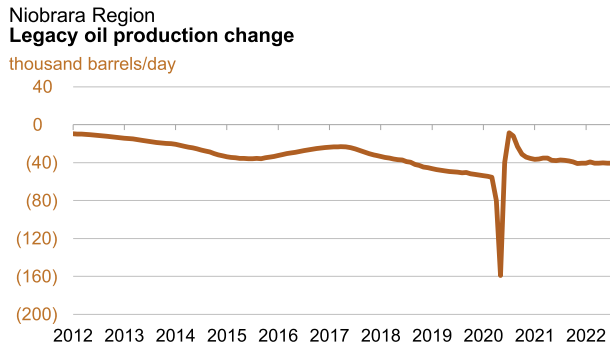
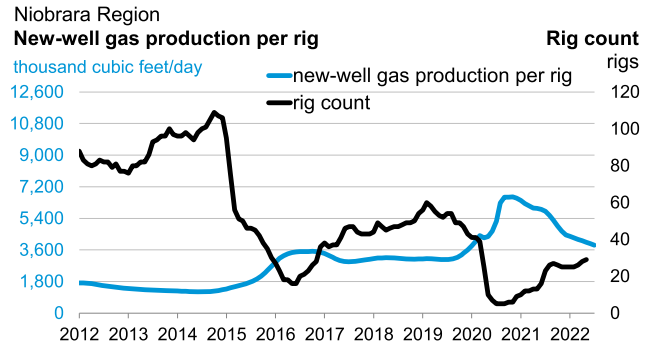
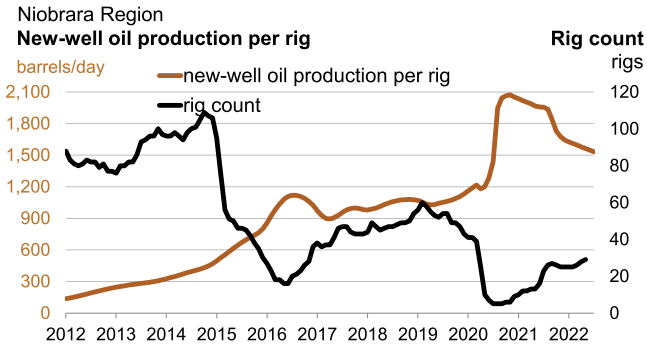


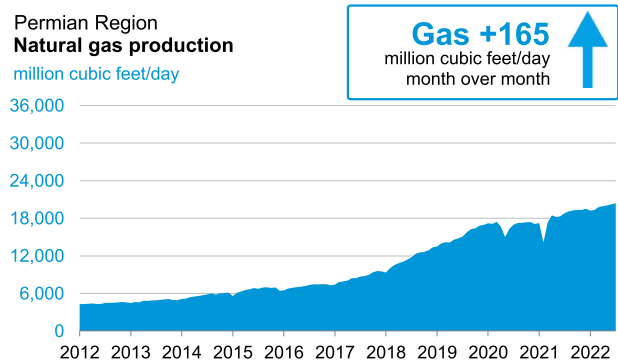
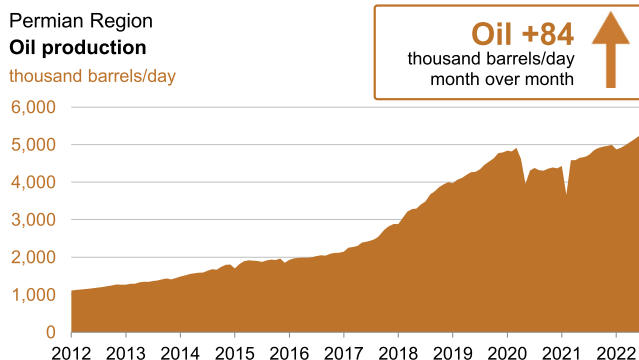
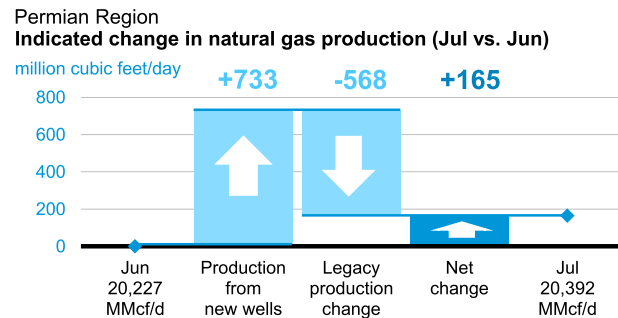
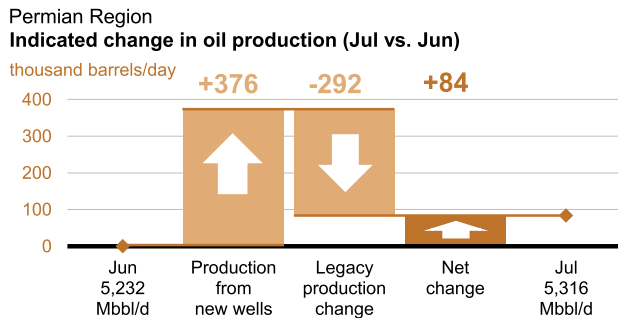
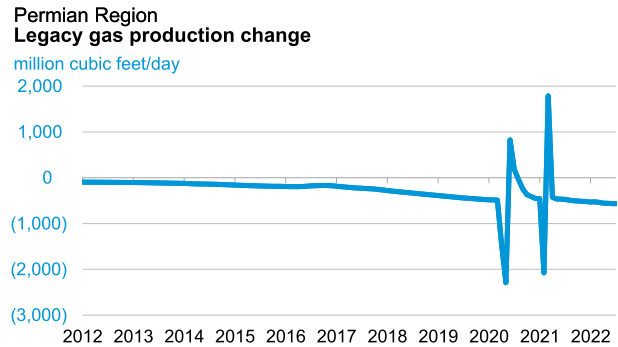
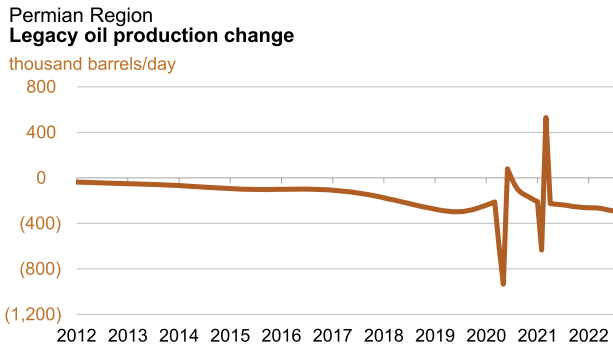
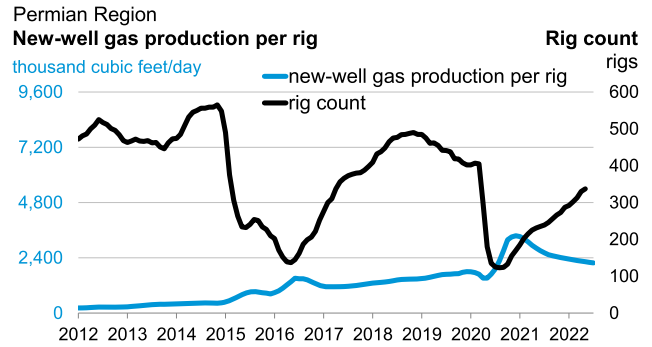
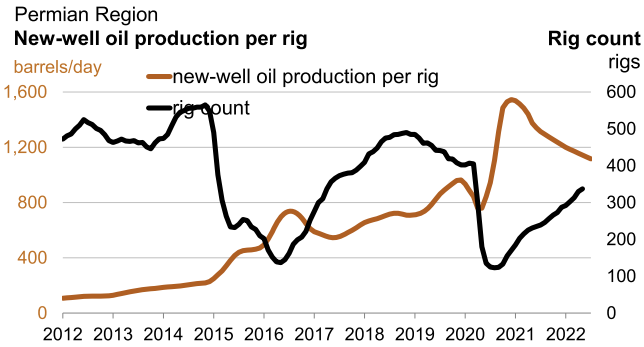




Monthly additions from one average rig









The Drilling Productivity Report uses recent data on the total number of drilling rigs in operation along with estimates of drilling productivity and estimated changes in production from existing oil and natural gas wells to provide estimated changes in oil¹ and natural gas² production for seven key regions. EIA's approach does not distinguish between oil-directed rigs and gas-directed rigs because once a well is completed it may produce both oil and gas; more than half of the wells do that.

Monthly additions from one average rig

Monthly additions from one average rig represent EIA's estimate of an average rig's³ contribution to production of oil and natural gas from new wells.⁴ The estimation of new-well production per rig uses several months of recent historical data on total production from new wells for each field divided by the region's monthly rig count, lagged by two months.⁵ Current- and next-month values are listed on the top header. The month-over-month change is listed alongside, with +/- signs and color-coded arrows to highlight the growth or decline in oil (brown) or natural gas (blue).

New-well oil/gas production per rig

Charts present historical estimated monthly additions from one average rig coupled with the number of total drilling rigs as reported by Baker Hughes.

Legacy oil and natural gas production change

Charts present EIA's estimates of total oil and gas production changes from all the wells other than the new wells. The trend is dominated by the well depletion rates, but other circumstances can influence the direction of the change. For example, well freeze-offs or hurricanes can cause production to significantly decline in any given month, resulting in a production increase the next month when production simply returns to normal levels.

Projected change in monthly oil/gas production

Charts present the combined effects of new-well production and changes to legacy production. Total new-well production is offset by the anticipated change in legacy production to derive the net change in production. The estimated change in production does not reflect external circumstances that can affect the actual rates, such as infrastructure constraints, bad weather, or shut-ins based on environmental or economic issues.

Oil/gas production

Charts present all oil and natural gas production from both new and legacy wells since 2007. This production is based on all wells reported to the state oil and gas agencies. Where state data are not immediately available, EIA estimates the production based on estimated changes in new-well oil/gas production and the corresponding legacy change.

Footnotes:

1. Oil production represents both crude and condensate production from all formations in the region. Production is not limited to tight formations. The regions are defined by all selected counties, which include areas outside of tight oil formations.
2. Gas production represents gross (before processing) gas production from all formations in the region. Production is not limited to shale formations. The regions are defined by all selected counties, which include areas outside of shale formations.
3. The monthly average rig count used in this report is calculated from weekly data on total oil and gas rigs reported by Baker Hughes.
4. A new well is defined as one that began producing for the first time in the previous month. Each well belongs to the new-well category for only one month. Reworked and recompleted wells are excluded from the calculation.
5. Rig count data lag production data because EIA has observed that the best predictor of the number of new wells beginning production in a given month is the count of rigs in operation two months earlier.



The data used in the preparation of this report come from the following sources. EIA is solely responsible for the analysis, calculations, and conclusions.

Drilling Info (<http://www.drillinginfo.com>) Source of production, permit, and spud data for counties associated with this report. Source of real-time rig location to estimate new wells spudded and completed throughout the United States.

Baker Hughes (<http://www.bakerhughes.com>) Source of rig and well counts by county, state, and basin.

North Dakota Oil and Gas Division (<https://www.dmr.nd.gov/oilgas>) Source of well production, permit, and completion data in the counties associated with this report in North Dakota

Railroad Commission of Texas (<http://www.rrc.state.tx.us>) Source of well production, permit, and completion data in the counties associated with this report in Texas

Pennsylvania Department of Environmental Protection (<https://www.paoilandgasreporting.state.pa.us/publicreports/Modules/Welcome/Welcome.aspx>) Source of well production, permit, and completion data in the counties associated with this report in Pennsylvania

West Virginia Department of Environmental Protection (<http://www.dep.wv.gov/oil-and-gas/Pages/default.aspx>) Source of well production, permit, and completion data in the counties associated with this report in West Virginia

Colorado Oil and Gas Conservation Commission (<http://cogcc.state.co.us>) Source of well production, permit, and completion data in the counties associated with this report in Colorado

Wyoming Oil and Conservation Commission (<http://wogcc.state.wy.us>) Source of well production, permit, and completion data in the counties associated with this report in Wyoming

Louisiana Department of Natural Resources (<http://dnr.louisiana.gov>) Source of well production, permit, and completion data in the counties associated with this report in Louisiana

Ohio Department of Natural Resources (<http://oilandgas.ohiodnr.gov>) Source of well production, permit, and completion data in the counties associated with this report in Ohio

Oklahoma Corporation Commission (<http://www.occeweb.com/og/oghome.htm>) Source of well production, permit, and completion data in the counties associated with this report in Oklahoma

FREEPOR LNG PROVIDES UPDATE ON JUNE 8 INCIDENT AT ITS LIQUEFACTION SITE



NEWS PROVIDED BY

Freeport LNG

Jun 14, 2022, 09:28 ET

HOUSTON, June 14, 2022 /PRNewswire/ -- Freeport LNG Development, L.P. ("Freeport LNG") is providing the following update on the June 8 incident at its Quintana Island liquefaction facility:

At approximately 11:40AM CT on June 8, 2022, an incident occurred at the Freeport LNG liquefaction plant on Quintana Island, Texas that resulted in the release of LNG, leading to the formation and ignition of a natural gas vapor cloud, and subsequent fire at the facility. As reported previously, there were no injuries, and at no time did the incident pose a threat to the surrounding community. In accordance with Freeport LNG's safety design parameters, the LNG vapor cloud dispersion and ignition thereof were at all times contained within the fence line of the liquefaction facility, lasting approximately 10 seconds. The fire and associated smoke visible thereafter were from the burning of materials in and around the location where the incident occurred, such as piping insulation and cabling. With the assistance of local area emergency response personnel, the resultant fire was extinguished approximately 40 minutes after the initial incident. While the burning of those materials resulted in carbon monoxide, nitrous oxide, particulate matter, sulfur dioxide and volatile organic compound emissions, these were of limited quantity due to the short duration of the fire and not at levels that posed any immediate risk to Freeport LNG personnel or the surrounding community. There was no release of any other chemicals or substances from the plant during the event. Water used to suppress the subsequent fire was captured on site, and will be tested and confirmed free of any harmful contaminants before being released or removed for proper disposal.

The incident occurred in pipe racks that support the transfer of LNG from the facility's LNG storage tank area to the terminal's dock facilities located on the intracoastal (i.e., north) side of Freeport LNG's dock basin. None of the liquefaction trains, LNG storage tanks, dock facilities, or LNG process areas were impacted. In coordination with local, state and federal officials, Freeport LNG's investigation into the cause of the incident, and what steps are necessary to safely resume liquefaction operations, is underway. Preliminary observations suggest that the incident resulted from the overpressure and rupture of a segment of an LNG transfer line, leading to the rapid flashing of LNG and the release and ignition of the natural gas vapor cloud. Additional investigation is underway to determine the underlying precipitating events that enabled the overpressure conditions in the LNG piping.

At this time, completion of all necessary repairs and a return to full plant operations is not expected until late 2022. Given the relatively contained area of the facility physically impacted by the incident, a resumption of partial operations is targeted to be achieved in approximately 90 days, once the safety and security of doing so can be assured, and all regulatory clearances are obtained.

Freeport LNG is mindful of the impact this incident and our suspension of operations has on our personnel, our surrounding community, and the domestic and international gas and LNG markets. We have immense gratitude for the selfless efforts undertaken by Freeport LNG operators and emergency response personnel and local

emergency responders to quickly address and contain the impacts of the event on our facilities, our personnel, and the surrounding community.

ABOUT FREEPORT LNG

Freeport LNG is an LNG export company headquartered in Houston, Texas. The company's three train, 15 MTPA liquefaction facility is the seventh largest in the world and second largest in the U.S. Freeport LNG's liquefaction facility is the largest all-electric drive motor plant of its kind in the world, making it the most environmentally sustainable site of its kind. The facility's electric drive motors reduce carbon emissions by over 90% relative to gas turbine-driven liquefaction facilities. Freeport plans to expand by adding a fourth liquefaction train, which has received all regulatory approvals for construction. Freeport was formed in 2002 to develop, own and operate an LNG terminal on Quintana Island, near Freeport, Texas. The terminal started LNG import operations in June 2008 and began LNG export operations in 2019. Further information can be found on Freeport's website at www.freeportlng.com.

SOURCE Freeport LNG

Baker Hughes terminates service agreements for LNG projects in Russia

According to Kommersant's information, the American Baker Hughes stops servicing all Russian LNG projects. In particular, the company is withdrawing service engineers from Gazprom's Sakhalin-2 and NOVATEK's Yamal LNG projects, as well as design engineers from NOVATEK's Arctic LNG-2 under construction. Simultaneously, Baker Hughes will stop shipping for the latest equipment project, including gas turbines. The timing of the completion of the construction of the first line of the Arctic LNG-2 directly depends on these deliveries.

The American Baker Hughes recalls its engineers for the maintenance of key technological equipment (gas turbines and compressors) from the Yamal LNG projects of NOVATEK and Sakhalin-2 of Gazprom, project engineers from the Arctic LNG-2 project of NOVATEK under construction, and also stops all shipments of equipment for LNG projects in Russia. This was reported to Kommersant by sources among the Russian counterparties of the company. According to them, in fact, this calls into question the further operation and commissioning of foreign equipment, and also makes it impossible to supply spare parts for its repairs.

The American company is terminating the agreements, despite the fact that there are no direct sanctions restrictions on the service and supply of gas turbines in the Russian Federation (the conclusion of new contracts is prohibited), and Gazprom and NOVATEK are not under direct US or EU sanctions.

Completion of the construction of the first Arctic LNG-2 line for 6.6 million tons is now directly dependent on the supply of Baker Hughes LM9000 gas turbines.

In total, seven turbines are to be delivered to the first line (part for the LNG production process, part for power generation), but, according to Kommersant, only half of the machines have been shipped to NOVATEK so far. There is, in fact, nothing to replace this equipment now: analogues are not produced in the Russian Federation, and LNG production lines have already been designed for the LM9000.

NOVATEK did not respond to Kommersant's request about a possible delay in commissioning the first Arctic LNG-2 line and the number of vehicles received. Sakhalin-2 (Gazprom has 50% + 1 share) has signed a long-term service contract for the maintenance of four Frame 7EA turbines (used in the process, power - 90 MW) and five Frame 5 turbines (25 MW, for power generation).). The project company Sakhalin Energy did not respond to Kommersant's request.

The head of NOVATEK, Leonid Mikhelson, said on May 19 that the company still maintains plans to launch the first line of Arctic LNG-2 in 2023. To do this, a floating platform from Murmansk to the waters of the Gulf of Ob should be sent to navigation in 2022, which will last until about the end of August. "There are big difficulties today with the imposition of sanctions, and not only the sanctions for the products and services themselves, there are many logistical difficulties ... We manage to overcome these difficulties so far, and so far we have not changed plans for the timing of the introduction," Mr. Mikhelson explained.

As part of Arctic LNG-2, NOVATEK planned to build three lines for the production of LNG with a capacity of 6.6 million tons per year each, the launch of the second line was planned for 2024, the third - for 2025. At the same time, the head of TotalEnergies Patrick Pouyanne (the company has 10% in the project) reported that the first Arctic LNG-2 platform is 98% ready and has a high chance of completion, but "there may be some tricky moments", because some of the equipment is still not delivered in the Russian Federation (quote from Bloomberg).

According to Mr. Mikhelson, the localization of the equipment for Arctic LNG-2, in particular, the cryogenic equipment necessary for the production of LNG, may take two to three years.

While localization is about 50%. Leonid Mikhelson specified that NOVATEK had already begun pre-project work on the construction of a new LNG plant using Russian technology with a capacity of 5 million tons.

NOVATEK plans new LNG plant with Russian equipment

Yury Melnikov, Head of Hydrogen and Energy Efficiency at the Energy Center of the Skolkovo School of Management, notes that aircraft-type gas turbines, typical of the oil and gas industry and known under the General Electric (GE) brand, have been produced and serviced by Baker Hughes since about 2019. In the Russian Federation, the production of turbines that are used in Sakhalin and Yamal is not localized: REP Holding, in partnership with GE, has been engaged in a turbine of a different size since 2013 - MS5002E (32 MW). Therefore, the expert admits, objective difficulties in service can be expected if Baker Hughes decides to stop work on service contracts and the supply of spare parts. The most serious problems, in his opinion, may arise with the maintenance of parts of the hot path - the combustion chamber and the first stages of the turbine.

<https://tass.ru/ekonomika/14944991>

2 hours ago

updated 2 hours ago

The Ministry of Energy admitted that new LNG projects will be launched with a shift of no more than one or two years

According to First Deputy Minister Pavel Sorokin, Russia maintains plans to increase LNG production to 120-140 million tons by 2035

ST. PETERSBURG, June 17. /TASS/. New LNG projects in Russia can be launched with a time shift of no more than one or two years. This was stated by the First Deputy Head of the Ministry of Energy Pavel Sorokin at SPIEF.

"There may be shifts in terms, new projects may appear," he said. "It is critical not to allow shifts for more than one or two years."

According to him, Russia maintains plans to increase LNG production to 120-140 million tons by 2035. He added that Russia could take a share of 15-20% of the world market, which could reach 700 million tons by 2030.

Tags:

[Russia](#)

BN 06/17 16:58 *MIKHELSON: NOVATEK SEES 2022 GAS OUTPUT UP 2%-3% Y/Y: IFX

BN 06/17 17:04 *MIKHELSON: INVESTMENT DECISION ON LNG FROM OBSKY PLANT SEEN '23

BN 06/17 17:27 *NOVATEK MAY LOOK INTO BUYING RUSSIA ASSETS OF FORTUM: IFX

Novatek Plans to Launch Arctic LNG 2 on Time: IFX Cites CEO

2022-06-17 18:08:52.290 GMT

By Bloomberg News

(Bloomberg) -- Novatek plans to launch Arctic LNG 2 on time despite all the problems amid sanctions, Interfax reports, citing CEO Leonid Mikhelson at St. Petersburg International Economic Forum.

* NOTE: Novatek holds 60% stake in the Arctic LNG 2 project with three LNG production trains with a capacity of 6.6m tons/year each. The first train was expected to start production in 2023

* Novatek has revised Arctic LNG 2 financing scheme, there are no problems with that

* Novatek expects gas output to rise 2-3% this year, while oil production will slightly decline

* Investment decision on producing 5m tons/year at Obsky gas chemical complex seen in 2023

* Novatek will continue to pay interim dividends in 2022

* Co. may look into buying Fortum assets in Russia

* Novatek hasn't reduced supplies from its Vysotsk LNG project with the fuel going mainly to Finland, Tass reports, citing Mikhelson

* READ, June 16: Arctic LNG 2 Launch to Be 'Slightly' Delayed: Novatek Deputy CEO

* READ, April 21: Novatek Seeks New Finance Plan for Arctic LNG 2: Interfax

To contact Bloomberg News staff for this story:

James Herron in London at jherron9@bloomberg.net

To contact the editors responsible for this story:

James Herron at jherron9@bloomberg.net

Jasmina Kelemen

Doha (Qatar), 19 June 2022 – Eni has been selected by QatarEnergy as a new international partner in the North Field East (NFE) expansion project.

The Minister of State for Energy Affairs, President and CEO of QatarEnergy, Saad Sherida Al-Kaabi, and Eni CEO, Claudio Descalzi, signed the partnership agreement for the creation of the new Joint Venture company during an official ceremony today. QatarEnergy will hold a 75% interest while Eni the remaining 25% interest. The JV will hold 12,5% interest in the entire NFE project, including the 4 mega LNG trains with a combined capacity of 32 MTPA.

The NFE project will expand Qatar's LNG export capacity from the current 77 million tons per annum (MTPA) to 110 MTPA. A \$28.75 billion investment, NFE is expected to start production before the end of 2025 and will deploy state of the art technologies to minimize overall carbon footprint, including carbon capture and sequestration.

The agreement marks the completion of a competitive process started in 2019 and has a duration of 27 years. It is a strategic move for Eni, which expands Eni's presence in the Middle East and gains access to a world leading LNG producer, detaining among the largest natural gas reserves in the world. It is also a significant milestone in the Company's diversification strategy, adding a cleaner and reliable energy source to its portfolio.

In his remarks during the ceremony, Eni CEO Descalzi said: "We are honored and delighted for having been selected as partner in the North Field East expansion project. As a newcomer joining this world leading LNG project, we feel the privilege and the responsibility of being a strategic partner of choice for the State of Qatar. This agreement is a significant milestone for Eni and fits our objective to diversify into cleaner and more reliable energy sources in line with our decarbonization strategy. Eni looks forward to working with QatarEnergy on this project to positively contribute to increasing worldwide gas security of supply."

Workers Extend Strike at Shell's Prelude LNG Facility By a Week
2022-06-13 04:40:34.934 GMT

By Stephen Stapczynski

(Bloomberg) -- Workers on Shell's Prelude floating liquefied natural gas production facility in Australia extended industrial action to 19 days after talks failed to resolve a dispute over conditions, a labor union group said on Sunday in an online post.

* The strike began on Friday, and was initially planned to last 12 days

* Shell didn't immediately respond to a request for comment

* READ: Shell's Prelude LNG Plant Braces for Disruption on Union Strike

** READ: Workers Say to Begin Strike at Shell's Prelude LNG Facility

* NOTE: Members of the Offshore Alliance, a partnership between the Australian Workers Union and the Maritime Union of Australia, as well as of the Electrical Trades Union previously had said action would include halting tasks such as unloading of non-essential cargo

** Union member are demanding better rates, conditions and job security for workers at the site

To contact the reporter on this story:

Stephen Stapczynski in Singapore at sstapczynsk1@bloomberg.net

To contact the editors responsible for this story:

David Stringer at dstringer3@bloomberg.net

Jason Rogers

To view this story in Bloomberg click here:

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<https://www.wsj.com/articles/germany-steps-up-measures-to-conserve-gas-as-russia-slows-supply-to-europe-11655642717>

Germany Steps Up Measures to Conserve Gas as Russia Slows Supply to Europe

Berlin to restart coal-fired plants and auction gas to reduce consumption

The German government said it would empower utility companies to extend the use of coal-fired power plants.

PHOTO: ALEX KRAUS/BLOOMBERG NEWS

By

[William Boston](#) Follow

June 19, 2022 8:45 am ET

BERLIN—Germany will restart coal-fired power plants and offer incentives for companies to curb natural gas consumption, marking a new step in the economic war between Europe and Russia.

Berlin unveiled the measures on Sunday after Russia [cut gas supplies to Europe](#) last week as it punched back against European sanctions and military support for Ukraine.

The steps, part of a broader strategy initiated after the invasion of Ukraine, aims to reduce gas consumption and divert gas deliveries to storage facilities to ensure that the country has enough reserves to get through the winter.

Russia's gradual cutting of gas supplies has [raised the specter of a potential fuel shortage](#) if Europe goes into winter with less-than-full storages. It has also raised prices, putting additional pressure on economies that are already struggling with high inflation and rising borrowing costs and face the prospect of a recession.

Nord Stream, the main channel for Russian fuel to Europe, has reported a sharp drop in gas supplies.

"It is obviously Putin's strategy to rattle us, drive up prices and divide us. We won't allow that. We will defend ourselves resolutely, precisely and thoughtfully," said Robert Habeck, Germany's economy minister.



A natural gas storage facility in Germany. Russia's gradual cutting of supplies has raised the specter of a potential fuel shortage.

PHOTO: DAVID HECKER/GETTY IMAGES

Gazprom has blamed the shortfall on [missing turbine parts](#) that were stuck in Canada due to sanctions. European officials and analysts dismissed the explanation.

Germany imports about 35% of its gas from Russia, [down from 55% before the war](#), and uses most of it for heating and manufacturing, according to German government estimates. Last year, power generation using natural gas accounted for about 15% of total public electricity in Germany, Mr. Habeck said, adding that the share of gas in power production has likely fallen this year.

To accelerate the decline of gas in the power mix, Mr. Habeck outlined a number of steps the government was taking to reduce reliance on gas and build up stores for the coming winter.

In a U-turn for a leader of the environmentalist Green Party, which has campaigned to reduce fossil-fuel use, Mr. Habeck said the government would empower utility companies to extend the use of coal-fired power plants.

This would ensure that Germany has an alternative source of energy but would further delay the country's efforts to slash carbon emissions.

"This is bitter," Mr. Habeck said of the need to rely on coal. "But in this situation, it is necessary to reduce gas consumption. Gas stores must be full by winter. That has the highest priority."

The legislation affecting the use of coal is expected to be approved on July 8 in the Bundesrat, the upper house of parliament, Mr. Habeck said. The measure expires on March 31, 2024, by which time the government hopes to have created a sustainable alternative to Russian gas.

Mr. Habeck also said the government would introduce an auction system that would motivate industry to reduce consumption.

The government released no details about how the auction would work, but Mr. Habeck said it would begin this summer.

Mr. Habeck said the new measures are aimed at diverting the dwindling gas deliveries from Russia into storage tanks to be used during the winter. Germany is aiming to have its gas storage facilities 90% full by December. Currently, Germany's gas storage facilities are about 56% full, Mr. Habeck said.

The measures come on top of a variety of previously announced steps aimed at reducing Germany's reliance on Russian gas. Under plans drafted earlier, the government could ration gas for industrial users should it run out of it in the winter.

Rising oil costs have helped push the national average price for a gallon of gasoline to \$5 for the first time, and that's leading to increased inflation pressure across the U.S. economy. Photo illustration: Todd Johnson

The government has made arrangements to purchase gas from non-Russian sources and is accelerating the construction of a liquefied natural gas terminal in the North Sea near Wilhelmshaven.

Mr. Habeck said that two of the planned four special ships to convert liquefied natural gas that can be fed into the German grid would become operational this winter, allowing the country to replenish gas supplies independent of Russia.

Write to William Boston at william.boston@wsj.com



MONTHLY UPDATE

JUNE 2022 PRODUCTION & TRANSPORTATION

Published: June 14, 2022
Justin J. Kringstad, Director
North Dakota Pipeline Authority
Office: 701.220.6227
www.northdakotapipelines.com

MONTHLY UPDATE

JUNE 2022 PRODUCTION & TRANSPORTATION

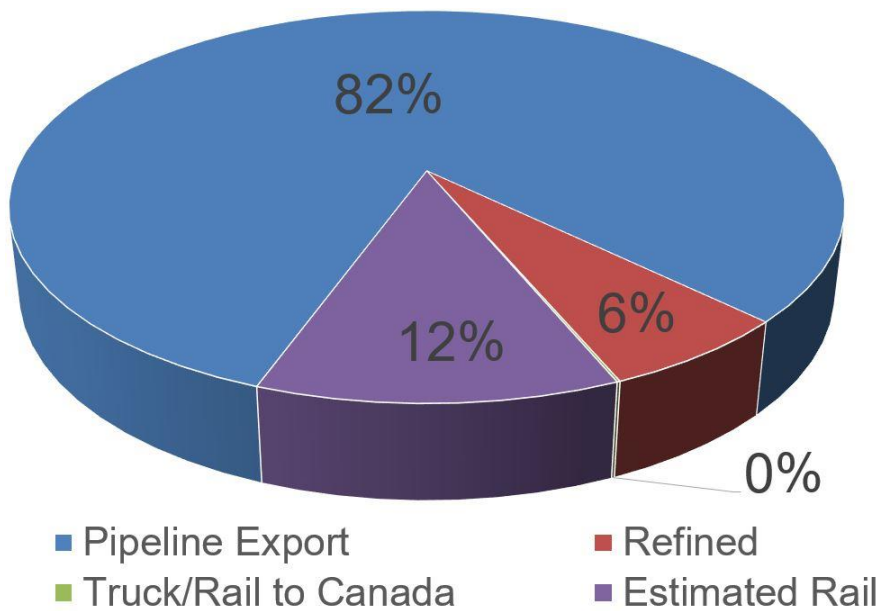
North Dakota Oil Production

Month	Monthly Total, BBL	Average, BOPD
Mar. 2022 - Final	34,801,844	1,122,640
Apr. 2022 - Prelim.	27,017,910	900,597

North Dakota Natural Gas Production

Month	Monthly Total, MCF	Average, MCFD
Mar. 2022 - Final	93,292,505	3,009,436
Apr. 2022 - Prelim.	73,347,983	2,444,933

Estimated Williston Basin Oil Transportation, Apr. 2022



CURRENT DRILLING ACTIVITY:

NORTH DAKOTA¹

37 Rigs

EASTERN MONTANA²

3 Rigs

SOUTH DAKOTA²

0 Rigs

SOURCE (JUNE 14, 2022):

1. ND Oil & Gas Division
2. Baker Hughes

PRICES:

Crude (WTI): \$121.92

Crude (Brent): \$123.53

NYMEX Gas: \$7.21

SOURCE: BLOOMBERG
(JUNE 14, 2022 11AM CST)

GAS STATS*

94% CAPTURED & SOLD

5% FLARED DUE TO
CHALLENGES OR
CONSTRAINTS ON EXISTING
GATHERING SYSTEMS

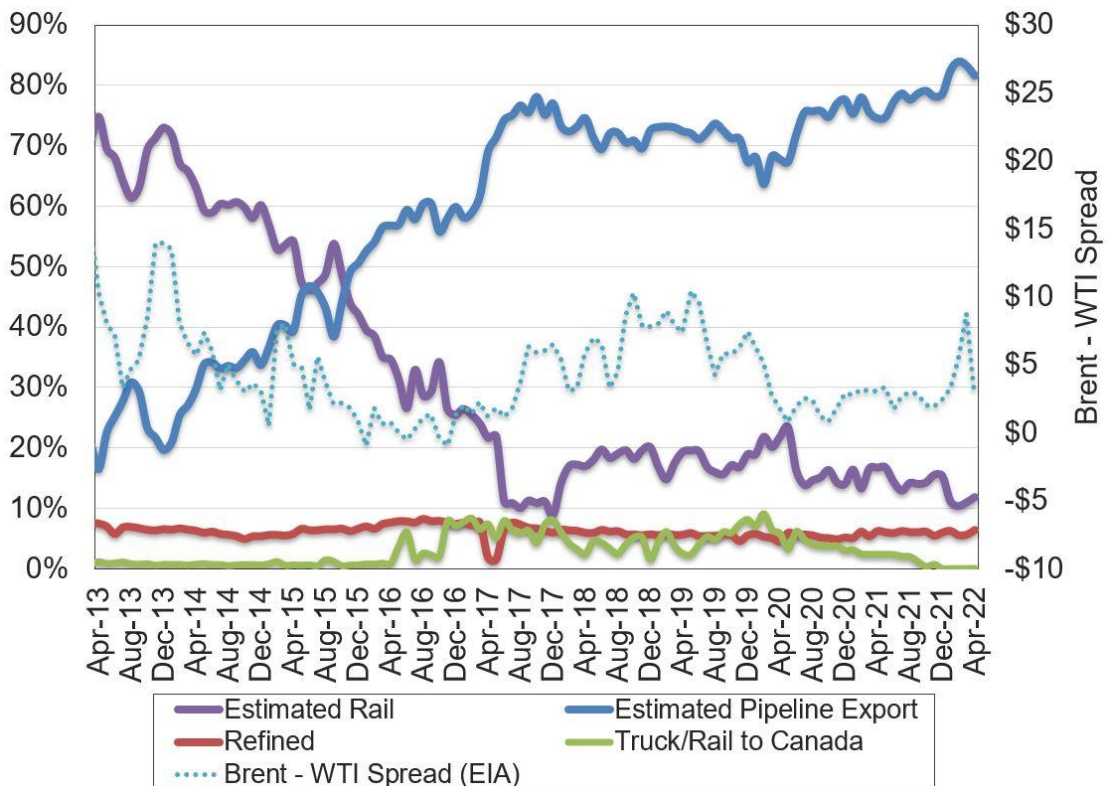
1% FLARED FROM WELL
WITH ZERO SALES

*APR. 2022 NON-CONF DATA

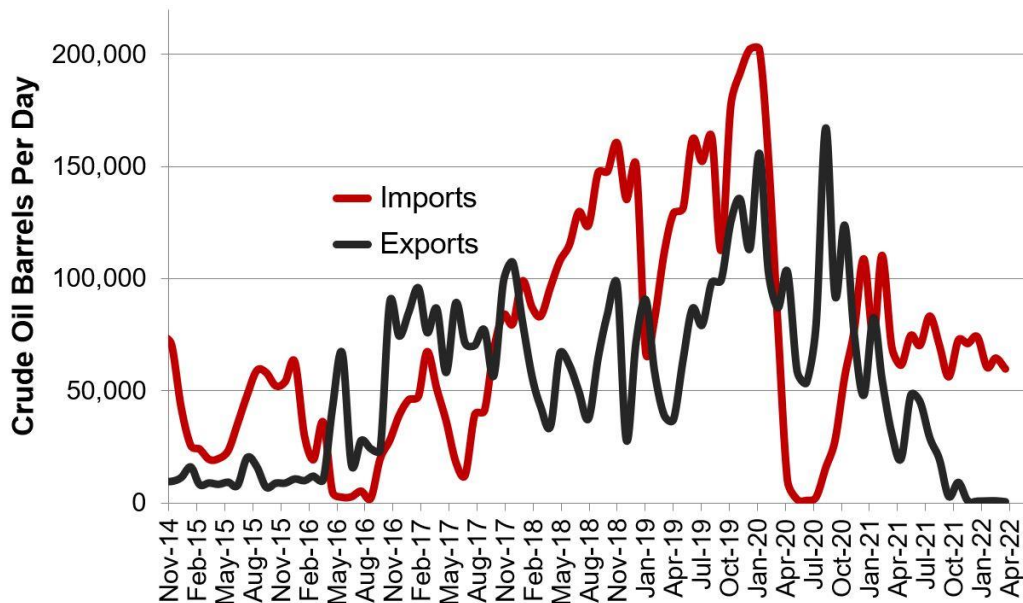
Estimated North Dakota Rail Export Volumes



Estimated Williston Basin Oil Transportation

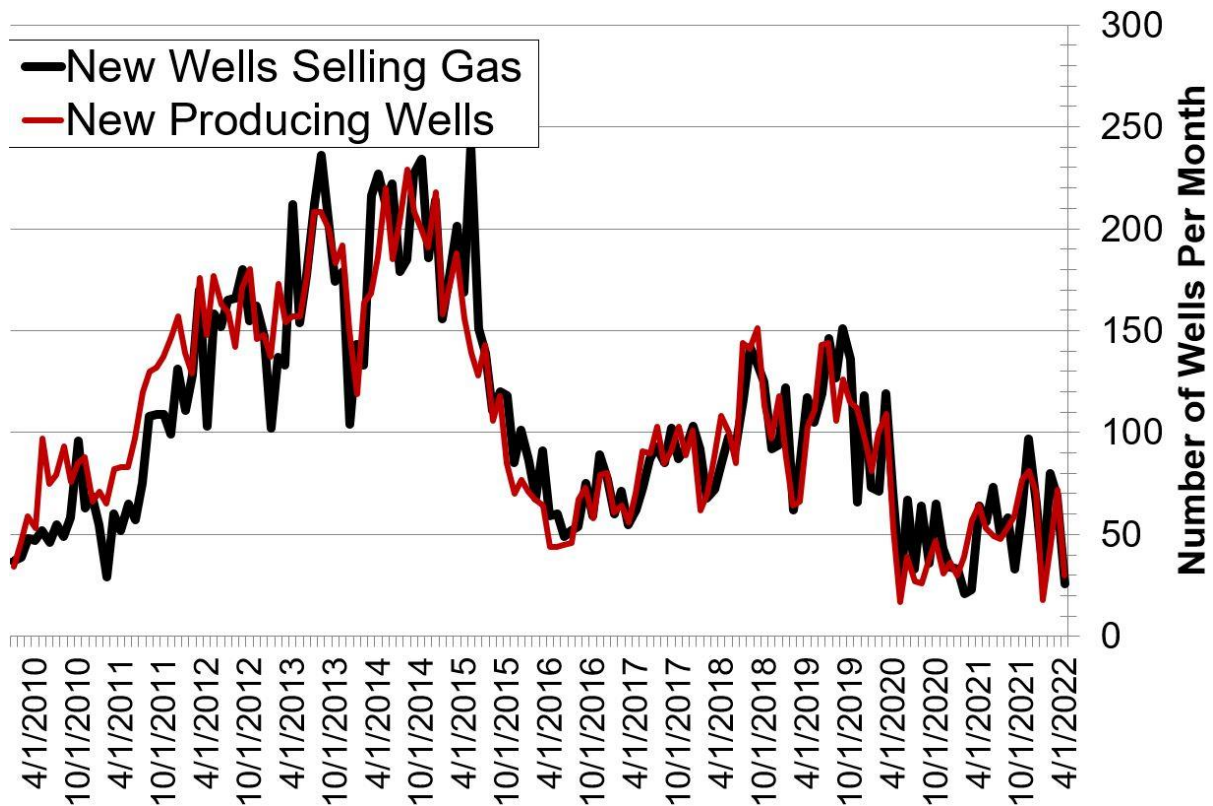


Williston Basin Truck/Rail Imports and Exports with Canada



Data for imports/exports chart is provided by the US International Trade Commission and represents traffic across US/Canada border in the Williston Basin area.

New Gas Sales Wells per Month



US Williston Basin Oil Production, BOPD

2021

MONTH	ND	EASTERN MT*	SD	TOTAL
January	1,147,724	50,415	2,874	1,201,012
February	1,083,820	48,246	2,828	1,134,895
March	1,109,005	49,520	2,744	1,161,269
April	1,121,776	48,440	2,644	1,172,860
May	1,129,785	47,277	2,640	1,179,702
June	1,134,758	44,100	3,103	1,181,962
July	1,078,883	43,758	2,884	1,125,525
August	1,108,084	47,284	2,892	1,158,260
September	1,113,963	50,408	2,847	1,167,218
October	1,110,828	49,462	2,853	1,163,143
November	1,158,553	48,588	2,780	1,209,921
December	1,144,999	48,214	2,717	1,195,929

2022

MONTH	ND	EASTERN MT*	SD	TOTAL
January	1,088,613	47,942	2,709	1,139,263
February	1,089,091	45,200	2,742	1,137,033
March	1,122,640		2,709	
April	900,597			
May				
June				
July				
August				
September				
October				
November				
December				

* Eastern Montana production composed of the following Counties: Carter, Daniels, Dawson, Fallon, McCone, Powder River, Prairie, Richland, Roosevelt, Sheridan, Valley, Wibaux

https://bismarcktribune.com/news/state-and-regional/daily-oil-production-plummets-amid-april-blizzards/article_758c973a-ec1a-11ec-8703-a73103dcc5c5.html

Daily oil production plummets amid April blizzards

BLAKE NICHOLSON

June 14, 2022

A stormy April dropped daily oil production in North Dakota below 1 million barrels for the first time in two years.

Production totaled 900,597 barrels per day, down nearly 20% from 1.12 million barrels per day in March, according to the State Mineral Resources Department. The state's oil figures lag two months as officials collect and analyze data from energy companies. April's preliminary figure is the lowest since 893,756 barrels per day in June 2020.

North Dakota's oil industry had been steadily producing about 1.1 million barrels per day for the past year up until April.

"When you look at (April) production only one word comes to mind, and that is 'wow,'" state Mineral Resources Director Lynn Helms said. "A 20% drop, and of course that is entirely due to the back-to-back blizzards we experienced."

Two historic blizzards during the month and an Easter Sunday snowstorm in between brought up to 4 feet of snow, freezing rain and strong winds to the Bakken oil patch. It downed more than 4,000 utility poles and damaged miles of transmission lines. Gov. Doug Burgum declared a statewide emergency and a statewide disaster.

Oil production fell as low as 300,000 barrels per day during the second blizzard in late April -- a 70% drop relative to the start of the month, according to Helms. It had rebounded to more normal levels by mid-May but did not fully recover until the beginning of this month, meaning May's production figures also are likely to be impacted, he said.

"The entire month of May we had a hangover from the big blizzard party," Helms said.

North Dakota's oil production had been slowly climbing before April. High oil prices attributed to Russia's invasion of Ukraine have helped the state's oil industry as it continues recovering from the coronavirus pandemic, though a worker shortage has plagued the oil patch.

Thirty-seven drilling rigs were operating Tuesday, up from the low 30s at the start of 2022. But it's taking rig operators two to three months to secure and train crews, according to Helms.

"We're going to inch our way up into the lower to mid-40s through the end of this year, but there's no anticipation that we're going to break 50 at even \$125 oil, which is quite remarkable," he said.

April's production drop was similar in scope to a 14% decline in October 1980 attributed to a global energy crisis tied to the Iranian Revolution, and a 30% drop in May 2020 when the coronavirus pandemic was gaining steam, according to Helms.

North Dakota produced about 2.4 billion cubic feet of natural gas per day in April, a 19% drop from March. The industry captured 93% of gas and is exceeding the state's 91% target. Energy producers captured 94% in both March and February. The rest was burned off at well sites in a process known as flaring, due

to a lack of access to pipelines and processing plants. Operators flared 161 million cubic feet of natural gas per day in April.

Natural gas processors saw production drop anywhere from 40% to 100% due to the massive power outages caused by the second April blizzard, according to Helms.

"Our two largest natural gas processing operators went to zero for the first time in their entire history," he said.

By Jennifer A. Dlouhy and Ari Natter

(Bloomberg) -- Top Biden administration officials are weighing limits on exports of fuel as the White House struggles to contain gasoline prices that have topped \$5 per gallon. Discussions around capping gasoline and diesel exports have picked up in recent days, as President Joe Biden intensified his criticism of soaring oil company profits, said people familiar with the matter who asked for anonymity to describe private conversations.

Limits under consideration would fall short of a complete ban on foreign sales of petroleum products, with gasoline exports averaging 755,000 barrels a day so far this year, according to the US Energy Information Administration. That's up from 681,000 barrels a day during the same period in 2021.

The discussion comes as White House officials consider an array of options for taming gasoline prices that pose an increasing political risk for Biden and Democrats struggling to maintain control of the House and Senate during the November midterm elections. White House Press Secretary Karine Jean-Pierre said Wednesday the president is open to using emergency wartime powers under the Defense Production Act to "lower costs at the pump."

It wasn't immediately clear how advanced the discussions are; at least one person was told any new export controls are not imminent.

An export ban could conflict with other geopolitical priorities. Biden has repeatedly highlighted the US commitment to help ensure European allies have sufficient energy supplies amid the war in Ukraine. US restrictions on diesel exports to Europe could create new friction with allies overseas as they wean off of Russian supplies. And analysts have said export limits are unlikely to lower the price of gasoline in the long run.

A White House spokesman didn't immediately respond to a request for comment.

Energy Secretary Jennifer Granholm is set to meet with oil refiners June 23 on the issue, according to people familiar with the plan. Biden directed Granholm to hold the session and asked US oil companies to provide her with "concrete ideas that would address the immediate inventory, price and refining capacity issues."

Other actions that have been discussed in recent weeks include waiving gasoline from anti-smog rules that require low-volatility fuel in the summer, two people said. The shift could reduce costs by allowing fuel blenders to mix in lower-cost butane.

Staff from the National Economic Council have considered legal avenues for restricting exports, including possibly under the 2015 law that unleashed overseas sales of crude, one person

said.

If imposed, any limits could be calibrated to prior export levels, one person said. That approach would effectively limit exports to ensure future increases in fuel production stay within the US.

There is no apparent explicit presidential authority to ban oil products exports, but the president could tap vast emergency powers, ClearView Energy Partners LLC said in a research note. Refiners have argued against export controls, insisting there is a disconnect between the president's desire to boost US refining capacity and cutting off overseas sales that justify investments.

Top oil trade groups also have said recent refining capacity reductions have been stoked by Biden administration policies designed to limit gasoline demand and transition from fossil fuels.

In meetings with administration officials in recent weeks, refining executives have stressed that it's incongruent to both talk down capital investments in the refining sector while pleading for more of them, two of the people said.

--With assistance from Chunzi Xu.

To contact the reporters on this story:

Jennifer A. Dlouhy in Washington at jdouhy1@bloomberg.net;

Ari Natter in Washington at anatter5@bloomberg.net

To contact the editors responsible for this story:

Catherine Traywick at ctraywick@bloomberg.net

Mike Jeffers, Lydia Mulvany

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<https://www.api.org/news-policy-and-issues/news/2022/06/13/ten-point-plan-to-restore-us-energy-leadership-fuel-economic-recovery>

API Unveils Ten-Point Policy Plan to Restore U.S. Energy Leadership, Fuel Economic Recovery

202.682.8114 | press@api.org

WASHINGTON, June 14, 2022 – The American Petroleum Institute (API) today released a [10 in 2022 plan](#) – 10 policies that policymakers can advance today to unlock American energy, fuel economic recovery, and strengthen national security. As energy costs and geopolitical instability around the world continue to rise, API is calling on policymakers to confront the global mismatch between energy demand and available supply that has driven higher fuel prices by supporting greater U.S. production and infrastructure.

“America is blessed with abundant energy resources that are the envy of the world. Given today’s global unrest and economic uncertainty, American energy is a long-term strategic asset that can advance our national and economic security,” said API President and CEO Mike Sommers. “These 10 in ’22 policies are a framework for new energy leadership for our nation, unleashing investment in America and creating new energy access while avoiding harmful government policies and duplicative regulation. It’s time to lead.”

In a [letter](#) to President Biden, Sommers highlighted the economic importance of American oil and natural gas resources, supporting more than 11 million U.S. jobs, investing billions in the U.S. economy, and powering our way of life and urged the administration to act immediately to implement the 10 policies that support energy investment, create new access and keep government policies from unnecessarily restricting energy growth.

[10 actions policymakers can take right now:](#)

1. Lift Development Restrictions on Federal Lands and Waters

The Department of the Interior (DOI) should swiftly issue a 5-year program for the Outer Continental Shelf and hold mandated quarterly onshore lease sales with equitable terms. DOI should reinstate canceled sales and valid leases on federal lands and waters.

2. Designate Critical Energy Infrastructure Projects

Congress should authorize critical energy infrastructure projects to support the production, processing and delivery of energy. These projects would be of such concern to the national interest that they would be entitled to undergo a streamlined review and permitting process not to exceed one year.

3. Fix the NEPA Permitting Process

The Biden administration should revise the National Environmental Policy Act process by establishing agency uniformity in reviews, limiting reviews to two years, and reducing bureaucratic burdens placed on project proponents in terms of size and scope of application submissions.

4. Accelerate LNG Exports and Approve Pending LNG Applications

Congress should amend the Natural Gas Act to streamline the Department of Energy (DOE) to a single approval process for all U.S. liquefied natural gas (LNG) projects. DOE should approve pending LNG applications to enable the U.S. to deliver reliable energy to our allies abroad.

5. Unlock Investment and Access to Capital

The Securities and Exchange Commission should reconsider its overly burdensome and ineffective climate disclosure proposal and the Biden administration should ensure open capital markets where access is based upon individual company merit free from artificial constraints based on government-preferred investment allocations.\

6. Dismantle Supply Chain Bottlenecks

President Biden should rescind steel tariffs that remain on imports from U.S. allies as steel is a critical component of energy production, transportation, and refining. The Biden administration should accelerate efforts to relieve port congestion so that equipment necessary for energy development can be delivered and installed.

7. Advance Lower Carbon Energy Tax Provisions

Congress should expand and extend Section 45Q tax credits for carbon capture, utilization, and storage development and create a new tax credit for hydrogen produced from all sources.

8. Protect Competition in the Use of Refining Technologies

The Biden administration should ensure that future federal agency rulemakings continue to allow U.S. refineries to use the existing critical process technologies to produce the fuels needed for global energy markets.

9. End Permitting Obstruction on Natural Gas Projects

The Federal Energy Regulatory Commission should cease efforts to overstep its permitting authority under the Natural Gas Act and should adhere to traditional considerations of public needs as well as focus on direct impacts arising from the construction and operation of natural gas projects.

10. Advance the Energy Workforce of the Future

Congress and the Biden administration should support the training and education of a diverse workforce through increased funding of work-based learning and advancement of STEM programs to nurture the skills necessary to construct and operate oil, natural gas and other energy infrastructure.

Click [here](#) to view the plan.

API represents all segments of America's natural gas and oil industry, which supports more than 11 million U.S. jobs and is backed by a growing grassroots movement of millions of Americans. Our nearly 600 members produce, process and distribute the majority of the nation's energy, and participate in [**API Energy Excellence®**](#), which is accelerating environmental and safety progress by fostering new technologies and transparent reporting. API was formed in 1919 as a standards-setting organization and has developed more than 800 standards to enhance operational and environmental safety, efficiency and sustainability.

<https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bp-reshapes-canada-portfolio-for-strong-future-growth.html>

bp reshapes Canada portfolio for strong future growth

Release date:

13 June 2022

- bp has agreed to sell its 50% interest in the Sunrise oil sands project in Alberta, Canada, to Calgary-based Cenovus Energy.
- As part of the deal, bp is acquiring Cenovus's interest in the Bay du Nord project in Eastern Canada, adding to its sizeable acreage position offshore Newfoundland and Labrador.

Press release PDF / 122.5 KB [Add item](#)

CALGARY – bp will increase its acreage position offshore Eastern Canada and sell its 50% non-operated interest in the Sunrise oil sands project in an agreement reached with Calgary-based Cenovus Energy.

Total consideration for the transaction includes C\$600 million (Canadian dollars) cash, a contingent payment with a maximum aggregate value of C\$600 million expiring after two years, and Cenovus's 35% position in the undeveloped Bay du Nord project offshore Newfoundland and Labrador.

“This is an important step in our plans to create a more focused, resilient and competitive business in Canada. Bay du Nord will add sizeable acreage and a discovered resource to our existing portfolio offshore Newfoundland and Labrador. Along with bp's active Canadian marketing and trading business, this will position bp Canada for strong future growth.”

[Starlee Sykes, bp senior vice president, Gulf of Mexico & Canada](#)

Starlee Sykes, bp senior vice president, Gulf of Mexico & Canada, said: “This is an important step in our plans to create a more focused, resilient and competitive business in Canada. Bay du Nord will add sizeable acreage and a discovered resource to our existing portfolio offshore Newfoundland and Labrador. Along with bp's active Canadian marketing and trading business, this will position bp Canada for strong future growth.”

In Canada, bp will no longer have interests in oil sands production and will shift its focus to future potential offshore growth. bp currently holds an interest in six exploration licenses in the offshore Eastern Newfoundland Region. The non-operated stake in the Bay du Nord project will expand bp's position offshore Eastern Canada.

Subject to regulatory approvals, the transaction is expected to close in 2022.

[About bp](#)

bp's purpose is to reimagine energy for people and our planet. It has set out an ambition to be a net zero company by 2050, or sooner and help the world get to net zero, and a strategy for delivering on that ambition. For more information visit [bp.com](https://www.bp.com).

Notes to editors

- The Bay du Nord (BdN) project consists of several oil discoveries in the Flemish Pass Basin, some 500 km northeast of St. John's in Newfoundland and Labrador, Canada.
- The project area is in water depths of approximately 1,200m, with recoverable reserves estimated to be about 300 million barrels of oil.
- bp Canada Energy Group ULC ("bp") holds offshore exploration licenses in the Orphan Basin and is planning to drill an initial exploration well called Ephesus in 2023.
- The Sunrise oil sands project, operated by Cenovus, is located 40 miles east of Fort McMurray, Alberta and employs steam-assisted gravity drainage to produce bitumen. It has a nameplate capacity of 60,000 bbls/day.



THE WHITE HOUSE
WASHINGTON

June 14, 2022

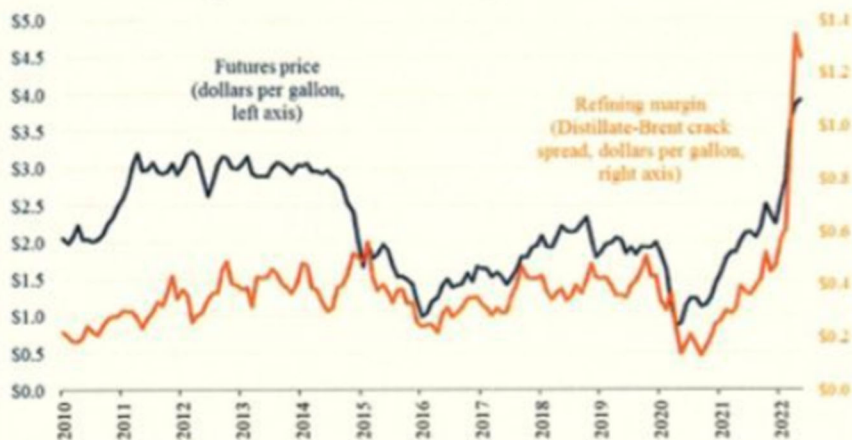
Dear Ms. Watkins:

I am writing to you about the high prices our fellow Americans are paying at the pump, and how we can all play a part in addressing them. Since the beginning of this year, gasoline prices have increased by more than \$1.70 per gallon.

Vladimir Putin's war of aggression, and the bipartisan and global effort to counter it, has disrupted the global supply of oil and driven up the global price. But the sharp rise in gasoline prices is not driven only by rising oil prices, but by an unprecedented disconnect between the price of oil and the price of gas. The last time the price of crude oil was about \$120 per barrel, in March, the price of gas at the pump was \$4.25 per gallon. Today, gas prices are 75 cents higher, and diesel prices are 90 cents higher.

That difference -- of more than 15% at the pump -- is the result of the historically high profit margins for refining oil into gasoline, diesel and other refined products. Since the beginning of the year, refiners' margins for refining gasoline and diesel have tripled, and are currently at their highest levels ever recorded.

Wholesale diesel prices and refiner margins



Notes and Sources: Data from EIA

To be sure, the shortage of refining capacity is a global challenge and a global concern. Around 3 million barrels a day of global refining capacity have gone offline since the onset of the pandemic, inhibiting our ability to ramp up supply of gasoline, diesel and jet fuel. I am working with allies and partners and countries around the world to encourage global refinery capacity to come back online. But, in the United States alone, oil refiners significantly reduced their capacity during the pandemic. In the year before I took office, refineries in the United States reduced their capacity by more than 800,000 barrels a day, leaving American refinery companies today at their lowest level of capacity in more than a half decade.

I understand that many factors contributed to the business decisions to reduce refinery capacity, which occurred before I took office. But at a time of war, refinery profit margins well above normal being passed directly onto American families are not acceptable.

There is no question that Vladimir Putin is principally responsible for the intense financial pain the American people and their families are bearing. But amid a war that has raised gasoline prices more than \$1.70 per gallon, historically high refinery profit margins are worsening that pain.

Your companies and others have an opportunity to take immediate actions to increase the supply of gasoline, diesel, and other refined product you are producing and supplying to the United States market. With prices for your product where they are today, you have ample market incentive to take these actions, and I recognize that some of you have already begun to do so. I also encourage you to continue maintaining and expanding fuel supply safely.

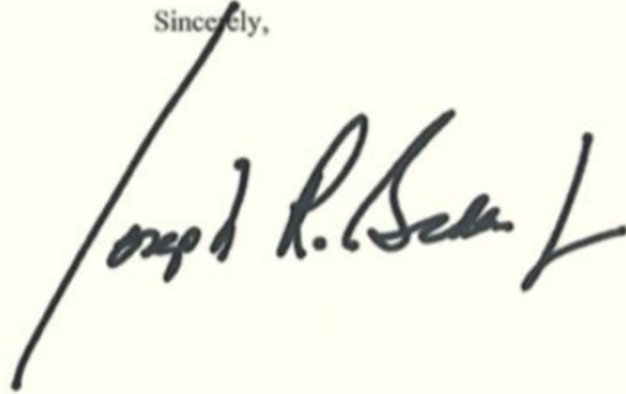
In addition, my Administration is prepared to use all reasonable and appropriate Federal Government tools and emergency authorities to increase refinery capacity and output in the near term, and to ensure that every region of this country is appropriately supplied. Already, I have invoked emergency powers to execute the largest Strategic Petroleum Reserve release in history, expand access to E15 (gasoline with 15% ethanol), and authorize the use of the Defense Production Act to provide reliable inputs into energy production. I am prepared to use all tools at my disposal, as appropriate, to address barriers to providing Americans affordable, secure energy supply.

The crunch that families are facing deserves immediate action. Your companies need to work with my Administration to bring forward concrete, near-term solutions that address the crisis and respect the critical equities of energy workers and fence-line communities. I have directed the Secretary of Energy to convene an emergency meeting on this topic and engage the National Petroleum Council in the coming days. In advance of that, I request that you provide the Secretary with an explanation of any reduction in your refining capacity since 2020 and any concrete ideas that would address the immediate inventory, price, and refining capacity issues in the coming months -- including transportation measures to get refined product to market.

The lack of refining capacity -- and resulting unprecedented refinery profit margins -- are blunting the impact of the historic actions my Administration has taken to address

Vladimir Putin's Price Hike and are driving up costs for consumers. I appreciate your immediate attention to this issue and your efforts to mitigate the economic challenges that Vladimir Putin's actions have created for American families.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph R. Sen". The signature is written in a cursive, flowing style with a long, sweeping underline that extends to the left.

Gretchen Watkins
President
U.S. Country Chair
EVP Unconventionals
Shell USA, Inc.
200 North Dairy Ashford Road
Houston, Texas 77079

ECO2. For each of the following, how concerned are you about the impact of higher than usual prices on your household's financial situation?

[GRID ITEMS RANDOMIZED, HALF SAMPLE ASKED RESPONSE OPTIONS IN REVERSE ORDER]

WSJ/NORC 05/09-17/2022 N=1,071	Extremely/ very concerned NET	Extremely concerned	Very concerned	Somewhat concerned	Not very/not at all concerned	Not very concerned	Not at all concerned	D K	SKP / REF
Groceries	54	28	26	26	19	15	4	-	*
Gas	63	35	28	23	13	8	5	-	1
Housing	42	20	22	26	31	20	11	-	1
Health care	47	23	24	30	22	16	7	-	1
Child care	18	11	8	16	64	15	49	-	2
Elder care	35	19	17	27	37	18	18	-	1
Prescription drugs	33	17	16	29	37	24	13	*	1
Other goods and services	48	23	25	34	16	13	3	-	2

<https://www.wsj.com/articles/inflation-political-division-put-u-s-in-a-pessimistic-mood-poll-finds-11654507800>

- WSJ NEWS EXCLUSIVE
- [POLITICS](#)

Inflation, Political Division Put U.S. in a Pessimistic Mood, Poll Finds

WSJ-NORC survey finds dim views of U.S. economy, government, global leadership

Amid a record hiring streak in the U.S., economists are watching for signs of a possible wave turn. WSJ's Anna Hirtenstein looks at how rising interest rates over high inflation, market selloffs and recession risks challenge the growth of America's workforce. Photo: Olivier Douliery/AFP

By [Janet Adamy](#)

Follow

June 6, 2022 5:30 am ET

Americans are deeply [pessimistic about the U.S. economy](#) and view the nation as sharply divided over its most important values, according to a new Wall Street Journal-NORC Poll.

The findings are from a Journal survey conducted with NORC at the University of Chicago, a nonpartisan research organization that measures social attitudes. The survey found Americans in a sour mood and registering some of the [highest levels of economic dissatisfaction](#) in years. The pessimism extended beyond the current economy to include [doubts about the nation's political system](#), its role as a global leader and its ability to help most people achieve the American dream.

Would you describe the state of the nation's economy these days as...?Source: WSJ-NORC poll of 1,071 adults conducted May 9–17; margin of error: +/-4 pct. pts.

Excellent or good 0% 100 25 50 75

Some 83% of respondents described the state of the economy as poor or not so good. More than one-third, or 35%, said they aren't satisfied at all with their financial situation. That was the highest level of dissatisfaction since NORC began asking the question every few years starting in 1972 as part of the General Social Survey, though the poll's 4-point margin of error means that new figures may not differ significantly from prior high and low points.

Just over one quarter of respondents, 27%, said they have a good chance of improving their standard of living—a 20-point drop from last year—while just under half of respondents, 46%, said they don't.

The share of respondents who said their financial situation had gotten worse in the past few years was 38%. That marked the only time other than in the aftermath of the 2007-09 recession that more than three in 10 respondents said their pocketbooks were worse off, according to GSS data going back a half-century.

Would you say that you are pretty well satisfied with your present financial situation, more or less satisfied, or not satisfied at all? Sources: WSJ-NORC poll of 1,071 adults conducted May 9–17; margin of error: +/-4 pct. pts.; General Social Survey (historical)

'10'801972'90200001020304050% Satisfied More or less Not at all satisfied

The survey results show that high inflation in particular is [driving the dim economic outlook](#), said Jennifer Benz, vice president of public affairs and media research at NORC. Inflation [is running at close to its fastest pace](#) in four decades, at an 8.3% annual rate in April, one of several factors weighing on consumers. Households [are digging into savings](#) to support their spending, the Commerce Department has said, and the S&P 500 nearly closed in bear territory recently.

The labor market [has been an economic bright spot](#), with the unemployment rate close to a half-century low, at 3.6% in May. In the survey, about two-thirds of respondents said it would be somewhat or very easy to find a new job with about the same income and benefits. That was one of the highest levels on record since GSS began asking the question in 1977.

Still, the results suggest that Democrats, who control the White House and Congress, face a dispirited electorate heading into November's elections. Other pollsters say economic issues are the top concern for voters, and they are likely to [hold the party in power accountable](#) for high inflation that has made housing, groceries, gas and other essentials more expensive

Amid a record hiring streak in the U.S., economists are watching for signs of a possible wave turn. WSJ's Anna Hirtenstein looks at how rising interest rates over high inflation, market selloffs and recession risks challenge the growth of America's workforce. Photo: Olivier Douliery/AFP

More broadly, the survey reveals a despondent view of national unity and partisan splits over cultural issues, suggesting that a connective tissue of pessimism underlies Americans' economic and social attitudes. Some 86% of respondents said Americans are greatly divided when it comes to the most important values, and over half said they expect those divisions to worsen five years from now, up from just a third of respondents who were asked the question last year.

"In the prior years that we've asked this question, there's at least been some hope, a little bit more hope, that things might get better," Ms. Benz said. "That's a key difference underlying all of this right now."

About six in 10 respondents said they were pessimistic about the ability for most people to achieve the American dream.

The way things are in America, people like you and your family have a good chance of improving your standard of living - do you agree or disagree? Sources: WSJ-NORC poll of 1,071 adults conducted May 9–17; margin of error: +/-4 pct. pts.; General Social Survey (historical)

'1019872000020406080100% Agree Disagree

Julie Olsen Edwards, an 83-year-old Soquel, Calif., retired community college teacher, said what disappoints her is that the country isn't living up to its ideals of opportunity and justice. She described herself as a liberal and said she mostly votes Democratic.

"The promise was this was a place where what you were born into did not determine who you could be. But I think we've failed deeply at that," Ms. Edwards said. "I find myself choking up saying it."

Robert Benda, a 69-year-old retired telecommunications worker who lives in Berthoud, Colo., said that he considers freedom the most important value in America and thinks Democrats who control Washington are trying to take that away from people. He said that [gas has gotten so expensive](#), he can hardly afford to drive the motor home in which he lives to visit family in Texas.

“I’m angry,” said Mr. Benda, a former Democrat who now considers himself very conservative. “Our government is doing what’s right for their special-interest groups, and everybody else be damned.”

In the past, a national crisis, such as the Sept. 11, 2001, terrorist attacks, served as a rallying point for patriotism and unity, said Trevor Tompson, NORC’s senior vice president of public affairs and media research. “It’s been the absolute opposite case with this crisis with Covid,” he said.

The Journal-NORC poll showed that about a third of respondents were optimistic that people of different races or religions could come together and solve the country’s problems. Just 13% of respondents said they were optimistic that was true for Americans who hold different political views.

The survey found divisions between the two parties on a range of cultural issues. While about two-thirds of poll respondents said transgender people should be accepted by society, nearly 90% of Democrats agreed with that statement, compared with 38% of Republicans. Just over half of Republicans said their local public schools focus too much on racism, while 59% of Democrats said that schools focus too little on it. Two-thirds of Democrats said the country’s diversity makes it stronger, compared with 47% of Republicans.

Trudi McClendon, a 55-year-old [DoorDash](#) driver in Ardmore, Okla., said the country’s divides aren’t simply political. “There are people that have good Christian morals, and those that want to live by their own rules,” said Ms. McClendon, who described herself as a Republican voter.

Ms. McClendon said the country’s racial diversity is a good thing that makes the U.S. stronger, and she pointed to the media for sharpening racial divisions. “I just think there’s a lot of incidents that get—what’s the word?—they’re made to sound a whole lot worse than they are,” she said. “They get a lot of news media coverage when other good things do not, so they kind of try to keep people divided.”

Vincent Johnson, a 57-year-old in Everett, Wash., who retired from working at the King County Jail and is Black, said national conversations about race often overlook how difficult it is for low-income people to move up in society because they aren’t surrounded by the examples of success and opportunity that are common in upper-class neighborhoods.

“When people need someone to blame, they’re quick to look at people of color,” said Mr. Johnson, who said he backs Democrats for president but splits his ticket in local races. “We pretty much are dividing ourselves, and it has a devastating effect.”

SHARE YOUR THOUGHTS

Are you optimistic or pessimistic about America’s future, and why? Join the conversation below.

Social-media companies also took heat in the survey for [putting Americans at odds with each other](#). Nearly two-thirds of respondents, 64%, said platforms such as Facebook and Twitter are harmful for society because they emphasize differences between people, while just over one-third, 34%, said they are helpful because they provide a way for all Americans to share their opinions.

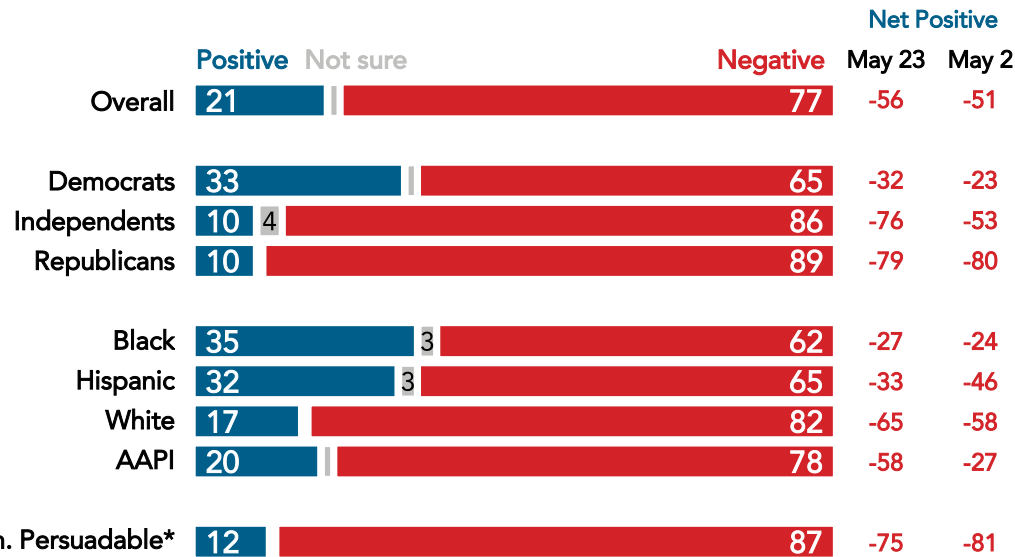
The WSJ-NORC poll surveyed 1,071 adults from May 9 through May 17. The margin of error was plus or minus 4 percentage points. Respondents were drawn from NORC’s AmeriSpeak survey panel, which uses random sampling to represent the U.S. population.

Americans Are the Most Pessimistic They Have Been About Their Personal Finances Since Biden Took Office

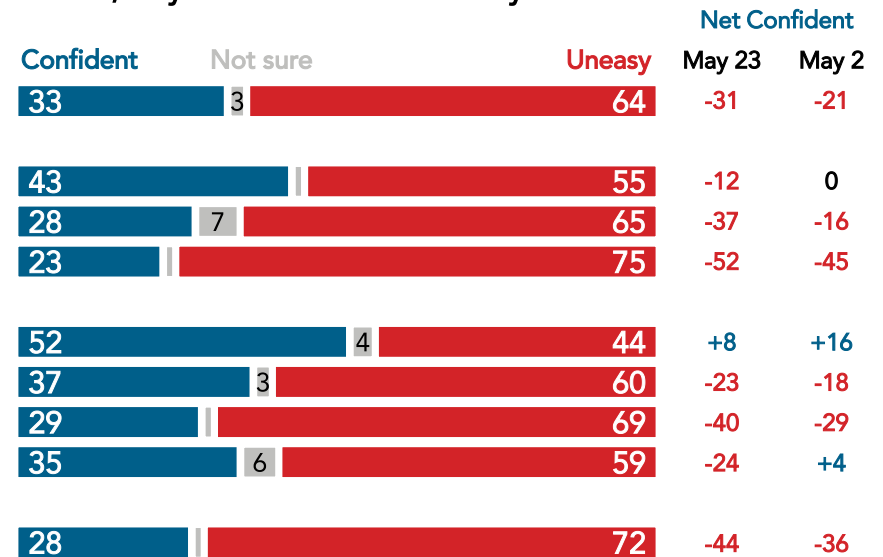
Nearly two in three (64%) say they are uneasy about their personal financial situation, the highest share since Biden's inauguration.

- Nearly nine in ten independents (86%) rate the state of the U.S. economy negatively, and two in three (65%) feel uneasy about their personal financial situation over the next few months.

How would you rate the state of the U.S. economy today?



Thinking about your personal financial situation over the next few months, do you feel confident or uneasy?

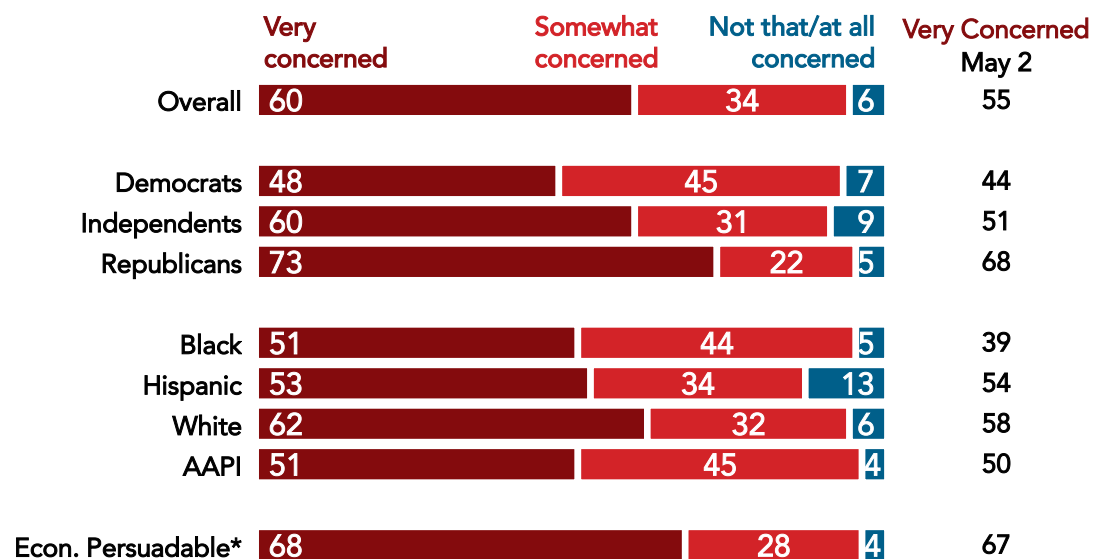


*"Economically persuadable Americans" are those who disapprove of Biden's handling of the economy, but support new economic legislation on separate questions. This data is from a survey conducted entirely before the mass shooting at Robb Elementary School in Uvalde, Texas on May 24th, 2022. Nationwide surveys of registered voters; Each wave represents approximately 1,000 interviews taken over the prior three-five days. Latest wave conducted May 19-23, 2022. For more info, visit navigatorresearch.org

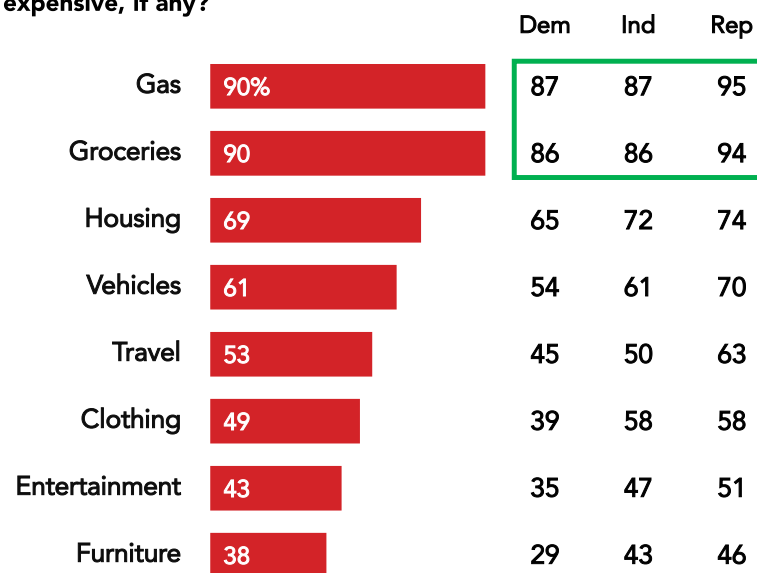
A Growing Majority Are “Very Concerned” About Inflation and See Range of Items Getting More Expensive

Since May 2nd, there has been a 5-point increase in the share who say they are “very concerned” about inflation, with the greatest increase coming from independents (9-point increase, from 51% to 60%).

How concerned are you that the rate of inflation will climb in the coming months?



Which of the following items do you think are getting more expensive, if any?

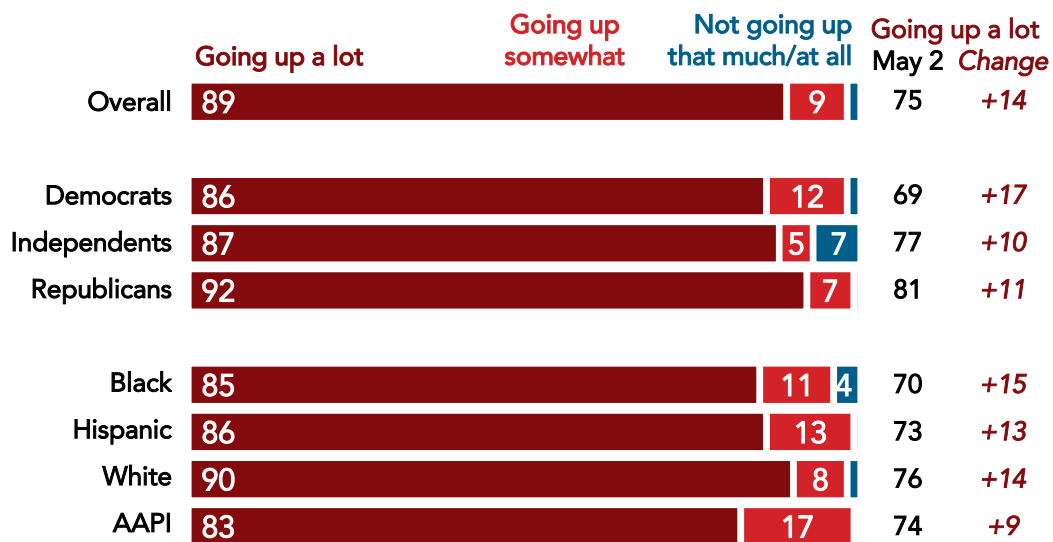


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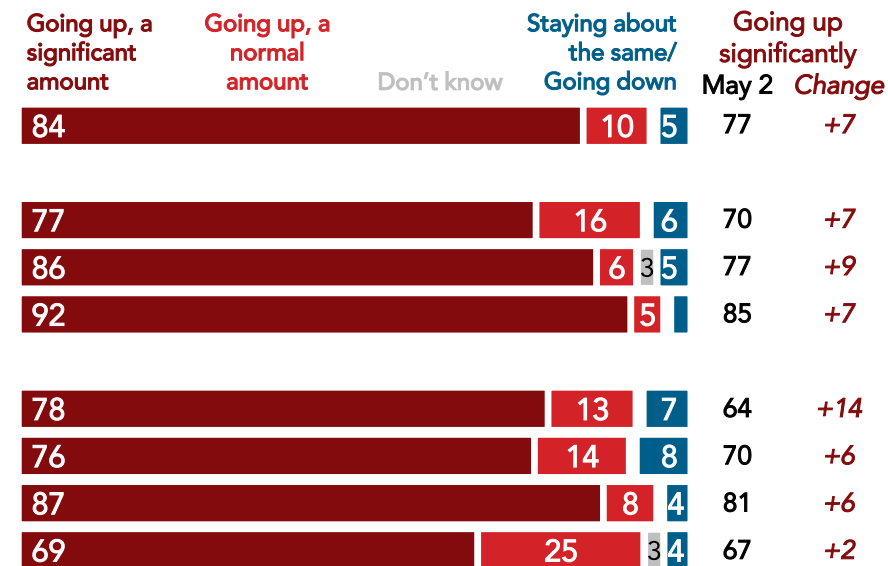
Intensity of Feelings that Gas and Groceries Are Increasing in Price Is Universal and Growing

Since early May, there has been a 14-point increase in the share who say the price of gas is going up “a lot” (from 75% to 89%) and a 7-point increase in the share who say the cost of groceries is going up “significantly” (from 77% to 84%).

Do you feel the price of gas is going up?



When it comes to the costs of everyday goods like groceries, do you think costs are:



This data is from a survey conducted entirely before the mass shooting at Robb Elementary School in Uvalde, Texas on May 24th, 2022. Nationwide surveys of registered voters; Each wave represents approximately 1,000 interviews taken over the prior three-five days. Latest wave conducted May 19-May 23, 2022. For more info, visit navigatorresearch.org

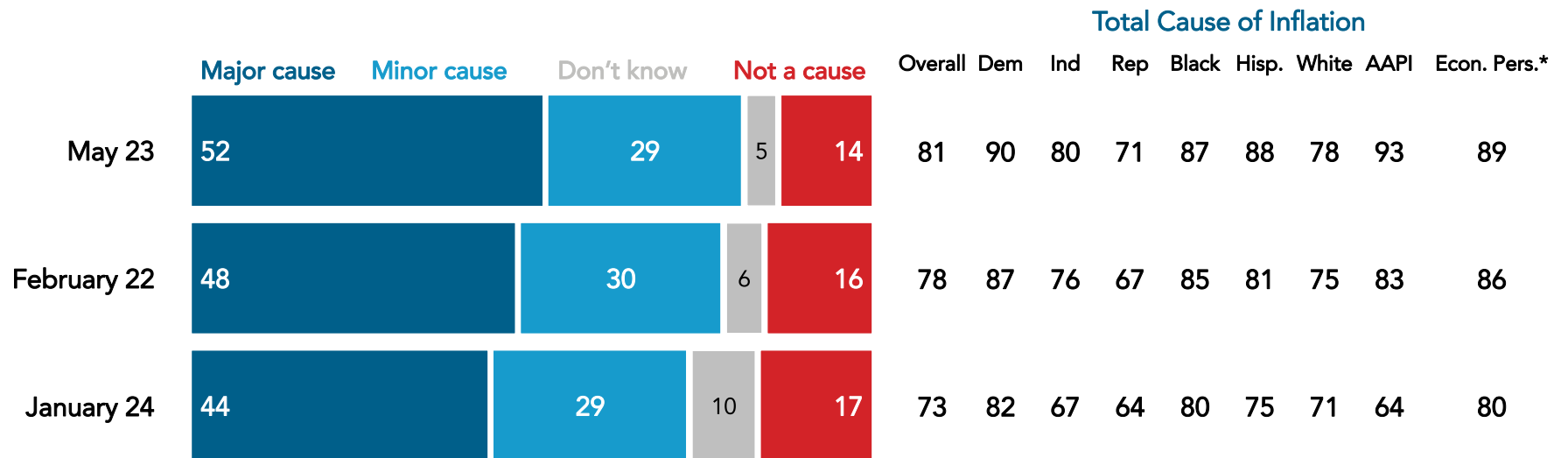


Americans Increasingly See Corporations Being Greedy and Raising Prices to Make Record Profits as a Cause of Inflation

Since January, there has been an 8-point increase in the share who say corporate greed is a cause of inflation (from 73% to 81%).

- Increases in blame for greedy corporations have been universal: there has been a 7-point increase among Republicans (from 64% to 71%), a 13-point increase among independents (from 67% to 80%), and an 8-point increase among Democrats (from 82% to 90%).

For each one, please indicate whether you believe it is a cause of inflation: Corporations being greedy and raising prices to make record profits.



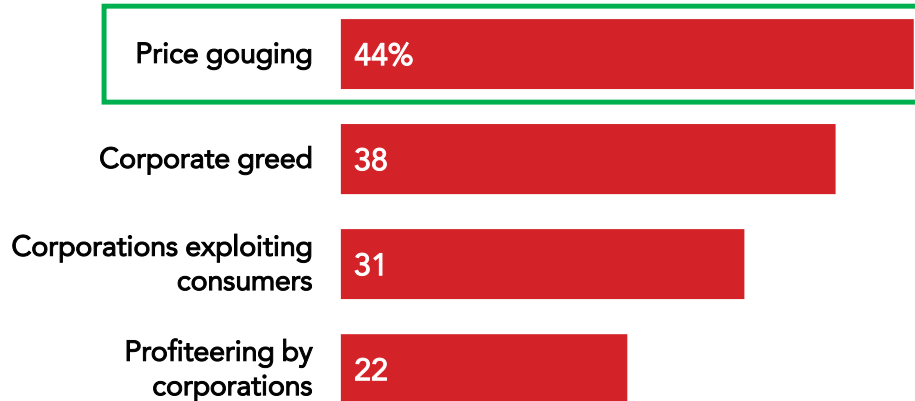
*"Economically persuadable Americans" are those who disapprove of Biden's handling of the economy, but support new economic legislation on separate questions. This data is from a survey conducted entirely before the mass shooting at Robb Elementary School in Uvalde, Texas on May 24th, 2022. Nationwide surveys of registered voters; Each wave represents approximately 1,000 interviews taken over the prior three-five days. Latest wave conducted May 19-23, 2022. For more info, visit navigatorresearch.org

On Oil and Gas, "Price Gouging" Is Most Descriptive, While on Big Pharma, "Corporate Greed" Is Strongest

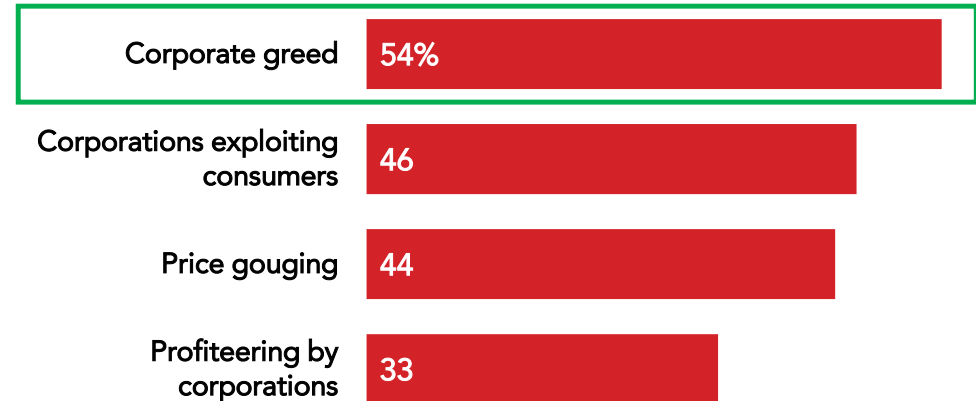
Two in five Americans say a statement about oil and gas companies making \$35 billion in profits while Americans pay more for gas is best described as "price gouging" (44%), while a majority describe pharmaceutical companies increasing revenue while Americans pay more for prescription drugs as "corporate greed" (54%).

- In both cases, language about corporate "profiteering" is least likely to resonate with Americans.

(Split sample) Which of the following two phrases best describe the following statement: *The top oil and gas companies made \$35 billion in profits in the first quarter of 2022 as Americans paid more at the pump.*



(Split sample) Which of the following two phrases best describe the following statement: *Big pharmaceutical companies grew their revenue by 16 percent since last year while Americans paid more for prescription drugs.*



This data is from a survey conducted entirely before the mass shooting at Robb Elementary School in Uvalde, Texas on May 24th, 2022. Nationwide survey of 998 registered voters conducted May 19-May 23, 2022. For more info, visit navigatorresearch.org.



Laura Sanicola ✓
@LauraSanicola



FACTS: Which U.S. refineries have shut since the global pandemic, and why?

Since the onset of the global pandemic, the US has lost nearly 1 million barrels per day of oil refining capacity, with more set to be shuttered in the next few years.

These are the plants:

1/x

2:04 PM · Jun 17, 2022 · Twitter Web App

1,020 Retweets 216 Quote Tweets 2,543 Likes



Laura Sanicola ✓ @LauraSanicola · 19h



Replying to @LauraSanicola

LYONDELLBASELL HOUSTON:

CAPACITY: 263,776 barrel-per-day (bpd)

Lyondell said in April of 2022 that it would permanently shut the refinery by year-end 2023, as it was unable to find a buyer and did not want to invest to keep the facility open.

2/X



10



67



344



Laura Sanicola ✓ @LauraSanicola · 19h



PHILLIPS 66 ALLIANCE, BELLE CHASSE, LA.

CAPACITY: 255,000 bpd

Phillips 66 said in November 2021 that it would not reopen the Alliance refinery, which was shut in mid-August ahead of Hurricane Ida. The 50-year-old refinery was severely damaged by several feet of water

3/x



2



56



304



Laura Sanicola ✓ @LauraSanicola · 19h



LIMETREE BAY, ST. CROIX, USVI:

CAPACITY: 210,000 bpd

Limetree Bay Energy shut its St. Croix refinery due to financial problems in May 2021 after only operating for a few months, due to setbacks and environmental hazards. The refinery had already been idle for a decade.

4/x



6



43



277



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SHELL CONVENT, ST. JAMES, LOUISIANA

CAPACITY: 240,000 bpd

Shell announced in November 2020 it would be shuttering the refinery after attempts to sell the plant between July and October were unsuccessful. The refinery became unprofitable as COVID-19 spread across the US.

5/x



Laura Sanicola @LauraSanicola · 19h
MARATHON, MARTINEZ CA , AND GALLUP, NM

CAPACITY: 161,000 bpd (Martinez); 27,000 bpd (Gallup)

Marathon said in August 2020 that it would permanently close plants due to lower fuel demand.

Martinez should produce 260 mln gallons/yr of renewable diesel starting in 2023.

6/x

2 46 264



Laura Sanicola @LauraSanicola · 19h
PHILLIPS 66 RODEO, CALIFORNIA

Capacity: 120,200 bpd

U.S. refiner Phillips 66 plans to fully convert its Rodeo, California, crude oil refinery into a renewable fuels plant using cooking oil and food wastes beginning in 2024. It will cease processing crude oil.

7/x

2 46 279



Laura Sanicola @LauraSanicola · 19h
HOLLYFRONTIER, CHEYENNE, WYOMING

Capacity: 52,000 bpd

HollyFrontier said in June 2020 it would convert its Cheyenne refinery into a biofuel plant that would produce 6,000 bpd of renewable diesel. The plant ceased operations the next month.

8/x



Laura Sanicola @LauraSanicola · 19h
CALCASIEU REFINING - LAKE CHARLES, LOUISIANA

Capacity: 135,500 bpd

Calcasieu Refining shut its Lake Charles plant in early August of 2020, according to the Louisiana Department on Environmental Quality, citing demand loss during the pandemic.

9/x

3 41 221



Laura Sanicola @LauraSanicola · 19h
PBF ENERGY - PAULSBORO, NEW JERSEY

Capacity: 180,000 bpd

PBF Energy shut most fuel units of its Paulsboro plant in November 2020 citing low fuel demand during the coronavirus pandemic. The plant has since restarted some secondary units but cited lack of VGO as inhibitor.

10/10

Novak says Russia may increase oil production in July compared to June



Deputy Prime Minister of the Russian Federation Alexander Novak
© Maxim Blinov/POOL/TASS

Deputy Prime Minister noted that the country did not mothball oil wells ST. PETERSBURG, June 16. /TASS/. Russia may continue to restore oil production in July and increase it compared to June. Oil exports will also grow this month, Russian Deputy Prime Minister Alexander Novak told reporters on the sidelines of the St. Petersburg International Economic Forum.

"I thought there were prerequisites that we would continue to increase production in July. We see that we have a fairly significant increase in June compared to May - this is an plus of 600 thousand barrels (per day). In fact, we are already close to recovering the February level ", - he said.

According to him, Russia plans to increase oil refining in June, slightly reducing exports.

"Export (in June will be) lower, because it increased significantly when there was a reduction in oil refining, so the released volumes (in April-May) were exported. In June there will be a slight decrease (in exports), because the loading of oil refineries will increase" , he noted.

Oil price

Russia admits that the price of oil may rise even more before the end of the year, but everything will depend on the balance of supply and demand. At the same time, Russia hopes for an increase in demand in the world, although uncertainty remains due to the possibility of a lockdown in China due to Covid-19, the Deputy Prime Minister said. "There are different forecasts, including that oil will continue to grow. Everything depends on the balance of supply and demand," he said.

"I hope that demand will continue to recover during the year, as planned, but there are certain risks associated with lockdowns in the People's Republic of China. Therefore, we will see how the global economy and consumption develop," he added.

Well conservation

Russian oil companies have not mothballed wells, so the country has the technical ability to increase production to pre-crisis levels, Novak said.

"I don't think that we had any conservation of wells, the process is technological, they can be adjusted," he said.

Novak added that companies are currently redirecting export flows and establishing new connections and production chains.

The St. Petersburg International Economic Forum, organized by the Roscongress Foundation, takes place from June 15 to 18. The theme of the forum this year is "New World - New Opportunities". As part of the event, forums for SMEs, creative business, Drug Safety, SPIEF Junior and SPIEF Sport Week are also planned. TASS acts as a photo host agency and media partner of the event.

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Tags:

[Novak, Alexander Valentinovich](#) [Russia](#) [SPIEF-2022](#)

Oil Market Highlights

Crude Oil Price Movements

Crude oil spot prices recorded solid gains in May, buoyed by strong physical crude market fundamentals. Tight oil product markets and high refining margins have prompted refineries to increase throughputs, boosting crude demand, specifically for light sweet crude. Planned and unplanned oil supply disruptions in several regions contributed to tightening fundamentals. The OPEC Reference Basket increased \$8.23, or 7.8%, to settle at \$113.87/b. Oil futures prices rallied in May driven by tightening oil products markets, near-term global oil supply risks amid continued geopolitical tensions in Europe, as well as the prospect of a firm recovery in demand after Chinese authorities started to gradually ease COVID-19-related lockdown measures. The start of the summer driving season in the Northern Hemisphere provided further support. The ICE Brent front-month contract rose \$6.04, or 5.7%, in May to average \$111.96/b and NYMEX WTI increased by \$7.62, or 7.5%, to average \$109.26/b. As a result, the Brent/WTI futures spread narrowed by \$1.58 to average \$2.70/b. Backwardation in the Brent, WTI and Dubai futures markets strengthened significantly in May and the near-month contract spreads moved into deep backwardation as the outlook for oil market fundamentals tightened. Hedge funds and other money managers turned bullish on crude prices in May, raising their total futures and options net-long positions in ICE Brent and NYMEX WTI by 18.2%.

World Economy

World economic growth in 2022 remains broadly unchanged at 3.5%, following growth of 5.8% in 2021. US GDP growth for 2022 is revised down to 3.0% from 3.2%, after growth was reported at 5.7% for 2021. Euro-zone economic growth for 2022 is revised down to 3.0% from 3.1%, following growth of 5.4% in 2021. Japan's economic growth for 2022 is revised down to 1.6% from 1.8%, after growth of 1.7% in 2021. China's 2022 growth remains unchanged at 5.1%, after growth of 8.1% in 2021. India's 2022 GDP growth remains at 7.1%, after 2021 growth of 8.3%. Brazil's economic growth forecast for 2022 is revised up to 1.2% from 0.7% in the previous assessment, following growth of 4.6% in 2021. For Russia, the 2022 GDP growth forecast is unchanged, showing a contraction of 6.0%, following reported growth of 4.7% in 2021. Consumption remains robust, especially in the advanced economies, with an expected continued recovery particularly evident in the contact-intensive services sector, which includes travel and transportation activity, leisure and hospitality. However, significant downside risks prevail, stemming from ongoing geopolitical tensions, the continued pandemic, rising inflation, aggravated supply chain issues, high sovereign debt levels in many regions, and expected monetary tightening by central banks in the US, the UK, Japan and the Euro-zone.

World Oil Demand

World oil demand growth in 2021 remained unchanged at 5.7 mb/d. Oil demand in the OECD increased by 2.6 mb/d in 2021, while the non-OECD showed growth of 3.1 mb/d. For 2022, world oil demand growth is broadly unchanged to stand at 3.4 mb/d. Within the quarters, the 2Q22 is revised down, reflecting the lockdown in some part of China leading to lower-than-expected demand, while 2H22 is revised up on expectations of higher demand during the summer holiday and driving season. Oil demand growth in 2022 is forecast at 1.8 mb/d in the OECD and 1.6 mb/d in the non-OECD.

World Oil Supply

The estimate for non-OPEC liquids supply growth in 2021 remains broadly unchanged at 0.6 mb/d. Total US liquids production is estimated to have increased by 0.1 mb/d y-o-y in 2021. The forecast for non-OPEC supply growth in 2022 is revised down by 0.25 mb/d to 2.1 mb/d. Russia's liquids production for 2022 is revised down by 0.25 mb/d. The US liquids supply growth forecast for 2022 remains marginally unchanged at 1.3 mb/d. The main drivers of liquids supply growth in 2022 are expected to be the US, Brazil, Canada, Kazakhstan, Guyana and China, while declines are expected mainly in Russia, Indonesia and Thailand. OPEC NGLs and non-conventional liquids production in 2021 is revised up by 20 tb/d from last month's assessment, representing growth of 0.1 mb/d y-o-y to average 5.3 mb/d. Growth of 0.1 mb/d is also expected for 2022. In May, OPEC-13 crude oil production decreased by 176 tb/d m-o-m to average 28.51 mb/d, according to available secondary sources.

Product Markets and Refining Operations

Refinery margins on all main trading hubs continued to increase in May, albeit at a considerably lower rate than in the previous months. With the conclusion of the peak turnaround season, rising product output started to limit the contraction in global product balances. In the Western Hemisphere, gasoline was the sole positive performer and margin driver across the barrel. Gasoline inventories declined in the US, while gasoil stocks showed some recovery. In Asia, all product markets strengthened, with the exception of naphtha and fuel oil, as regional transport fuel consumption improved amid the roll back of COVID-19 lockdown measures in China. Going forward, refinery intakes are expected to rise further to accommodate a seasonal pickup in fuel consumption and to replenish stocks.

Tanker Market

Dirty tanker spot freight rates fell back from the sharp gains seen the previous month. Suezmax rates declined 37% m-o-m and Aframax fell 22% over the same period, as ample availability overwhelmed the upward pressure caused by trade dislocations. VLCC rates declined 20%, with losses both East and West of Suez. In contrast, clean rates continued to surge, up 37% on average amid tight product markets. Dirty spot freight rates are likely to remain capped by ample tanker supply, while clean rates could continue to benefit from trade shifts necessitating higher vessel demand in the summer driving season in the Northern Hemisphere.

Crude and Refined Products Trade

Preliminary data shows US crude imports averaged 6.4 mb/d in May, a gain of 6% m-o-m, while crude exports set a new record high of 3.7 mb/d in May. US product imports remained steady, averaging 2.2 mb/d, supported by an increase in gasoline flows ahead of the driving season. China's crude imports averaged 10.5 mb/d in April and preliminary data shows May imports at 10.8 mb/d, as inflows continued to pick up from the weak performance in February despite lower refinery throughputs. China's product exports edged lower in April, averaging 1.0 mb/d, as declines in gasoline, diesel and fuel oil exports offset increased jet fuel outflows. The anticipated lifting of lockdown measures should support China's crude imports in June, although this could be offset by refiners drawing from existing inventories. India's crude imports jumped 13% to a new record high of 5.1 mb/d in April, as refineries maximized run rates and snapped up discounted Russian crude. Japan's crude imports saw the fourth-consecutive m-o-m gain in April, edging up to average 2.9 mb/d amid expectations of improving product demand. Japan's product imports, including LPG, were broadly flat, while product exports fell 30% m-o-m, with declines across most major products amid lower flows to China. OECD Europe trade flows remain a key uncertainty due to sanctions and the challenges of sourcing crude and refined products from other suppliers.

Commercial Stock Movements

Preliminary April data sees total OECD commercial oil stocks up 1.8 mb m-o-m. At 2,628 mb, inventories were 287 mb less than in the same period a year ago, 332 mb lower than the latest five-year average, and 299 mb below the 2015–2019 average. Within components, crude stocks rose m-o-m by 9.3 mb, while product inventories fell m-o-m by 7.5 mb. At 1,293 mb, OECD crude stocks were 129 mb lower than the same time a year ago, 180 mb lower than the latest five-year average, and 179 mb below the 2015–2019 average. OECD product stocks stood at 1,335 mb, representing a deficit of 158 mb compared to the same time a year ago, 152 mb lower than the latest five-year average, and 120 mb below the 2015–2019 average. In terms of days of forward cover, OECD commercial stocks fell m-o-m by 0.6 days in April to stand at 57.4 days. This is 7.6 days below April 2021 levels, 8.0 days less than the latest five-year average and 4.8 days lower than the 2015–2019 average.

Balance of Supply and Demand

Demand for OPEC crude in 2021 is revised down by 0.2 mb/d from the previous month's assessment to stand at 28.0 mb/d, which is around 5.0 mb/d higher than in 2020. Demand for OPEC crude in 2022 is revised up by 0.1 mb/d from the previous month's assessment to stand at 29.2 mb/d, which is around 1.1 mb/d higher than in 2021.

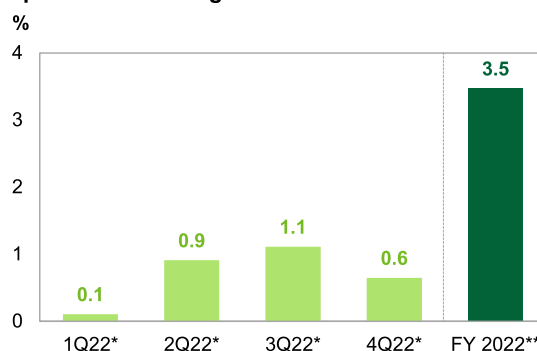
Feature Article

World oil market prospects for the second half of 2022

The global economy in 2022 continues to be fraught with uncertainty. The first quarter of the year showed a weakening growth trend amid strongly rising commodity prices and a surging Omicron wave, both of which dampened the economic dynamic, particularly in the advanced economies and China. Nevertheless, economic growth is forecast to pick up towards the end of 2Q22.

Recently, economic momentum has been building, especially in the contact-intensive services sector, which includes travel and transportation, leisure and hospitality. This renewed activity is expected to lead into the summer holiday season of the northern hemisphere, supported by still-sufficient savings in advanced economies to be spent on pent-up demand. A similar seasonal dynamic was observed during the summer months of pandemic years 2020 and 2021. However, once the summer holidays are over, it will remain to be seen to what extent inflation, i.e. rising cost of living, financial tightening and rising geopolitical uncertainty, dampen the growth dynamic towards the end of the year (**Graph 1**).

Graph 1: World GDP growth



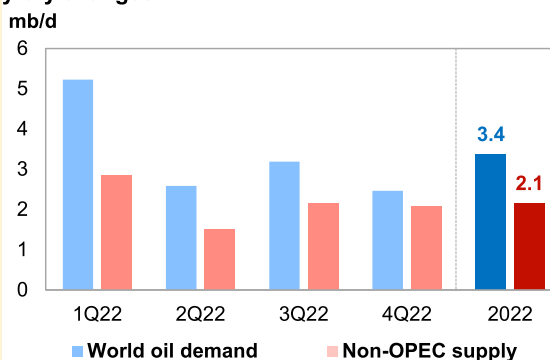
Note: * q-o-q and ** y-o-y. Source: OPEC.

Turning to the oil market, global oil demand is anticipated to average 101.8 mb/d in 2H22, up from 98.7 mb/d on average seen in 1H22. For the year, world oil demand is forecast to grow by 3.4 mb/d (see **Graph 2**). Improving mobility in major economies, as well as seasonal containment of the pandemic is projected to support gasoline and distillate demand. Oil demand growth in the OECD is forecast to average 1.2 mb/d y-o-y in 2H22, with OECD Americas remaining the largest contributor to oil demand growth. In terms of main products, gasoline is expected to lead oil demand growth in the region, closely followed by LPG, middle distillates and naphtha. In the non-OECD, oil demand is estimated to increase by 1.6 mb/d in 2H22 y-o-y, driven mostly by China, India, Other Asia and the Middle East. The rapid containment of COVID-19 in China is expected to support a healthy rebound in economic momentum in the region. In terms of products, middle distillates are projected to be the main contributor to growth, followed by gasoline, LPG and naphtha.

Following estimated growth of 2.2 mb/d y-o-y in 1H22, non-OPEC liquids supply is forecast to grow by 2.1 mb/d y-o-y in 2H22. For the entire year, non-OPEC liquids supply is projected to grow by 2.1 mb/d y-o-y (**Graph 2**).

On a regional basis, OECD liquids supply is expected to grow by 1.7 mb/d y-o-y in 2H22, mainly in the US with a projected increase of 1.2 mb/d, and additional incremental production coming from Canada and Norway. However, liquids supply from the non-OECD region is forecast to increase only by 0.3 mb/d y-o-y in 2H22. Lower production from Russia is forecast to be offset by higher output in other regions like Latin America. However, the second half of the year remains highly uncertain due to geo-political developments in Eastern Europe.

Graph 2: World oil demand and Non-OPEC supply, y-o-y changes



Note: 2022 = Forecast. Source: OPEC.

Looking ahead, current geopolitical developments and the uncertain roll-out of the pandemic toward the end of the second half of the year continue to pose a considerable risk to the forecast recovery to pre-pandemic levels. Inflationary pressures are likely to persist and it remains highly uncertain as to when geopolitical issues may be resolved. Nevertheless, oil demand is forecast at healthy levels in the second half of this year. In order to meet this incremental demand, the countries participating in the Declaration of Cooperation (DoC) decided in their 29th Ministerial Meeting held on 2 June 2022 to advance the planned production adjustments of September 2022 in an ongoing endeavour to ensure market stability.

World Oil Demand

World oil demand growth in 2021 remain unchanged as compared to the previous month's report to stand at 5.7 mb/d. During 2021, OECD oil demand increased by 2.6 mb/d, while non-OECD oil demand showed growth of 3.1 mb/d y-o-y.

In 2022, oil demand growth remain unchanged at 3.4 mb/d as compared to the May MOMR. World oil demand is projected to average 100.29 mb/d, which is same as the previous month's estimates, and demand is expected to exceed 2019 by 0.09 mb/d.

In 1Q22, world oil demand recorded robust growth of 5.2 mb/d, mainly due to a strong economic rebound supported by further easing of COVID-19 containment measures, particularly in OECD countries. OECD oil demand grew by 3.4 mb/d y-o-y while non-OECD requirements gained 1.9 mb/d as compared to the same quarter in 2021. Downward revisions in 2Q22, 3Q22 and 4Q22 oil demand growth took into account mainly current economic forecasts and other factors that could potentially reduce global oil requirements, including COVID-19 developments in China.

Diesel and gasoline are anticipated to record the highest gains among petroleum products y-o-y on the back of increasing mobility and healthy industrial activity globally. The easing of supply chain bottlenecks in major consuming countries will support oil demand, with light distillates largely supported by strong petrochemical demand, notably in China, the US and India. The recovery in global air travel amid declining COVID-19 infections is expected to further support jet kerosene demand.

Table 4 - 1: World oil demand in 2021*, mb/d

World oil demand	2020	1Q21	2Q21	3Q21	4Q21	2021	Change 2021/20	
							Growth	%
Americas	22.56	22.82	24.38	24.83	25.05	24.28	1.72	7.62
<i>of which US</i>	18.35	18.60	20.17	20.35	20.56	19.93	1.58	8.60
Europe	12.43	11.91	12.64	13.85	13.90	13.08	0.65	5.22
Asia Pacific	7.14	7.67	7.04	7.11	7.82	7.41	0.27	3.78
Total OECD	42.13	42.40	44.05	45.79	46.77	44.77	2.64	6.26
China	13.86	14.18	15.08	14.95	15.54	14.94	1.08	7.78
India	4.51	4.98	4.50	4.59	5.02	4.77	0.26	5.81
Other Asia	8.13	8.56	8.98	8.34	8.62	8.63	0.50	6.09
Latin America	5.90	6.17	6.08	6.38	6.26	6.23	0.32	5.50
Middle East	7.45	7.75	7.52	8.06	7.85	7.79	0.35	4.67
Africa	4.05	4.35	4.01	4.11	4.42	4.22	0.17	4.22
Russia	3.39	3.65	3.42	3.63	3.76	3.61	0.23	6.69
Other Eurasia	1.07	1.23	1.24	1.09	1.28	1.21	0.14	12.69
Other Europe	0.70	0.78	0.72	0.73	0.79	0.75	0.06	8.27
Total Non-OECD	49.06	51.65	51.55	51.87	53.54	52.16	3.10	6.32
Total World	91.19	94.05	95.60	97.65	100.31	96.92	5.74	6.29
Previous Estimate	91.19	94.05	95.60	97.66	100.30	96.92	5.74	6.29
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Totals may not add up due to independent rounding. Source: OPEC.

Table 4 - 2: World oil demand in 2022*, mb/d

World oil demand	2021	1Q22	2Q22	3Q22	4Q22	2022	Change 2022/21	
							Growth	%
Americas	24.28	24.78	24.99	25.69	25.76	25.31	1.03	4.26
of which US	19.93	20.30	20.57	21.19	21.21	20.82	0.90	4.50
Europe	13.08	13.10	13.06	14.29	14.15	13.65	0.57	4.35
Asia Pacific	7.41	7.90	7.22	7.25	7.93	7.57	0.17	2.23
Total OECD	44.77	45.77	45.26	47.23	47.84	46.53	1.77	3.95
China	14.94	14.67	15.16	15.42	15.97	15.31	0.37	2.48
India	4.77	5.18	4.85	5.01	5.39	5.11	0.33	7.01
Other Asia	8.63	9.09	9.59	8.93	8.95	9.14	0.51	5.91
Latin America	6.23	6.32	6.25	6.53	6.42	6.38	0.16	2.51
Middle East	7.79	8.06	7.77	8.32	8.09	8.06	0.27	3.43
Africa	4.22	4.51	4.15	4.23	4.55	4.36	0.14	3.23
Russia	3.61	3.67	3.28	3.45	3.54	3.48	-0.13	-3.58
Other Eurasia	1.21	1.22	1.15	1.01	1.24	1.15	-0.06	-4.71
Other Europe	0.75	0.79	0.71	0.73	0.80	0.76	0.01	1.01
Total Non-OECD	52.16	53.50	52.92	53.62	54.94	53.75	1.60	3.06
Total World	96.92	99.28	98.19	100.85	102.77	100.29	3.36	3.47
Previous Estimate	96.92	99.28	98.44	100.74	102.64	100.29	3.36	3.47
Revision	0.00	0.00	-0.25	0.11	0.13	0.00	0.00	0.00

Note: * 2022 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

OECD

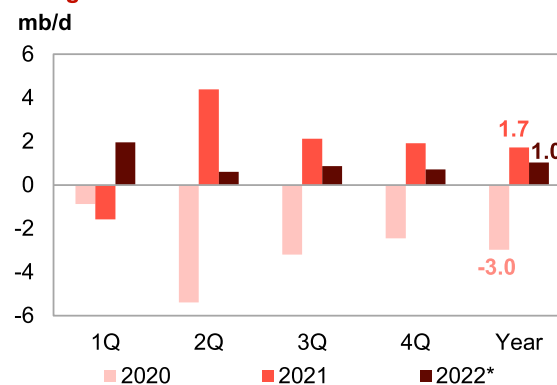
OECD Americas

Update on the latest developments

Oil demand in the US continues to recover despite some macroeconomic challenges. In March, the US recorded strong growth of 1.3 mb/d, equal to 7% y-o-y. LPG demand from residential requirements for heating and cooking as well as demand from commercial sectors were the leading sources of oil demand growth, LPG registered growth of 0.3 mb/d, equivalent to 10% y-o-y growth.

Behind the continuing improvement in air travel in the US in March, jet kerosene demand grew by about 0.4 mb/d, equivalent to 31% annual growth. Gasoline demand suffered a setback yet registered growth of 0.3 mb/d annually, lower than previous months' growth levels.

Graph 4 - 1: OECD Americas oil demand, y-o-y change



Note: * 2022 = Forecast. Source: OPEC.

Gasoline demand was partly impacted by a decline in vehicle sales due to the supply chain bottlenecks that are affecting vehicle manufacturers and a sharp reduction in monthly motor vehicle travel in the US, which fell from 10.7% in February to 2.9% in March. Diesel demand grew by 0.1 mb/d y-o-y. Diesel in the US is mostly used in industrial and commercial applications, and to some extent in road transportation and is tied closely to economic activity. However, naphtha demand fell by 10 tb/d, y-o-y.

Table 4 - 3: US oil demand, mb/d

By product	Mar 21	Mar 22	Change Mar 22/Mar 21	
			Growth	%
LPG	3.04	3.34	0.30	9.9
Naphtha	0.17	0.16	-0.01	-7.1
Gasoline	8.58	8.86	0.28	3.3
Jet/kerosene	1.16	1.52	0.36	31.4
Diesel	4.03	4.16	0.13	3.2
Fuel oil	0.29	0.44	0.15	49.8
Other products	2.23	2.33	0.10	4.6
Total	19.49	20.80	1.31	6.7

Note: Totals may not add up due to independent rounding. Sources: EIA and OPEC.

Near-term expectations

After strong growth of 1.7 mb/d annually in 1Q22, in 2Q22 the US oil demand is forecast to grow at 0.4 mb/d, y-o-y. In 2Q22, the US economy is forecast to grow by 3.6%, after a contraction in 1Q22. In the 2Q22, the US economy will be affected by high producer prices due to current geopolitical developments. This will fuel domestic inflation combined with tight monetary policy which may cap oil demand in the industrial and commercial sectors. Nevertheless, the declining impact of the COVID-19 pandemic will likely support the demand for gasoline and diesel. Demand for diesel is also expected to be supported by rising requirements for trucking, home delivery and the distribution of goods due to relative improvements in economic activity in the US. By 3Q22, US oil demand is forecast to improve and grow by 0.8 mb/d, y-o-y. Furthermore, improvements in both domestic and international air travel will support jet kerosene demand to increase further. Residential and industrial demand for light distillates will support the demand for LPG and naphtha, which will benefit from petrochemical feedstock requirements in the remaining part of 2022.

However, in 4Q22, the US GDP is forecast to slow and settle at 2.9%. The slowdown in the economy, food inflation as a result current geopolitical developments and tight monetary policy will further fuel inflation. These factors combined with a slowdown in winter driving activity will drag oil demand to annual growth of 0.6 mb/d

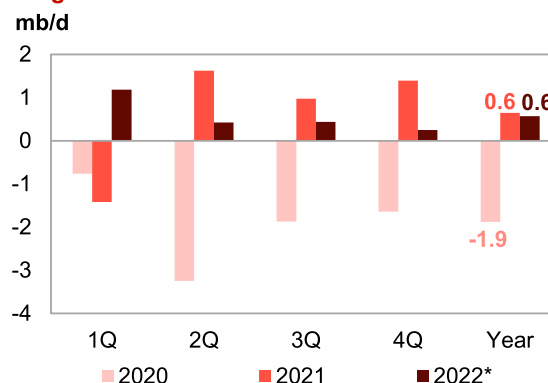
Nevertheless, as the US government continues to implement monetary and fiscal policy measures to support the economy, rising inflation is likely to slow in 2023 and supply chain bottlenecks are expected to ease further. Consequently, the manufacturing sector and households are expected to benefit from these policies and support oil demand growth.

OECD Europe

Update on the latest developments

OECD Europe saw bullish oil requirements amid rising jet kerosene and gasoline demand with the onset of warmer weather, the easing of COVID-19 measures and the growth in travel activity, despite high inflation and energy prices. March 2022 oil demand data shows strong oil demand growth of 1.1 mb/d, equivalent to 9% y-o-y. Demand from the aviation sector in the region has continued to improve, correlating with the reopening of international travel. Statistics from Eurostat show that the number of commercial flights in the Europe increased by 156% in March 2022 compared to March 2021. Jet kerosene demand grew by 0.5 mb/d, or a huge 78% y-o-y, though this reflects a low historical baseline.

Graph 4 - 2: OECD Europe's oil demand, y-o-y change



Note: * 2022 = Forecast. Source: OPEC.

Behind the strong mobility recovery in OECD Europe, gasoline demand registered growth of 0.3 mb/d, or 16% y-o-y. Since the easing of lockdowns in European countries, driving mobility has improved significantly; in the UK in March driving mobility recorded y-o-y growth of 27%, in Italy 59%, France 30% and Germany 26%. Diesel demand recorded growth of 0.4 mb/d y-o-y grow and m-o-m diesel requirements declined by 0.1 mb/d, also consistent with seasonal demand, with less diesel needed for heating during warmer weather.

World Oil Demand

LPG recorded growth of 61 tb/y-o-y, a slight decline m-o-m. Naphtha demand recorded a contraction of 0.1 mb/d y-o-y for the fourth consecutive month.

Table 4 - 4: Europe's Big 4* oil demand, mb/d

By product	Mar 21	Mar 22	Change Mar 22/Mar 21	
			Growth	%
LPG	0.44	0.50	0.06	12.8
Naphtha	0.59	0.50	-0.08	-14.2
Gasoline	1.01	1.14	0.13	12.5
Jet/kerosene	0.36	0.59	0.23	63.4
Diesel	3.04	3.15	0.11	3.5
Fuel oil	0.15	0.17	0.02	16.2
Other products	0.42	0.54	0.13	30.1
Total	6.01	6.59	0.58	9.7

Note: * Germany, France, Italy and the UK. Totals may not add up due to independent rounding.

Sources: JODI, UK Department for Business, Energy & Industrial Strategy, Unione Petrolifera and OPEC.

Near-term expectations

After strong growth of 1.2 mb/d in 1Q22, oil demand growth in OECD Europe is projected to fall to 0.4 mb/d in 2Q22. In 2Q22, the region's GDP is forecast to grow by 2.4% as the regional economy is expected to be affected by geopolitical developments, which will worsen supply chain bottlenecks and increase inflation. Headline inflation in the region hit a new high of 8.2% in April 2022, up from 5.9% in February. In addition, there are trade- and commodity-related supply chain bottlenecks, particularly for consumable merchandise, energy and other industrial goods. Nonetheless, in 3Q22, the region's GDP is expected to improve and grow by 3.2%, while the summer season will enhance mobility and give further support to transportation fuels. Consequently, overall demand growth in 3Q22 is expected to reach 0.4 mb/d, y-o-y and on top of a robust growth during the same quarter in 2021.

However, in 4Q22, the combined effects of expected declines in the region's GDP to grow by 2.0%, alongside logistical problems due to geopolitical developments, will exacerbate inflation. The latter combined with the winter mobility slowdown in the region will lead to a decline of oil demand growth in 4Q22 to 0.2 mb/d, y-o-y. Overall, in 2022, OECD Europe oil demand growth is expected to average 0.6 mb/d annually.

OECD Asia Pacific

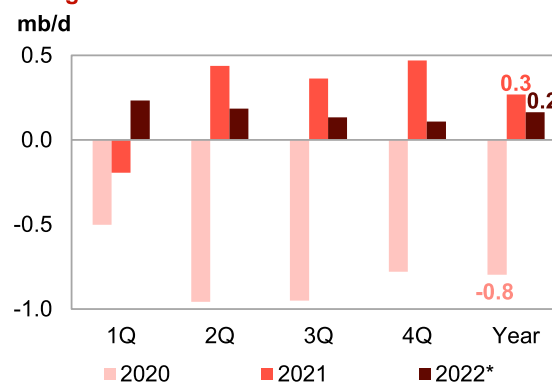
Update on the latest developments

Oil demand in Asia Pacific grew by 0.1 mb/d, y-o-y, in March 2022. Oil demand in the region is mostly supported by Japanese and South Korean requirements for NGLs/LPG for transportation and household fuels, and feedstocks for the petrochemical industry.

In Japan, for example, a considerable share of LPG is utilized for cooking and heating in the residential sector. There is also substantial demand from utilities, industries and the transportation sector. Supported by a regional recovery in air traffic, jet kerosene demand grew by 54 tb/d, y-o-y. According to data from the International Air Transport Association (IATA), air travel in Japan rebounded in March by 47% y-o-y and 30.3% m-o-m. Air travel in Australia grew by 26.3% y-o-y in March.

Diesel demand in the region posted a growth of 32 tb/d, y-o-y, marking an improvement compared to the y-o-y growth in February. However, gasoline demand contracted by 55 tb/d, y-o-y and for the second consecutive month. The demand for diesel and gasoline in Japan was affected by the slow pace of economic growth in 1Q22, combined with the country's COVID-19 emergency restrictions which dented consumer spending and capped diesel and gasoline requirements.

Graph 4 - 3: OECD Asia Pacific oil demand, y-o-y change



Note: * 2022 = Forecast. Source: OPEC.

Table 4 - 5: Japan's oil demand, mb/d

By product	Apr 21	Apr 22	Change Apr 22/Apr 21	
			Growth	%
LPG	0.44	0.49	0.05	11.8
Naphtha	0.70	0.57	-0.13	-18.5
Gasoline	0.74	0.70	-0.04	-5.2
Jet/kerosene	0.27	0.26	-0.01	-5.5
Diesel	0.71	0.67	-0.05	-6.4
Fuel oil	0.22	0.22	0.01	4.2
Other products	0.18	0.13	-0.05	-26.2
Total	3.26	3.04	-0.22	-6.6

Note: Totals may not add up due to independent rounding. Sources: JODI, METI and OPEC.

Near-term expectations

After recording growth of 0.2 mb/d in 1Q22, y-o-y, in 2Q22, the oil demand is expected to remain at 0.2 mb/d, annually. The oil demand will be affected by the economic growth in region which is expected to remain at 2.3%. The slowdown in GDP growth is expected to affect manufacturing activity and dampen consumer spending with also a consequent impact on mobility. In 3Q22 and 4Q22, oil demand growth in the region is expected to continue its downward trend to remain at 0.1 mb/d, y-o-y, for each quarter. A slowdown in driving activity during the winter is also likely to dampen gasoline consumption in 4Q22. Overall oil demand in the region is expected to grow by 0.2 mb/d annually in 2022.

Generally, the gradual economic and mobility recovery in the region, combined with improvements in the region's air travels would boost gasoline and jet kerosene demand and provide additional support for oil demand in 2022. Currently, the South Korean government's subsidy rate hike and rapid removal of COVID-19 restrictions would lead to higher demand for the middle distillate fuels over the peak summer driving season. Similarly, improvements in the aviation sector will support the demand for jet kerosene in the region. Diesel demand will be supported by trucking and industrial sector demand.

Non-OECD

China

Update on the latest developments

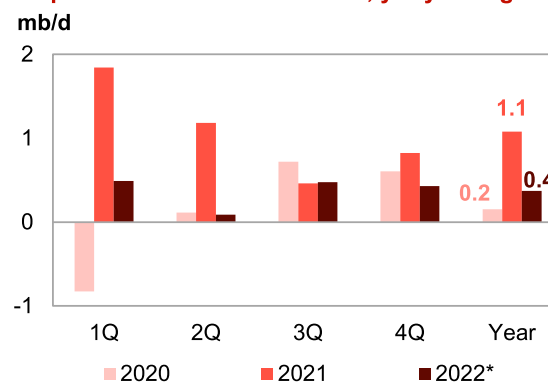
The extension of the zero-COVID-19 policy due to the resurgence of cases in Eastern China weighed heavily on **Chinese oil demand** in April.

The latest data shows that oil demand contracted by 0.7 mb/d in April, y-o-y, for the first time since February 2020. The re-introduction of complete lockdown measures – including mobility restrictions and industrial shutdowns due to trade-related supply chain bottlenecks in the major city of Shanghai and other provinces capped oil demand.

Similarly, both domestic and international air passenger traffic declined, causing demand for jet kerosene to plunge by 40% annually, equivalent to 0.4 mb/d, y-o-y.

Moreover, weakening mobility caused gasoline consumption to nosedive by 0.3 mb/d, equivalent to an annual decline of 8%. Manufacturing shutdowns and supply chain bottlenecks during the period led to a 0.2 mb/d contraction in diesel demand, an equivalent annual decline of 8%. However, naphtha demand grew by 0.1 mb/d, y-o-y, supported by demand for petrochemical feedstock in the Chinese petrochemical industry.

Graph 4 - 4: China's oil demand, y-o-y change



Note: * 2022 = Forecast. Source: OPEC.

Table 4 - 6: China's oil demand*, mb/d

By product	Apr 21	Apr 22	Change Apr 22/Apr 21	
			Growth	%
LPG	1.81	1.81	0.00	0.3
Naphtha	1.17	1.27	0.10	8.9
Gasoline	3.36	3.10	-0.26	-7.8
Jet/kerosene	0.88	0.53	-0.35	-39.9
Diesel	2.83	2.61	-0.21	-7.6
Fuel oil	0.69	0.71	0.02	2.5
Other products	2.05	2.00	-0.05	-2.2
Total	12.79	12.04	-0.75	-5.9

Note: * Apparent oil demand. Totals may not add up due to independent rounding.

Sources: Argus Global Markets, China OGP (Xinhua News Agency), Facts Global Energy, JODI, National Bureau of Statistics China and OPEC.

Near-term expectations

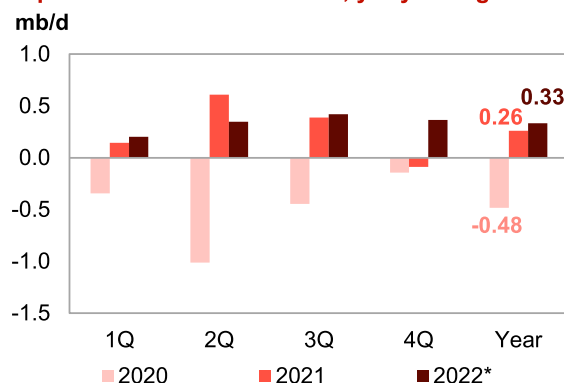
After posting a 0.5 mb/d growth in 1Q22, China's near-term outlook remains challenged by uncertainties. While the Chinese economy is forecast to grow by 5.1% in 2022, trade bottlenecks and a slowdown of manufacturing operations could also weigh on oil demand, notably during 2Q22. In 2Q22, oil demand growth is forecast to settle at 87 tb/d. Light distillates, NGL/LPG and naphtha are expected to be the main contributors for the demand growth in the second quarter.

As lockdowns were due to end in Shanghai and other provinces as COVID-19 cases declined, the Chinese government is very keen to support the economy and consumers with stimulus packages. Currently, China rolled out a broad package of measures to offset the effects of the COVID-19 containment. These stimulus measures are likely to support the Chinese economy and are expected to support consumer spending as well as ease some supply chain bottlenecks, further supporting manufacturing activity. During 3Q22 and 4Q22, oil demand growth will recover from the previous quarter and settle at 0.5 mb/d and 0.4 mb/ respectively, y-o-y.

India

Update on the latest developments

Data for April, the latest available, shows continued growth in **India's oil demand** amid improvements in economic and social activity and the easing of pandemic containment measures. The resumption of mobility and other economic activity has stimulated pent-up demand and helped demand grow by 0.5 mb/d, y-o-y in April, equivalent to strong 10%. Transportation fuels are the main drivers of India's oil demand growth in April. Gasoline recorded growth of 0.2 mb/d, equivalent to 28%, y-o-y and was strongly supported by the mobility recovery as the Indian government relaxed all travel restrictions. Additionally, individual preferences for private vehicles over public transport gave an additional boost to gasoline demand.

Graph 4 - 5: India's oil demand, y-o-y change

Note: * 2022 = Forecast. Source: OPEC.

Diesel demand has rose, supported by economic activity and the harvest season. Diesel accounts for about 40% of the total oil products used in India and recorded growth of 0.2 mb/d, y-o-y. Rise in GDP in India also aided small scale industries, supported India's industrial production to grow by 134% in April, up from 130% in March, also adding a boost to diesel demand. Domestic air travel in April recorded 83% y-o-y growth; international traffic surpassed pre-COVID-19 levels, and accordingly, jet kerosene demand grew by 38 tb/d, or equivalently 25% y-o-y in April. LPG requirements also registered gains during April to grow by 70 tb/d, annually, despite slight increases in prices. Naphtha demand suffered a setback to contract by 0.1 mb/d, y-o-y in April, recording a 29% drop.

Table 4 - 7: India's oil demand, mb/d

By product	Apr 21	Apr 22	Change Apr 22/Apr 21	
			Growth	%
LPG	0.86	0.93	0.07	7.9
Naphtha	0.45	0.32	-0.13	-28.8
Gasoline	0.68	0.86	0.19	27.6
Jet/kerosene	0.15	0.19	0.04	25.3
Diesel	1.67	1.86	0.19	11.2
Fuel oil	0.23	0.27	0.04	17.9
Other products	0.53	0.59	0.06	12.0
Total	4.57	5.03	0.46	10.0

Note: Totals may not add up due to independent rounding.

Sources: JODI, Petroleum Planning and Analysis Cell of India and OPEC.

Near-term expectations

India's oil demand is forecast to grow by 0.3 mb/d annually in 2022. The demand is expected to improve from 0.2 mb/d in 1Q22 to reach 0.4 mb/d in 3Q22 and 4Q22, y-o-y. The projected growth is expected to be supported by strong GDP growth of 7.1%. Furthermore, the Indian government cut taxes on fuels to address mounting inflationary pressure that have been hitting households, farmers and manufacturers. The cuts include slashing levies on pump prices of gasoline and diesel as well as increasing subsidies for cooking gas for households. Transportation fuels are expected to be the main beneficiaries of the policy, hence the main drivers of oil demand growth. Transportation fuel demand will be backed by a recovery in mobility and industrial requirements; gasoline and diesel are expected to lead the demand growth in 2022. Light distillates, LPG and naphtha demand from the residential sector and petrochemical feedstock are also expected to appreciate to reach pre-pandemic levels in India. Similarly, diesel demand will be supported by requirements for electricity for cooling homes due to hot summer weather and harvest requirements from farmers.

Latin America

Update on the latest developments

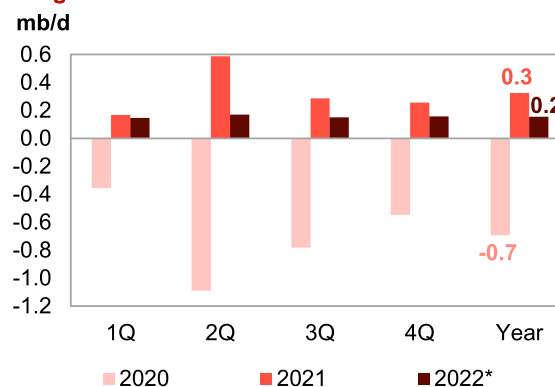
The latest data implies **oil demand growth in the Latin America** of 0.1 mb/d, y-o-y, in March. Gasoline recorded growth of 0.1 mb/d, y-o-y in line with improving mobility. Despite high inflation and to some extent supply chain challenges, demand remained resilient in the region. Jet kerosene and diesel demand also grew solidly, in line with robust manufacturing activity and improved air travel.

Overall gains have been partly offset by shrinking LPG and naphtha requirements, mainly as a result of fuel substitution. Oil demand grew y-o-y in Brazil, Argentina and Venezuela. The slow pace of the economic recovery in some big oil-consuming countries of Latin America, combined with high inflation, has dampened consumer purchasing power and created additional supply chain bottlenecks, which partially affected the oil demand in the region.

Near-term expectations

The pace of the economic recovery in Latin America is still slow, with current GDP growth in the region at 2.2%. Furthermore, COVID-19 cases are still very high. Despite these factors, the 0.1 mb/d annual oil demand growth recorded in 1Q22 is expected to improve slightly to around 0.2 mb/d in the remaining quarters. The prospects of oil demand improvements in the region largely depend on the momentum of the economic recovery in several regional countries.

Graph 4 - 6: Latin America's oil demand, y-o-y change



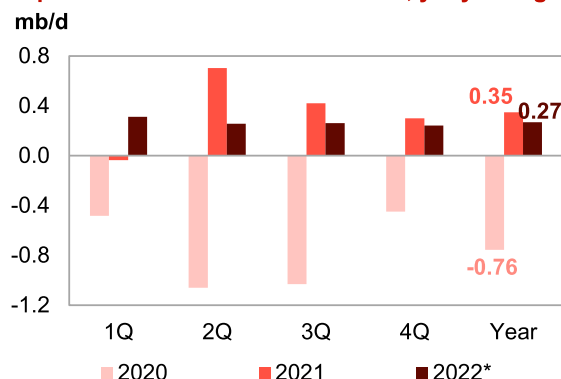
Note: * 2022 = Forecast. Source: OPEC.

Middle East

Update on the latest developments

The latest available data implies that **oil demand in the Middle East** grew solidly in March by 0.3 mb/d, y-o-y. The GDPs of several big regional countries are very healthy and COVID-19 in the region has been successfully managed. On the back of these positive developments, mobility, construction activity and significant improvements in passenger air traffic were in support of oil demand. Consequently, gasoline recorded the highest growth in the oil product demand mix to reach 0.1 mb/d, or around 10%, y-o-y, slightly higher than the growth recorded in February. Gasoline consumption was supported by improvements in the region's driving mobility. Apple's driving mobility data indicates 11% mobility growth in March in Saudi Arabia and 43% in the UAE, y-o-y.

Graph 4 - 7: Middle East's oil demand, y-o-y change



Note: * 2022 = Forecast. Source: OPEC.

Furthermore, on the back of industrial and construction demand, diesel grew by 83 tb/d, y-o-y. S&P Global indicated that Saudi Arabia's manufacturing index (PMI) increased to 56.8 in March from 56.2 in February. Improvements in the region's aviation sector backed the demand for jet kerosene to grow by 64 tb/d, about 22% y-o-y. Backed by residential and industrial requirements, LPG grew by 20 tb/d y-o-y.

Table 4 - 8: Saudi Arabia's oil demand, mb/d

By product	Apr 21	Apr 22	Change Apr 22/Apr 21	
			Growth	%
LPG	0.05	0.05	-0.01	-9.5
Gasoline	0.44	0.47	0.03	7.7
Jet/kerosene	0.04	0.09	0.05	139.7
Diesel	0.50	0.54	0.04	8.5
Fuel oil	0.64	0.60	-0.04	-5.6
Other products	0.48	0.48	0.00	0.6
Total	2.15	2.23	0.08	3.9

Note: Totals may not add up due to independent rounding.

Sources: JODI and OPEC.

Near-term expectations

After posting 0.3 mb/d annual growth in 1Q22, oil demand growth is forecast to remain roughly at the same level in 2Q22 and 3Q22. In 3Q22, the acceleration of travel and manufacturing activity will boost industrial and transportation demand. Hence, gasoline and diesel demand will improve. Summer demand for cooling in the region will boost diesel, residual fuel and crude direct use. Annual pilgrimage and international travel will lend additional support for jet kerosene and gasoline demand, notably in Saudi Arabia. In 4Q22, oil demand growth is forecast to slow and settle at 0.2 mb/d, y-o-y. The overall prospects for oil demand growth in the region are very strong, due to expected strong GDP growth and successful COVID-19 management.

World Oil Supply

Non-OPEC liquids supply growth y-o-y in 2021 (including processing gains of 0.1 mb/d) remains broadly unchanged at around 0.6 mb/d, for an average of 63.6 mb/d. Total US liquids production is estimated to have increased y-o-y by 0.15 mb/d. The largest increases for the year were seen in Canada, which rose by 0.3 mb/d, followed by Russia and China, which are estimated to each have grown by 0.2 mb/d. At the same time, production is estimated to have declined in the UK, Brazil, Colombia and Indonesia.

Non-OPEC supply growth for 2022 is revised down by 0.3 mb/d y-o-y to 2.1 mb/d, for a yearly average level of 65.7 mb/d, with Russia's liquids production for 2022 revised down by 0.25 mb/d. In the US, the current rate of hydraulic fracturing and drilling in the major shale oil areas is above the level required to maintain production and could support production growth in the coming months, especially in the second half of the year. Nevertheless, the US liquids supply growth forecast for 2022 remained broadly unchanged at 1.3 mb/d. The main drivers of liquids supply growth for the year are expected to be the US, Brazil, Canada, Kazakhstan, Guyana and China, while production is expected to decline mainly in Russia, Indonesia and Thailand.

OPEC NGLs and non-conventional liquids production in 2021 is revised up by 20 tb/d from the previous assessment and estimated to have grown by 0.1 mb/d y-o-y for an average of 5.3 mb/d. Growth of 0.1 mb/d y-o-y is forecast for 2022. OPEC-13 crude oil production in May decreased by 176 tb/d m-o-m to average 28.51 mb/d, according to available secondary sources.

Preliminary non-OPEC liquids production in May, including OPEC NGLs, is estimated to have increased m-o-m by a minor 23 tb/d to average 70.2 mb/d, but is up by 1.7 mb/d y-o-y. As a result, preliminary data indicates that global oil supply in May decreased by 0.15 mb/d m-o-m to average 98.75 mb/d, up by 4.64 mb/d y-o-y.

Non-OPEC liquids production growth in 2021 is broadly unchanged from the previous month's assessment to average 0.6 mb/d. The OECD region is estimated to have grown by around 0.3 mb/d and the non-OECD region by 0.2 mb/d.

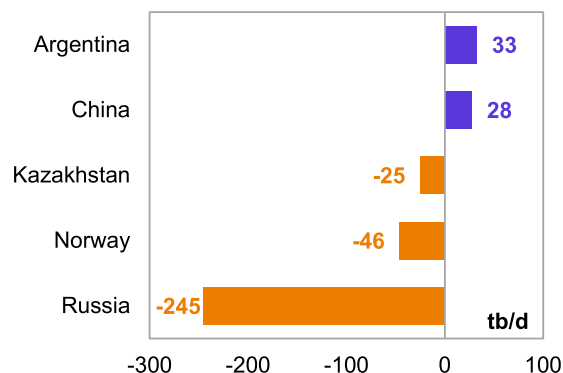
The non-OPEC supply growth forecast for 2022 was revised down by 0.3 mb/d from the previous month's assessment to 2.1 mb/d. Downward adjustments in Eurasian countries more than offset by any upward revisions.

In the OECD, an upward revision of 0.1 mb/d in 1Q22 was mostly offset by downward revisions to the following quarters, leading to a minor downward revision of 46 tb/d for the year. The main downward adjustment was due to planned maintenance in 2Q22 in Norway. Other OECD countries remained unchanged in terms of growth.

The non-OECD supply forecast for 2022 was revised down by 0.2 mb/d, mainly due to a downward revision to Eurasia. Russia and Kazakhstan were considered to account for the major changes in this month.

With this, the non-OPEC liquids supply forecast for 2022 was revised down by 254 tb/d to average 65.7 mb/d, with y-o-y growth revised down to 2.1 mb/d.

Graph 5 - 1: Major revisions to annual supply change forecast in 2022*, MOMR Jun 22/May 22

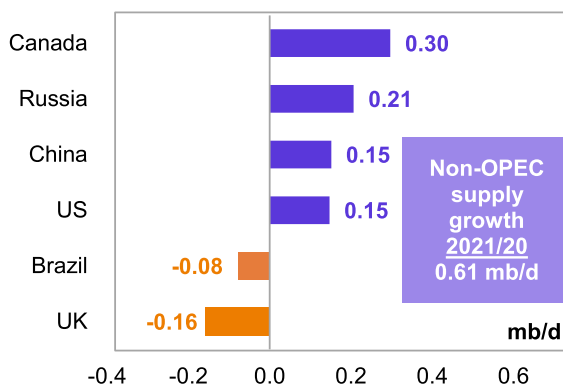


Note: * 2022 = Forecast. Source: OPEC.

Key drivers of growth and decline

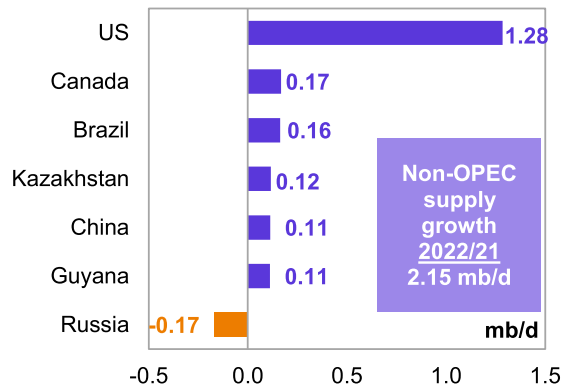
The **key drivers of non-OPEC liquids supply growth in 2021** are estimated to have been Canada, Russia, China and the US, while output is estimated to have declined in the UK and Brazil.

Graph 5 - 2: Annual liquids production changes for selected countries in 2021*



Source: OPEC.

Graph 5 - 3: Annual liquids production changes for selected countries in 2022*



Note: * 2022 = Forecast. Source: OPEC.

For **2022**, the **key drivers of non-OPEC supply growth** are forecast to be the US, Canada, Brazil, Kazakhstan, China and Guyana, while oil production is projected to decline mainly in Russia, Indonesia and Thailand.

Non-OPEC liquids production in 2021 and 2022

Table 5 - 1: Non-OPEC liquids production in 2021*, mb/d

Non-OPEC liquids production	2020	1Q21	2Q21	3Q21	4Q21	2021	Change 2021/20	
							Growth	%
Americas	24.71	24.11	25.19	25.22	26.17	25.18	0.47	1.89
of which US	17.61	16.63	17.93	17.85	18.58	17.75	0.15	0.84
Europe	3.89	3.95	3.51	3.81	3.78	3.76	-0.13	-3.34
Asia Pacific	0.52	0.51	0.45	0.55	0.52	0.51	-0.01	-2.67
Total OECD	29.13	28.58	29.15	29.58	30.47	29.45	0.32	1.11
China	4.15	4.30	4.34	4.33	4.26	4.31	0.15	3.65
India	0.78	0.78	0.77	0.77	0.77	0.77	0.00	-0.44
Other Asia	2.51	2.51	2.45	2.33	2.35	2.41	-0.10	-4.09
Latin America	6.03	5.94	5.97	6.09	5.83	5.96	-0.08	-1.26
Middle East	3.19	3.22	3.23	3.24	3.27	3.24	0.05	1.42
Africa	1.41	1.37	1.35	1.32	1.32	1.34	-0.07	-5.28
Russia	10.59	10.47	10.74	10.81	11.17	10.80	0.21	1.95
Other Eurasia	2.92	2.96	2.89	2.79	3.09	2.93	0.02	0.56
Other Europe	0.12	0.12	0.11	0.11	0.11	0.11	-0.01	-4.66
Total Non-OECD	31.71	31.66	31.85	31.78	32.17	31.87	0.16	0.50
Total Non-OPEC production	60.84	60.24	61.00	61.36	62.64	61.32	0.48	0.79
Processing gains	2.15	2.28	2.28	2.28	2.28	2.28	0.13	6.03
Total Non-OPEC liquids production	62.99	62.52	63.28	63.64	64.92	63.60	0.61	0.97
Previous estimate	62.97	62.50	63.26	63.60	64.87	63.56	0.59	0.94
Revision	0.02	0.02	0.02	0.04	0.05	0.03	0.02	0.03

Note: Totals may not add up due to independent rounding. Source: OPEC.

Table 5 - 2: Non-OPEC liquids production in 2022*, mb/d

Non-OPEC liquids production	2021	1Q22	2Q22	3Q22	4Q22	2022	Change 2022/21	
							Growth	%
Americas	25.18	25.89	26.31	26.96	27.47	26.66	1.48	5.88
<i>of which US</i>	17.75	18.26	18.94	19.27	19.67	19.04	1.28	7.24
Europe	3.76	3.70	3.59	3.79	4.13	3.80	0.04	1.15
Asia Pacific	0.51	0.49	0.54	0.56	0.54	0.53	0.02	4.19
Total OECD	29.45	30.07	30.44	31.30	32.13	30.99	1.54	5.24
China	4.31	4.49	4.41	4.35	4.43	4.42	0.11	2.61
India	0.77	0.77	0.78	0.80	0.83	0.79	0.02	2.78
Other Asia	2.41	2.38	2.39	2.37	2.36	2.38	-0.04	-1.53
Latin America	5.96	6.15	6.28	6.21	6.43	6.27	0.31	5.25
Middle East	3.24	3.29	3.36	3.38	3.39	3.36	0.12	3.63
Africa	1.34	1.32	1.31	1.30	1.31	1.31	-0.03	-2.02
Russia	10.80	11.33	10.40	10.40	10.40	10.63	-0.17	-1.55
Other Eurasia	2.93	3.06	2.93	3.17	3.22	3.10	0.17	5.64
Other Europe	0.11	0.11	0.11	0.10	0.10	0.10	-0.01	-6.90
Total Non-OECD	31.87	32.91	31.97	32.09	32.47	32.36	0.49	1.54
Total Non-OPEC production	61.32	62.98	62.41	63.40	64.60	63.35	2.03	3.32
Processing gains	2.28	2.39	2.39	2.39	2.39	2.39	0.11	4.91
Total Non-OPEC liquids production	63.60	65.37	64.80	65.79	67.00	65.74	2.15	3.38
Previous estimate	63.56	65.24	65.17	66.14	67.28	65.97	2.40	3.78
Revision	0.03	0.13	-0.37	-0.35	-0.29	-0.22	-0.25	-0.40

Note: * 2022 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

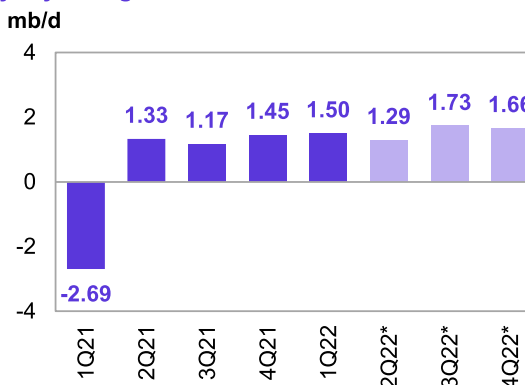
OECD

OECD liquids production in 2021 is estimated to have increased by 0.3 mb/d y-o-y to average 29.4 mb/d, revised up by a minor 18 tb/d from the previous assessment due to official Mexican data revisions.

OECD Americas is estimated to have grown by 0.5 mb/d to average 25.2 mb/d for the year.

Production in OECD Europe and OECD Asia Pacific is estimated to have declined y-o-y by 130 tb/d and 14 tb/d, to average 3.8 mb/d and 0.5 mb/d, respectively.

Graph 5 - 4: OECD quarterly liquids supply, y-o-y changes



Note: * 2Q22-4Q22 = Forecast. Source: OPEC.

For 2022, oil production in the OECD region is forecast to increase by 1.5 mb/d y-o-y, to average 31 mb/d. This has been revised down by a minor 46 tb/d compared to a month earlier, on the back of the downward revision of 46 tb/d for OECD Europe, due to the planned maintenance in North Sea offshore platforms. OECD Americas remained unchanged compared to the last month's assessment.

Based on these revisions, OECD Americas is forecast to grow by 1.5 mb/d, to average 26.7 mb/d. Oil production in OECD Europe and OECD Asia Pacific is anticipated to grow y-o-y by 43 tb/d and 21 tb/d to average 3.8 mb/d and 0.5 mb/d, respectively.

OECD Americas

US

US liquids production in 2021 is estimated to have increased by 0.15 mb/d to average 17.75 mb/d, unchanged m-o-m. Crude oil output fell by 0.1 mb/d y-o-y to average 11.2 mb/d, while NGLs production and non-conventional liquids, particularly ethanol, increased by 0.2 mb/d and 20 tb/d y-o-y to average 5.4 mb/d and 1.2 mb/d, respectively. Average tight crude output in 2021 is estimated at 7.3 mb/d, according to the latest information from the US Energy Information Administration (EIA).

US liquids production jumped m-o-m in **March 2022** by 0.8 mb/d to average 18.8 mb/d, and was higher by 1.5 mb/d compared with March 2021.

Crude oil and condensate production rose in **March 2022** by 349 tb/d m-o-m to average 11.7 mb/d, and was up by 1.9 mb/d y-o-y.

Regarding the crude and condensate production breakdown by region (PADDs), production increased mainly in the US Gulf Coast (USGC), up by 289 tb/d to average 8.3 mb/d. It also increased by 64 tb/d in the Midwest in North Dakota and Oklahoma. At the same time, the Rocky Mountains and East Coast showed a slight increase, while the West Coast decreased by 13 tb/d, m-o-m. Recovered production in the main regions was primarily due to the better weather conditions following the winter freeze.

NGLs production was up by 434 tb/d m-o-m to average 5.9 mb/d in March, which was higher by 0.8 mb/d y-o-y. Production of **non-conventional liquids** (mainly ethanol) increased by 17 tb/d m-o-m to average 1.2 mb/d, according to the US Department of Energy (DoE). Preliminary estimates see non-conventional liquids averaging 1.2 mb/d in April 2022, down by 48 tb/d compared to the previous month.

Production in the **Gulf of Mexico (GoM)** recovered m-o-m by 75 tb/d in March to average 1.7 mb/d, on the back of a partial return from maintenance in the WD-143 platform.

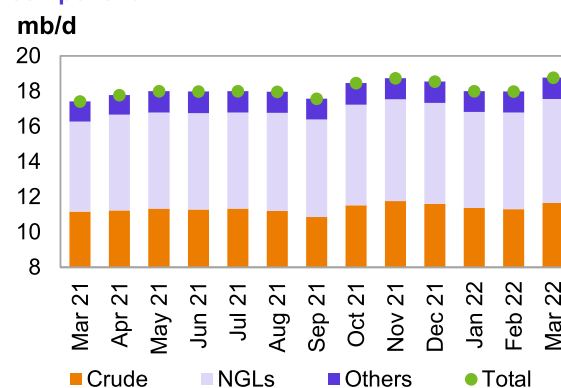
Looking at individual states, oil production in New Mexico increased by 66 tb/d m-o-m to average 1.5 mb/d, 311 tb/d higher than a year ago. Production in Texas jumped by 147 tb/d to average 5.0 mb/d, 244 tb/d higher than a year ago. Production in North Dakota increased by 34 tb/d m-o-m to average 1.1 mb/d, up by 76 tb/d y-o-y. Production in Oklahoma was up by 23 tb/d to average 0.4 mb/d. However, oil output in Colorado remained broadly unchanged, while Alaska showed a marginal m-o-m decline of 10 tb/d. In the onshore lower 48, March production increased m-o-m by 284 tb/d to average 9.5 mb/d.

Table 5 - 3: US crude oil production by selected state and region, tb/d

State	Mar 21	Feb 22	Mar 22	Change	
				m-o-m	y-o-y
Texas	4,728	4,825	4,972	147	244
Gulf of Mexico (GOM)	1,854	1,615	1,690	75	-164
New Mexico	1,156	1,401	1,467	66	311
North Dakota	1,030	1,072	1,106	34	76
Alaska	453	450	440	-10	-13
Colorado	371	425	429	4	58
Oklahoma	402	386	409	23	7
Total	11,160	11,306	11,655	349	495

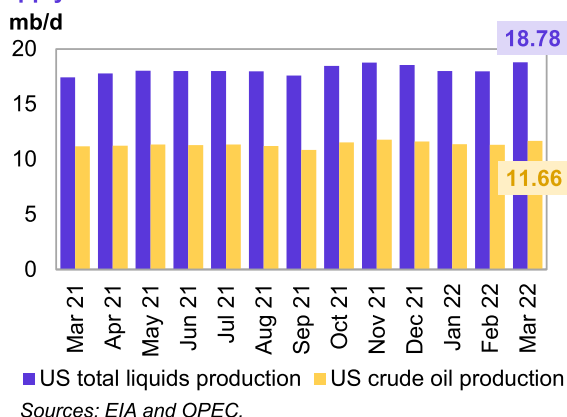
Sources: EIA and OPEC.

Graph 5 - 5: US monthly liquids output by key component

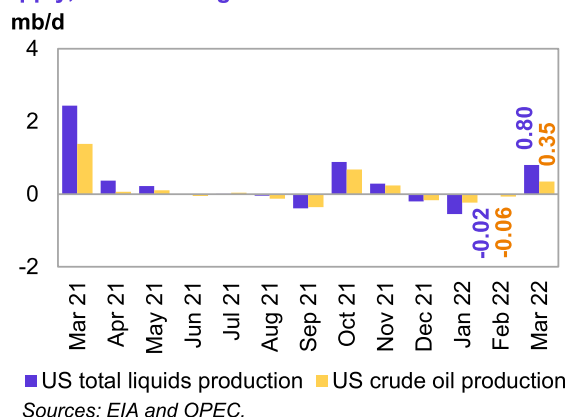


Source: OPEC.

Graph 5 - 6: US monthly crude oil and total liquids supply



Graph 5 - 7: US monthly crude oil and total liquids supply, m-o-m changes

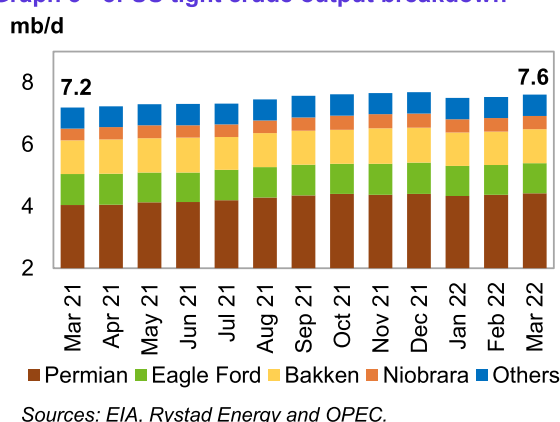


US tight crude output in **March 2022** increased by 73 tb/d m-o-m to average 7.6 mb/d, which was 0.4 mb/d higher than the same month a year earlier, according to EIA estimates.

The m-o-m increase from shale and tight formations through horizontal wells came mostly from the Permian, which increased by 48 tb/d to average 4.4 mb/d. This was up by 0.4 mb/d, y-o-y.

In the Williston Basin, production in the Bakken shale increased marginally by 9 tb/d to average 1.1 mb/d, unchanged y-o-y. Tight crude output at Eagle Ford in Texas rose by 15 tb/d to average 1.0 mb/d down by 19 tb/d y-o-y, while production in Niobrara-Codell in Colorado and Wyoming was down marginally by 8 tb/d to average 0.4 mb/d.

Graph 5 - 8: US tight crude output breakdown

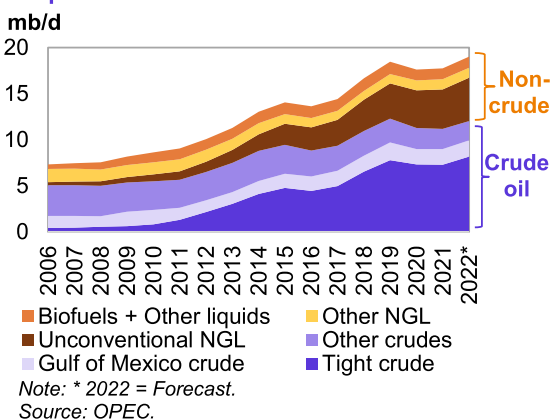


US liquids production in 2022, excluding processing gains, is forecast to grow y-o-y by 1.3 mb/d to average 19.0 mb/d, unchanged from the previous assessment.

The 2022 gains are due primarily to expected tight crude production growth of 0.9 mb/d, to average 8.2 mb/d, NGLs growth, mainly from unconventional basins, of 0.4 mb/d, to average 5.8 mb/d, and projected growth of 0.1 mb/d in the GoM. Non-conventional liquids are projected to grow by 40 tb/d to average 1.2 mb/d.

However, the expected growth will be partially offset by natural declines in onshore conventional fields of 0.1 mb/d y-o-y.

Graph 5 - 9: US liquids supply developments by component



Given the current pace of drilling and well completions in oil fields, **production of crude oil and condensate** is forecast to grow by 0.8 mb/d y-o-y to average 12.0 mb/d in 2022. This forecast assumes ongoing capital discipline, current inflation rates, continuing supply chain issues, and the oil field service section limitations (labour and equipment).

Table 5 - 4: US liquids production breakdown, mb/d

US liquids	Change		Change		Change	
	2020	2020/19	2021	2021/20	2022*	2022/21
Tight crude	7.34	-0.46	7.29	-0.05	8.17	0.88
Gulf of Mexico crude	1.64	-0.25	1.70	0.06	1.77	0.06
Conventional crude oil	2.30	-0.29	2.20	-0.10	2.11	-0.10
Total crude	11.28	-1.01	11.19	-0.10	12.04	0.85
Unconventional NGLs	4.09	0.25	4.28	0.20	4.70	0.42
Conventional NGLs	1.09	0.10	1.12	0.03	1.10	-0.02
Total NGLs	5.17	0.35	5.40	0.22	5.80	0.40
Biofuels + Other liquids	1.15	-0.20	1.17	0.02	1.21	0.04
US total supply	17.61	-0.86	17.75	0.15	19.04	1.28

Note: * 2022 = Forecast. Sources: EIA, OPEC and Rystad Energy.

US tight crude production in the Permian in **2021** is estimated to have increased by 210 tb/d to 4.1 mb/d and is forecast to grow by 742 tb/d y-o-y to average 4.9 mb/d in **2022**.

The decline rate in Bakken shale production slowed in 2021 compared with 2020, from a contraction of 234 tb/d to a decline of 75 tb/d. Production is now estimated to average 1.1 mb/d in 2021. For 2022, tight crude production from the Bakken shale is forecast to grow by 11 tb/d on the back of increased drilling activity in North Dakota and available DUC wells, and despite the impact of spring blizzards in April.

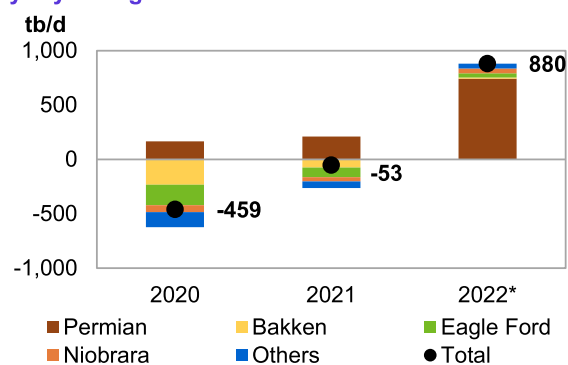
The Eagle Ford in Texas is estimated to have declined by 90 tb/d in 2021 to average 968 tb/d, but is forecast to expand in 2022 by 39 tb/d to average 1.0 mb/d. The rig-weighted average productivity (new-well oil production per rig) shows a m-o-m drop of 79 b/d in the Eagle Ford, according to the EIA-DPR (Drilling Productivity Report) forecast for June 2022. However, overall Eagle Ford production is expected to increase m-o-m by 27 tb/d during the same time.

Production in the Niobrara, following an estimated decline of 39 tb/d in 2021, is forecast to grow by 43 tb/d y-o-y in 2022, to average 0.5 mb/d. Other shale plays are expected to show marginal increases totalling 45 tb/d in 2022, given current drilling and completion activities.

Table 5 - 5: US tight oil production growth, mb/d

US tight oil	Change		Change		Change	
	2020	2020/19	2021	2021/20	2022*	2022/21
Permian tight	3.91	0.17	4.12	0.21	4.87	0.74
Bakken shale	1.18	-0.23	1.11	-0.07	1.12	0.01
Eagle Ford shale	1.06	-0.19	0.97	-0.09	1.01	0.04
Niobrara shale	0.45	-0.06	0.41	-0.04	0.46	0.04
Other tight plays	0.73	-0.14	0.67	-0.06	0.72	0.04
Total	7.34	-0.46	7.29	-0.05	8.17	0.88

Note: * 2022 = Forecast. Source: OPEC.

Graph 5 - 10: US tight crude output by shale play, y-o-y changes

Note: * 2022 = Forecast.

Sources: EIA, Rystad Energy and OPEC.

US rig count, spudded, completed, DUC wells and fracking activity

Total **US active drilling rigs** remained unchanged at 727 rigs in the week ending 3 June, which is 271 more rigs than a year ago. The number of active offshore rigs was steady w-o-w at 16, three rigs more than the same month in 2021. Moreover, 710 rigs (oil and gas) were active onshore, unchanged w-o-w, with one rig in inland waters.

The **US horizontal rig count** was also unchanged on a weekly basis at 666 rigs, compared with 415 horizontal rigs a year ago. The number of drilling rigs for oil and gas was recorded at 574 and 151, respectively, with no w-o-w changes.

The rig count in the Permian remained unchanged w-o-w at 342 rigs. At the same time, the number of active rigs remained unchanged at 66 in the Eagle Ford, at 38 in Williston basin, and at 15 in the DJ-Niobrara basins. They declined by one in the Cana Woodford to 27. Four oil rigs have been operating in the Barnett basin.

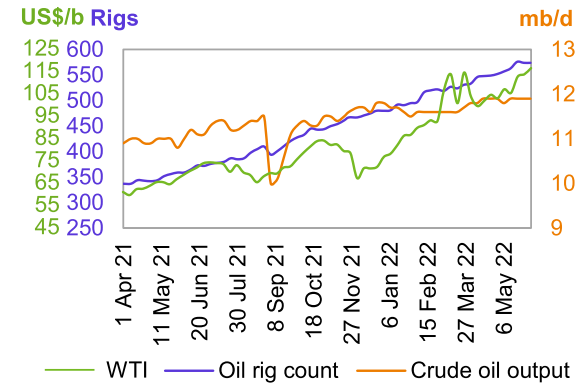
Drilling and completion (D&C) activities for spudded, completed and started wells in all US shale plays, based on the EIA-DPR regions, saw 863 horizontal wells spudded in April 2022 (as per preliminary data), up by 73 m-o-m, and 51% higher than in April 2021.

In April 2022, preliminary data indicates a lower number of completed wells at 576 m-o-m, which is down by 9% y-o-y. Moreover, the number of started wells was estimated at 624, which is 13% higher than in April 2021. Preliminary data for May estimates 786 spudded, 600 completed and 702 started wells, according to Rystad Energy.

In terms of identified **US oil and gas fracking operations** by region, Rystad Energy reported that after the highest number of fracked wells seen since March 2020, with 1,097 fracked in October 2021, 1,004 and 1,014 wells started to frack in April and May, respectively. This preliminary number is based on analysis of high-frequency satellite data.

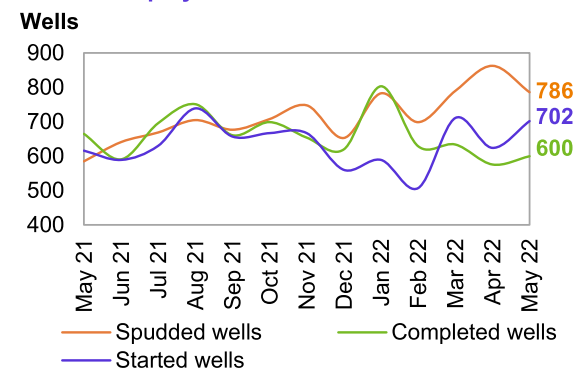
Preliminary data on fracking in April shows that 268 and 158 wells were fracked in the Permian Midland Tight and Permian Delaware Tight, respectively. In comparison with March, there was a drop of 68 wells fracked in the Delaware and a jump of 32 wells fracked in the Midland tight, according to preliminary data. Data also indicated that 90 wells were fracked in the DJ Basin, 100 in the Eagle Ford and 53 in the Bakken in April.

Graph 5 - 11: US weekly rig count vs. US crude oil output and WTI price



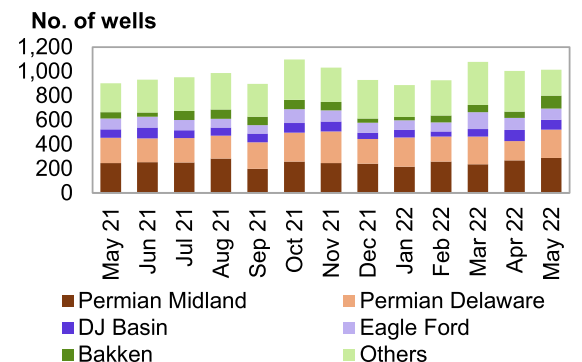
Sources: Baker Hughes, EIA and OPEC.

Graph 5 - 12: Spudded, completed and started wells in US shale plays



Note: Apr 22-May 22 = Preliminary data. Sources: Rystad Energy and OPEC.

Graph 5 - 13: Fracked wells count per month



Note: Apr 22-May 22 = Preliminary data. Sources: Rystad Energy Shale Well Cube and OPEC.

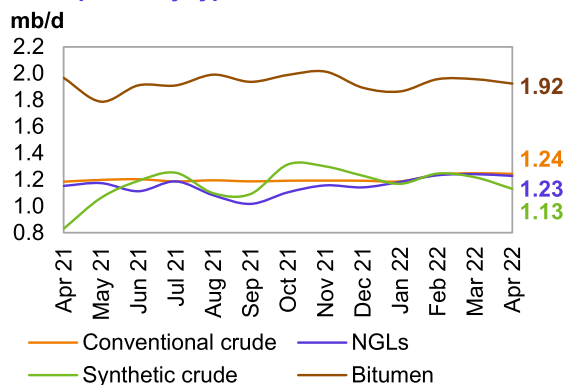
Canada

Canada's liquids production in April is estimated to have declined by 138 tb/d to average 5.6 mb/d.

Crude bitumen production and synthetic crude output decreased by 33 tb/d and 87 tb/d, respectively. Taken together, crude bitumen and synthetic crude production declined by 120 tb/d to 2.7 mb/d. At the same time, production of conventional crude and NGLs decreased slightly, following two consecutive months of increase, to average 1.2 mb/d, each.

Seasonal turnarounds in the main sand mine facilities started in April and are expected to reduce total output in the coming months, especially in 2Q22. However, project ramps and optimization in oil sands output will drive production in 4Q22.

Graph 5 - 14: Canada's monthly liquids production development by type

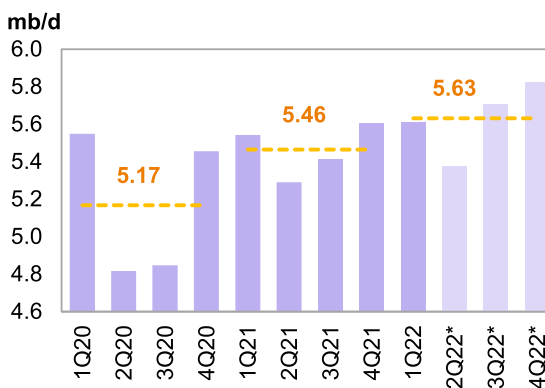


Sources: National Energy Board and OPEC.

Canadian liquids supply in 2021 is estimated to have grown by 0.3 mb/d for a yearly average of 5.5 mb/d, unchanged from the previous assessment.

For 2022, Canada's liquids production is forecast to increase at a slower pace compared with 2021, rising by 0.2 mb/d to average 5.6 mb/d, unchanged from the previous month. Lower production in 1Q22 is projected to be compensated by the end of the year, on the back of higher investment in oil sands basins.

Graph 5 - 15: Canada's quarterly liquids production and forecast



Note: * 2Q22-4Q22 = Forecast. Source: OPEC.

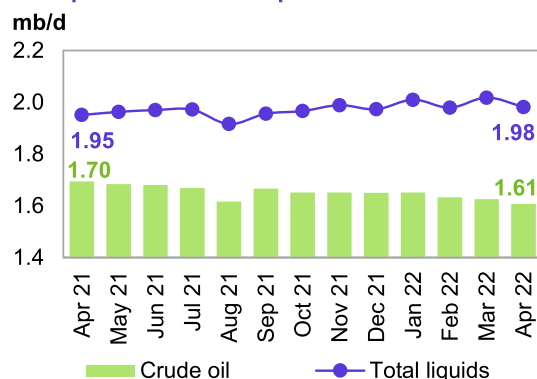
Mexico

Mexico's crude output decreased slightly in April by 18 tb/d to average 1.6 mb/d. NGLs output also was reduced by 18 tb/d. Therefore, Mexico's total liquids output in April decreased by 36 tb/d m-o-m, to average 1.98 mb/d. Lower Ku-Maloob-Zaap (KMZ) crude output offset higher production in ENI's Area 1 and some other fields.

For 2021, liquids production in Mexico is estimated to have grown by 23 tb/d to average 1.95 mb/d, up by a minor 9 tb/d, on the back of revised official data.

For 2022, growth is forecast at 30 tb/d to average 1.96 mb/d. Pemex' total crude production in mature fields continues to decline and new project output is not sufficient to offset the trend, while foreign-operated field production is expected to rise.

Graph 5 - 16: Mexico's monthly liquids and crude production development



Sources: PEMEX and OPEC.

OECD Europe

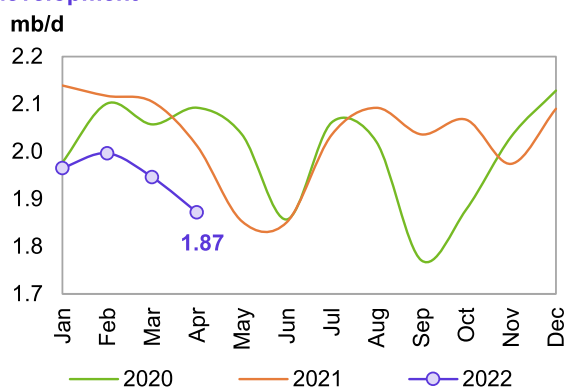
Norway

Norwegian liquids production in **April** declined by 74 tb/d m-o-m to average 1.9 mb/d. This was due to early seasonal maintenance at a number of fields related to the Troll crude-blend facilities.

Norway's crude production decreased by 82 tb/d m-o-m in April to average 1.7 mb/d, down by 72 tb/d y-o-y. Oil production in April is 10.6% lower than the Norwegian Petroleum Directorate's (NPD) forecast. Production of NGLs and condensates marginally declined by 8 tb/d m-o-m to average 0.2 mb/d, according to NPD data.

For **2021**, Norway's liquids supply growth is estimated to have grown by 31 tb/d to average 2.0 mb/d.

Graph 5 - 17: Norway's monthly liquids production development



Sources: NPD and OPEC.

For **2022**, Norway's liquids production is forecast to grow by 42 tb/d to average 2.1 mb/d, revised down by 46 tb/d from last month's assessment. This downward revision was mainly because of lower-than-expected production in April and considering planned maintenance in offshore platforms. However, following the end of the maintenance season, growth is expected in 4Q22, when the second phase of the Johan Sverdrup field development starts production, adding around 220 tb/d on top of the 535 tb/d already being produced.

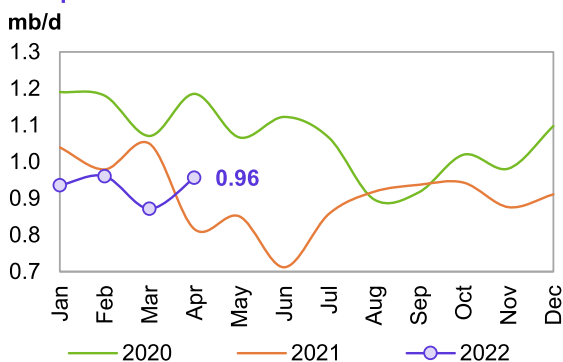
UK

UK liquids production increased in **April** by 85 tb/d m-o-m to average 0.96 mb/d. Crude oil output increased by 81 tb/d m-o-m to average 0.83 mb/d, according to official data, and was up by 112 tb/d y-o-y. NGLs output was up by a minor 4 tb/d to 92 tb/d.

For **2021**, UK liquids production is estimated to have contracted by 0.16 mb/d to average 0.91 mb/d.

For **2022**, UK liquids production is forecast to grow by 21 tb/d to average 0.93 mb/d, following two consecutive years of heavy declines, unchanged from the previous month's assessment. Low investment levels, COVID-19-related delays, and poor mature reservoir performance have been the cause of this weak growth forecast. Liquids production in the UK is expected to face challenges, given an inadequate number of new projects.

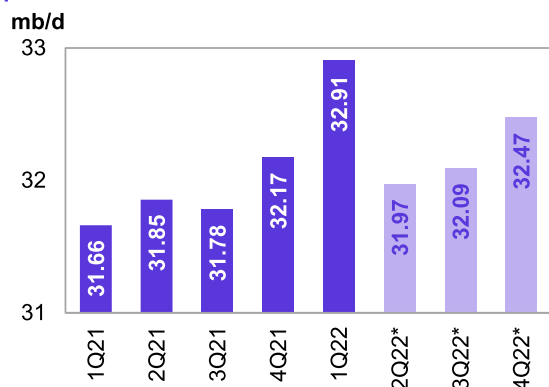
Graph 5 - 18: UK monthly liquids production development



Sources: Department of Energy & Climate Change and OPEC.

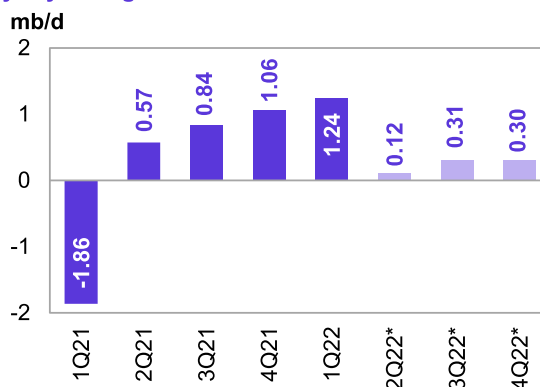
Non-OECD

Graph 5 - 19: Non-OECD quarterly liquids production and forecast



Note: * 2Q22-4Q22 = Forecast. Source: OPEC.

Graph 5 - 20: Non-OECD quarterly liquids supply, y-o-y changes

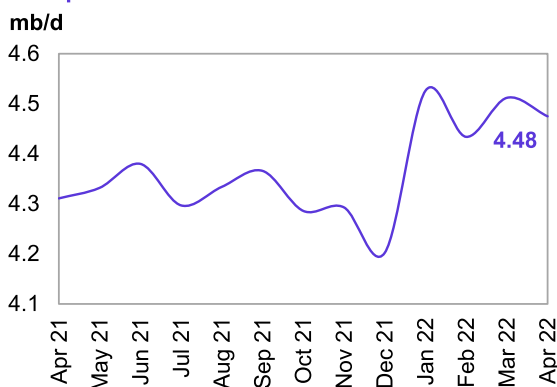


Note: * 2Q22-4Q22 = Forecast. Source: OPEC.

China

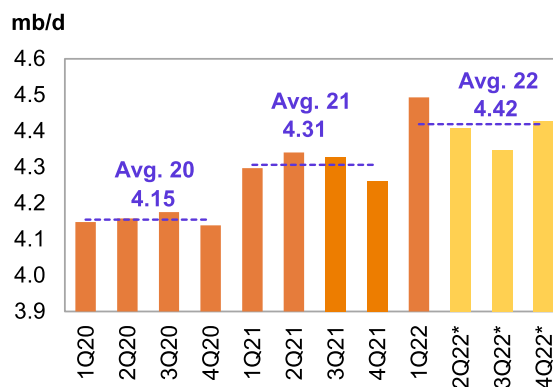
China's liquids production decreased by 37 tb/d m-o-m in **April** to average 4.5 mb/d, which was up by 164 tb/d y-o-y, according to official data. Crude oil output in April declined by 35 tb/d to average 4.1 mb/d, higher by 144 tb/d y-o-y. This marks the fourth month in a row of liquid production reaching above 4.4 mb/d.

Graph 5 - 21: China's monthly liquids production development



Sources: CNPC and OPEC.

Graph 5 - 22: China's quarterly liquids production and forecast



Note: * 2Q22-4Q22 = Forecast. Sources: CNPC and OPEC.

For **2021**, China's liquids supply is estimated to have grown by 0.2 mb/d y-o-y, to average 4.3 mb/d.

For **2022**, growth of 112 tb/d is forecast for an average of 4.4 mb/d, revised up by 28 tb/d on higher production expectations for 2Q22 compared to the previous assessment.

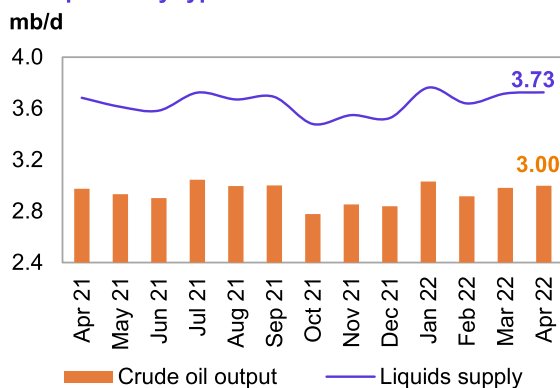
The COVID-19 lockdown in Shanghai and other provinces does not appear to have had any considerable impact on China's oil production in the previous months. Natural decline rates are still expected to be offset by Chinese company investments in new project start-ups, additional in-fill wells and EOR projects.

Latin America

Brazil

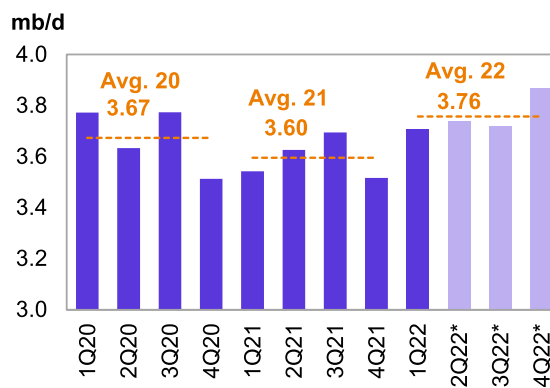
Brazil's crude output in **April** increased by 18 tb/d m-o-m to average 3.0 mb/d. NGLs production decreased slightly by 9 tb/d to average 94 tb/d and is expected to remain flat in May. Biofuel output (mainly ethanol) remained unchanged in April to average 632 tb/d, with preliminary data showing a flat trend in May as well. Therefore, in April, total liquids production increased by a minor 9 tb/d to average 3.7 mb/d, higher by 42 tb/d y-o-y.

Graph 5 - 23: Brazil's monthly liquids production development by type



Sources: ANP, Petrobras and OPEC.

Graph 5 - 24: Brazil's quarterly liquids production



Note: * 2Q22-4Q22 = Forecast. Sources: ANP and OPEC.

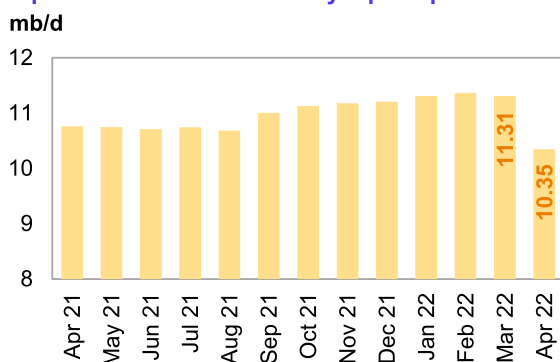
Liquids supply for **2021** is estimated to have averaged 3.6 m/d, a decline of 78 tb/d y-o-y, unchanged from the previous month's assessment.

For **2022**, Brazil's liquids supply, including biofuels, is forecast to increase by 0.2 mb/d y-o-y to average 3.8 mb/d, unchanged from the previous assessment. The main growth in 2022 will be driven by the continued ramp-up of the Sepia field, which came online in August 2021, along with two start-ups of Mero 1 and Peregrino Phase 2 in the pre-salt Santos basin. Connection activities at the Mero oilfield – the third largest field in Brazil's pre-salt regions after Buzios and Tupi – have finished and the Petrobras-operated Guanabara Floating Production Storage and Offloading (FPSO) vessel saw first oil in May.

Russia

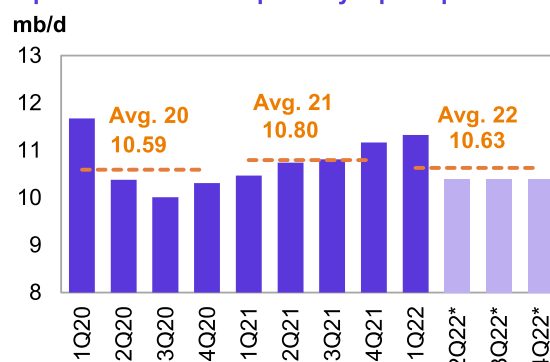
Russia's liquids production in April declined m-o-m by 964 tb/d to average 10.3 mb/d. This includes 9.1 mb/d of crude oil and condensate and 1.2 mb/d of NGLs. A preliminary estimate for Russia's crude and condensate production in May 2022 shows an expected increase of 152 tb/d m-o-m for crude and condensate to average 9.3 mb/d, while around a 38 tb/d decline is expected for NGLs.

Graph 5 - 25: Russia's monthly liquids production



Sources: Nefte Compass, The Ministry of Energy of the Russian Federation and OPEC.

Graph 5 - 26: Russia's quarterly liquids production



Note: * 2Q22-4Q22 = Forecast. Sources: Nefte Compass and OPEC.

Liquids production in **2021** is estimated to have increased by 0.2 mb/d y-o-y to average 10.8 mb/d.

For **2022**, Russian liquids output is expected to decrease by 0.2 mb/d to average 10.6 mb/d, revised down by 0.25 mb/d, compared to the previous month's assessment. It should be noted that this forecast is subject to high uncertainty.

Caspian

Kazakhstan & Azerbaijan

Liquids output in Kazakhstan decreased by 175 tb/d to average 1.8 mb/d in **April**. Crude production declined by 128 tb/d m-o-m to average 1.4 mb/d. Production of NGLs declined by 47 tb/d m-o-m in April to average 0.3 mb/d.

Kazakhstan's liquids supply forecast for **2021** is estimated to have increased marginally by 10 tb/d y-o-y, to average 1.8 mb/d. For **2022**, liquids supply is forecast to grow by 117 tb/d to average 1.95 mb/d, revised down by 25 tb/d from the previous month's assessment, due to maintenance in the Kashagan oil field in 2Q22.

Azerbaijan's liquids production in April rose by a minor 4 tb/d m-o-m to average 0.7 mb/d, up by 20 tb/d y-o-y. Crude production increased by 3 tb/d m-o-m to average 583 tb/d, while NGL output averaged at 148 tb/d, according to official sources.

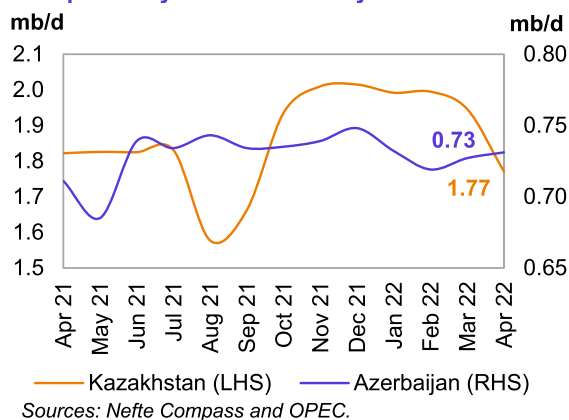
No new project is expected to come online in 2022 and the main decline in the offshore ACG crude and other legacy fields is expected to be offset by ramp-ups in other fields, such as Shah Deniz Phase 2 and the Absheron condensate project.

Azerbaijan's liquids production is expected to increase in May 2022 to average 0.8 mb/d, according to preliminary data.

For **2021**, liquids supply in Azerbaijan is estimated to have grown by 10 tb/d y-o-y to average 0.7 mb/d.

For **2022**, Azerbaijan liquids supply is forecast to grow by 56 tb/d for an average of 0.8 mb/d.

Graph 5 - 27: Caspian monthly liquids production development by selected country



OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids in 2021 are estimated to have grown by 122 tb/d, to average 5.3 mb/d, revised up by 20 tb/d, according to official data.

Production of OPEC NGLs and non-conventional oils has declined from 5.35 mb/d in 2Q18. In 2021, output was around 5.3 mb/d in all the quarters.

Output of NGLs in 1Q22 is estimated to have averaged 5.2 mb/d, while OPEC non-conventionals remained steady at 0.1 mb/d.

For **2022**, OPEC NGLs and non-conventional liquids production is forecast to grow by 0.1 mb/d to average 5.4 mb/d.

Graph 5 - 28: OPEC NGLs and non-conventional liquids quarterly production and forecast

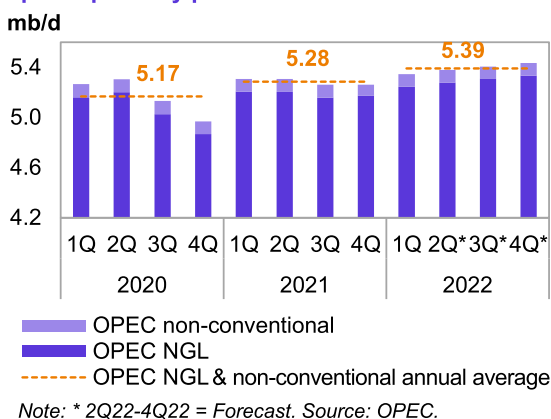


Table 5 - 6: OPEC NGL + non-conventional oils, mb/d

OPEC NGL and non-conventional oils	Change		Change		Change					
	2020	20/19	2021	21/20	1Q22	2Q22	3Q22	4Q22	2022	22/21
OPEC NGL	5.06	-0.06	5.18	0.12	5.24	5.28	5.31	5.33	5.29	0.11
OPEC non-conventional	0.10	0.01	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.00
Total	5.17	-0.05	5.28	0.12	5.34	5.38	5.41	5.43	5.39	0.11

Note: 2022 = Forecast. Source: OPEC.

OPEC crude oil production

According to secondary sources, total **OPEC-13 crude oil production** averaged 28.51 mb/d in May 2022, lower by 176 tb/d m-o-m. Crude oil output increased mainly in Saudi Arabia, the UAE and Kuwait, while production in Libya, Nigeria, Iraq, Gabon and IR Iran declined.

Table 5 - 7: OPEC crude oil production based on secondary sources, tb/d

Secondary sources	2020	2021	3Q21	4Q21	1Q22	Mar 22	Apr 22	May 22	Change May/Apr
Algeria	904	913	926	959	984	996	1,004	1,011	7
Angola	1,247	1,117	1,108	1,124	1,151	1,142	1,175	1,176	1
Congo	294	266	261	266	264	259	262	270	7
Equatorial Guinea	114	98	98	87	92	91	96	94	-2
Gabon	194	186	184	188	199	204	198	166	-32
IR Iran	1,991	2,392	2,472	2,472	2,528	2,548	2,565	2,544	-20
Iraq	4,076	4,049	4,078	4,240	4,286	4,302	4,426	4,405	-21
Kuwait	2,439	2,419	2,448	2,531	2,612	2,640	2,660	2,687	27
Libya	366	1,143	1,146	1,111	1,063	1,069	893	707	-186
Nigeria	1,575	1,372	1,335	1,321	1,376	1,339	1,306	1,262	-45
Saudi Arabia	9,204	9,113	9,557	9,879	10,164	10,215	10,364	10,424	60
UAE	2,804	2,727	2,770	2,861	2,954	2,974	3,015	3,046	31
Venezuela	512	555	540	662	684	696	719	717	-2
Total OPEC	25,721	26,351	26,922	27,700	28,358	28,475	28,684	28,508	-176

Notes: Totals may not add up due to independent rounding, given available secondary sources to date. Source: OPEC.

Table 5 - 8: OPEC crude oil production based on direct communication, tb/d

Direct communication	2020	2021	3Q21	4Q21	1Q22	Mar 22	Apr 22	May 22	Change May/Apr
Algeria	899	911	924	958	984	996	1,006	1,015	9
Angola	1,271	1,124	1,114	1,123	1,161	1,133	1,183	1,162	-21
Congo	300	267	266	260	267	264	261	261	0
Equatorial Guinea	114	93	92	79	95	95	95	89	-6
Gabon	207	181	180	183	197	198	174	183	9
IR Iran	..	..	..	..	..	..	..	..	..
Iraq	3,997	3,971	3,979	4,167	4,188	4,148	4,430	4,470	40
Kuwait	2,438	2,415	2,447	2,528	2,612	2,639	2,664	2,639	-25
Libya	389	1,207	1,220	1,182	1,151	1,166	..	..	..
Nigeria	1,493	1,323	1,269	1,260	1,299	1,238	1,219	1,024	-195
Saudi Arabia	9,213	9,125	9,565	9,905	10,224	10,300	10,441	10,538	97
UAE	2,779	2,718	2,758	2,854	2,949	2,970	3,011	3,032	21
Venezuela	569	636	635	817	756	728	775	735	-40
Total OPEC	..	..	..	..	..	..	..	..	..

Notes: .. Not available. Totals may not add up due to independent rounding. Source: OPEC.

Commercial Stock Movements

Preliminary April data shows total OECD commercial oil stocks up m-o-m by 1.8 mb. At 2,628 mb, they were 287 mb less than the same time one year ago, 332 mb lower than the latest five-year average and 299 mb below the 2015-2019 average. Within the components, crude stocks rose m-o-m by 9.3 mb, while product stocks fell m-o-m by 7.5 mb.

At 1,293 mb, OECD crude stocks were 129 mb lower than the same time one year ago, 180 mb lower than the latest five-year average and 179 mb below the 2015-2019 average. OECD product stocks stood at 1,335 mb, representing a deficit of 158 mb with the same time one year ago, 152 mb lower than the latest five-year average and 120 mb below the 2015-2019 average.

In terms of days of forward cover, OECD commercial stocks fell m-o-m by 0.6 days in April to stand at 57.4 days. This is 7.6 days below April 2021 levels, 8.0 days less than the latest five-year average and 4.8 days lower than the 2015-2019 average.

Preliminary data for May shows total US commercial oil stocks rose m-o-m by 8.2 mb to stand at 1,155 mb. This is 139.0 mb lower than the same month in 2021 and 163.3 mb below the latest five-year average. Crude stocks fell by 1.0 mb, while product stocks rose m-o-m by 9.2 mb.

OECD

Preliminary April data sees **total OECD commercial oil stocks** up m-o-m by 1.8 mb. At 2,628 mb, they were 287 mb less than the same time one year ago, 332 mb lower than the latest five-year average and 299 mb below the 2015-2019 average.

Within the components, crude stocks rose m-o-m by 9.3 mb, while product stocks fell m-o-m by 7.5 mb. Total commercial oil stocks in April rose in OECD Asia-Pacific while they declined in OECD Americas and OECD Europe.

OECD **commercial crude stocks** stood at 1,293 mb in April. This is 129 mb lower than the same time a year ago and 180 mb below the latest five-year average. Compared with the previous month, OECD Americas saw a stock build of 1.3 mb, OECD Asia Pacific rose by 4.3 mb and OECD Europe increased by 3.6 mb.

Total product inventories stood at 1,335 mb in April. This is 158 mb less than the same time a year ago, and 152 mb lower than the latest five-year average. Product stocks in OECD Americas and Europe fell m-o-m by 2.4 mb and 7.8 mb, respectively, while product stocks rose m-o-m by 2.8 mb in OECD Asia Pacific.

Table 9 - 1: OECD's commercial stocks, mb

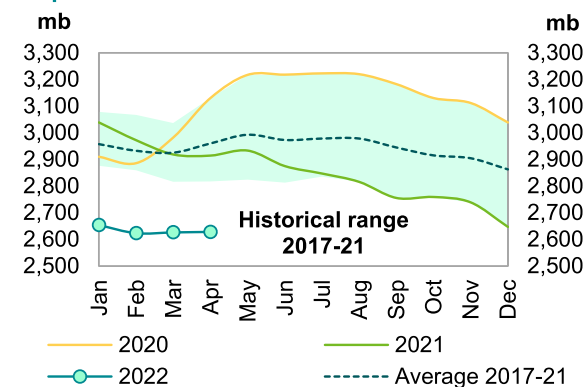
OECD stocks	Apr 21	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
Crude oil	1,422	1,255	1,284	1,293	9.3
Products	1,492	1,368	1,342	1,335	-7.5
Total	2,914	2,623	2,626	2,628	1.8
Days of forward cover	65.1	58.3	58.0	57.4	-0.6

Note: Totals may not add up due to independent rounding.

Sources: Argus, EIA, Euroilstock, IEA, METI and OPEC.

In terms of **days of forward cover**, OECD commercial stocks fell m-o-m by 0.6 days in April to stand at 57.4 days. This is 7.6 days below April 2021 levels, 8.0 days less than the latest five-year average and 4.8 days lower than the 2015-2019 average. All three OECD regions were below the latest five-year average: the Americas by 8.4 days at 55.8 days, Asia Pacific by 7.9 days at 45.1 days and Europe by 7.0 days at 67.3 days.

Graph 9 - 1: OECD commercial oil stocks



Sources: Argus, EIA, Euroilstock, IEA, METI and OPEC.

OECD Americas

OECD Americas total commercial stocks fell by 1.1 mb m-o-m in April to settle at 1,416 mb. This is 141 mb less than the same month in 2021 and 147 mb lower than the latest five-year average.

Commercial crude oil stocks in OECD Americas rose m-o-m by 1.3 mb in April to stand at 724 mb, which is 90 mb lower than in April 2021 and 89 mb less than the latest five-year average. The stock build came on the back of lower crude runs.

In contrast, **total product stocks** in OECD Americas fell m-o-m by 2.4 mb in April to stand at 693 mb. This was 51 mb lower than in the same month of 2021 and 58 mb below the latest five-year average. Higher total consumption in the region was behind the stock draw.

OECD Europe

OECD Europe total commercial stocks fell m-o-m by 4.2 mb in April to settle at 887 mb. This is 115 mb less than the same month in 2021 and 123 mb below the latest five-year average.

OECD Europe's **commercial crude stocks** in April rose m-o-m by 3.6 mb to end the month at 409 mb, which is 13 mb lower than one year ago and 32 mb below the latest five-year average. The build in crude oil inventories came despite higher m-o-m refinery throughput in the EU-14, plus the UK and Norway, which increased by 180 tb/d to stand at 9.41 mb.

Europe's **product stocks** fell m-o-m by 7.8 mb to end April at 478 mb. This is 102 mb lower than a year ago and 91 mb below the latest five-year average. The fall in product stocks could be attributed to higher consumption in the region.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks rose m-o-m by 7.1 mb in April to stand at 325 mb. This is 30 mb lower than a year ago and 62 mb below the latest five-year average.

OECD Asia Pacific's **crude inventories** rose by 4.3 mb m-o-m to end April at 161 mb, which is 26 mb lower than one year ago and 59 mb below the latest five-year average.

OECD Asia Pacific's **total product inventories** also rose m-o-m by 2.8 mb to end April at 164 mb. This is 4.3 mb lower than the same time a year ago and 2.7 mb below the latest five-year average.

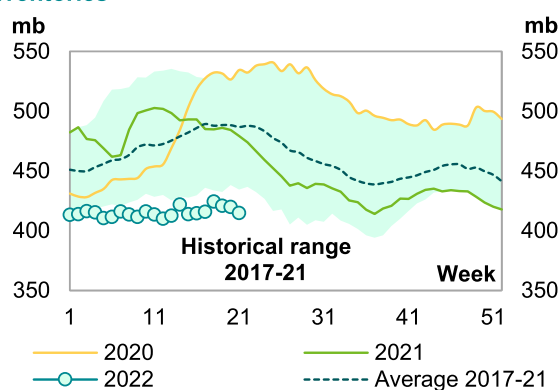
US

Preliminary data for May showed that **total US commercial oil stocks** rose m-o-m by 8.2 mb to stand at 1,155 mb. This is 139.0 mb, or 10.7%, lower than the same month in 2021 and 163.3 mb, or 12.4%, below the latest five-year average. Crude stocks fell by 1.0 mb, while product stocks rose m-o-m by 9.2 mb.

US **commercial crude stocks** in May stood at 414.7 mb. This is 61.9 mb, or 13.0%, lower than the same month of the previous year, and 71.3 mb, or 14.7%, below the latest five-year average. The monthly draw in crude oil stocks can be attributed to higher crude runs.

Total product stocks in May stood at 739.3 mb. This is 77.2 mb, or 9.4%, below May 2021 levels, and 92.0 mb, or 11.1%, lower than the latest five-year average. The stock build was mainly driven by higher product output.

Graph 9 - 2: US weekly commercial crude oil inventories



Sources: EIA and OPEC.

Gasoline stocks in May fell m-o-m by 9.6 mb to settle at 219.0 mb. This is 20.9 mb, or 8.7% lower than in the same month in 2021, and 25.0 mb, or 10.2%, lower than the latest five-year average. The monthly stock draw came mainly on the back of higher gasoline consumption.

Residual fuel oil stocks also fell by 1.3 mb m-o-m in May. At 26.9 mb, this was 4.8 mb, or 15.1%, lower than a year earlier, and 6.9 mb, or 20.5%, below the latest five-year average.

In contrast, **distillate stocks** rose m-o-m in May by 1.5 mb to stand at 106.4 mb. This is 33.6 mb, or 24.0%, lower than the same month of the previous year, and 36.9 mb, or 25.7%, below the latest five-year average.

Jet fuel stocks also rose m-o-m by 3.4 mb, ending May at 39.6 mb. This is 3.8 mb, or 8.7%, lower than the same month of 2021, and 2.2 mb, or 5.3%, below the latest five-year average.

Table 9 - 2: US commercial petroleum stocks, mb

US stocks					Change
	May 21	Mar 22	Apr 22	May 22	May 22/Apr 22
Crude oil	476.6	414.4	415.7	414.7	-1.0
Gasoline	239.9	238.5	228.6	219.0	-9.6
Distillate fuel	140.0	114.6	104.9	106.4	1.5
Residual fuel oil	31.7	27.9	28.2	26.9	-1.3
Jet fuel	43.4	35.6	36.2	39.6	3.4
Total products	817.1	739.2	730.7	739.9	9.2
Total	1,293.7	1,153.6	1,146.4	1,154.7	8.2
SPR	627.6	566.1	550.0	526.6	-23.4

Sources: EIA and OPEC.

Japan

In **Japan**, **total commercial oil stocks** in April rose m-o-m by 7.1 mb to settle at 115.2 mb. This is 11.0 mb, or 8.7%, lower than the same month in 2021 and 20.5 mb, or 15.1%, below the latest five-year average. Crude and product stocks rose by 4.3 mb and 2.8 mb, respectively.

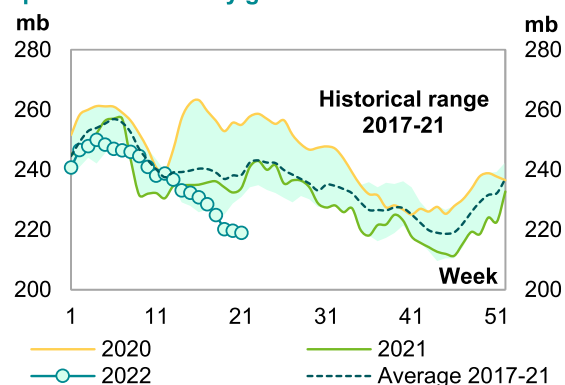
Japanese **commercial crude oil stocks** rose in April to stand at 64.8 mb. This is 1.8 mb, or 2.7%, lower than the same month of the previous year, and 13.4 mb, or 17.2%, lower than the latest five-year average. The build came on the back of higher crude imports along with lower crude runs.

Japan's **total product inventories** also rose m-o-m by 2.8 mb to end April at 50.4 mb. This is 9.1 mb, or 15.3%, lower than the same month in 2021 and 7.1 mb, or 12.3%, below the latest five-year average.

Gasoline stocks rose m-o-m by 0.5 mb to stand at 10.4 mb in April. This was 2.6 mb, or 20.3% lower than a year earlier, and 1.3 mb, or 11.3%, lower than the latest five-year average. Lower gasoline sales, which fell by 5.0%, were behind the gasoline stock build.

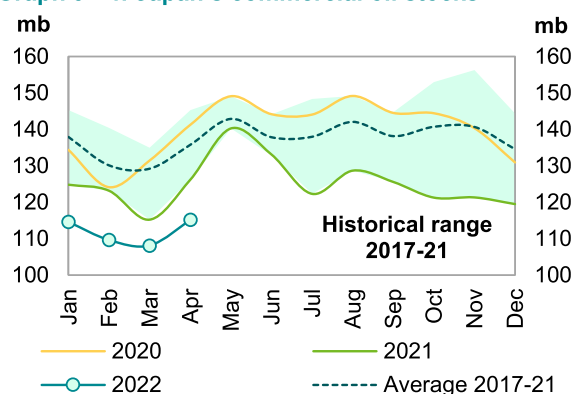
Distillate stocks also rose m-o-m by 1.0 mb to end April at 20.3 mb. This is 4.3 mb, or 17.4%, lower than the same month in 2021, and 3.5 mb, or 14.7%, below the latest five-year average. Within distillate components, jet fuel, kerosene and gasoil stocks rose by 10%, 6.4% and 1.3%, respectively.

Graph 9 - 3: US weekly gasoline inventories



Sources: EIA and OPEC.

Graph 9 - 4: Japan's commercial oil stocks



Sources: METI and OPEC.

Commercial Stock Movements

Total residual fuel oil stocks rose m-o-m by 0.9 mb to end April at 11.0 mb. This is 1.2 mb, or 10.2%, lower than in the same month of the previous year, and 1.8 mb, or 14.0%, below the latest five-year average. Within the components, fuel oil A and fuel oil B.C stocks rose by 9.2% and 8.9%, respectively.

Table 9 - 3: Japan's commercial oil stocks*, mb

Japan's stocks	Apr 21	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
Crude oil	66.6	56.0	60.5	64.8	4.3
Gasoline	13.0	11.1	9.9	10.4	0.5
Naphtha	9.8	9.0	8.4	8.8	0.4
Middle distillates	24.6	22.4	19.3	20.3	1.0
Residual fuel oil	12.2	11.2	10.1	11.0	0.9
Total products	59.6	53.6	47.6	50.4	2.8
Total**	126.2	109.6	108.2	115.2	7.1

Note: * At the end of the month. ** Includes crude oil and main products only.

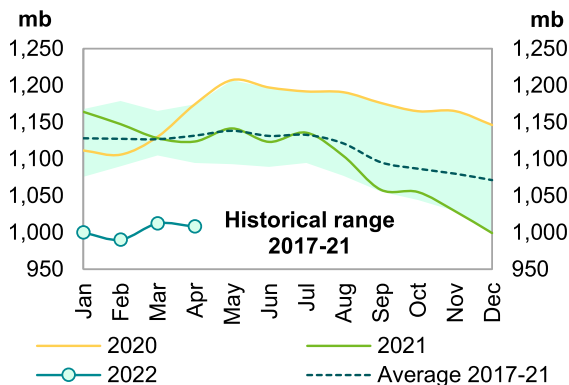
Sources: METI and OPEC.

EU-14 plus UK and Norway

Preliminary data for April showed that **total European commercial oil stocks** fell m-o-m by 4.2 mb to stand at 1,008 mb. At this level, they were 115.8 mb, or 10.3%, below the same month a year earlier, and 123.7 mb, or 10.9%, lower than the latest five-year average. Crude stocks rose by 3.6 mb, while product stocks fell by 7.8 mb.

European **crude inventories** rose in April to stand at 431.7 mb. This is 30.9 mb, or 6.7%, lower than the same month in 2021, and 54.2 mb, or 11.2%, below the latest five-year average. The build in crude oil inventories came despite higher m-o-m refinery throughputs in the EU-14, plus UK and Norway, which increased by 180 tb/d to stand at 9.41 mb.

Graph 9 - 5: EU-14 plus UK and Norway's total oil stocks



Sources: Argus, Euroilstock and OPEC.

Total European product stocks fell m-o-m by 7.8 mb to end April at 576.5 mb. This is 84.9 mb, or 12.8%, lower than the same month of the previous year, and 69.4 mb, or 10.7%, below the latest five-year average.

Gasoline stocks rose m-o-m by 2.1 mb in April to stand at 112.1 mb. At this level, they were 4.4 mb, or 3.8%, lower than the same time a year earlier, and 6.4 mb/d, or 5.4%, less than the latest five-year average.

Residual fuel stocks rose m-o-m by 0.5 mb in April to stand at 60.0 mb. This is 6.2 mb, or 9.4%, lower than the same month in 2021, and 6.7 mb, or 10.1%, below the latest five-year average.

Naphtha stocks also rose by 1.1 mb in April, ending the month at 26.0 mb. This is 5.6 mb, or 17.8%, below April 2021 levels, and 4.0 mb, or 13.3%, below the latest five-year average.

In contrast, **distillate stocks** fell m-o-m by 11.6 mb in April to stand at 378.4 mb. This is 68.7 mb, or 15.4%, below the same month in 2021, and 52.3 mb, or 12.2%, less than the latest five-year average.

Table 9 - 4: EU-14 plus UK and Norway's total oil stocks, mb

EU stocks	Apr 21	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
Crude oil	462.5	419.8	428.0	431.7	3.6
Gasoline	116.5	110.0	110.0	112.1	2.1
Naphtha	31.6	23.9	24.8	26.0	1.1
Middle distillates	447.1	379.4	390.0	378.4	-11.6
Fuel oils	66.2	57.3	59.5	60.0	0.5
Total products	661.4	570.6	584.3	576.5	-7.8
Total	1,123.9	990.3	1,012.3	1,008.1	-4.2

Sources: Argus, Euroilstock and OPEC.

Singapore, Amsterdam-Rotterdam-Antwerp (ARA) and Fujairah

Singapore

In April, **total product stocks in Singapore** fell m-o-m by 1.3 mb to 40.3 mb. This is 10.4 mb, or 20.5%, lower than the same month in 2021.

Light distillate stocks rose m-o-m by 0.3 mb in April to stand at 13.9 mb. This is 1.7 mb, or 13.8%, lower than the same month of the previous year.

In contrast, **middle distillate stocks** fell m-o-m by 0.4 mb in April to stand at 6.6 mb. This is 6.5 mb, or 49.5%, lower than a year earlier.

Residual fuel oil stocks also fell m-o-m by 1.1 mb, ending April at 19.7 mb. This is 5.6 mb, or 22.1%, lower than in April 2021.

ARA

Total product stocks in ARA fell m-o-m in April by 0.5 mb, reversing the build of last month. At 38.7 mb, they are 8.2 mb, or 17.4%, lower than the same month in 2021.

Gasoline stocks in April fell m-o-m by 0.2 mb to stand at 11.6 mb, which is 1.4 mb, or 13.3%, higher than the same month of the previous year.

Gasoil stocks fell by 0.5 mb to end April at 11.3 mb. This is 4.9 mb, or 30.5%, lower than the level seen in April 2021.

Jet oil stocks also fell m-o-m by 0.9 mb to end April at 6.7 mb. This is 1.0 mb, or 13.2%, lower than the level registered one year earlier.

In contrast, **fuel oil stocks** rose m-o-m by 0.8 mb in April to stand at 6.5 mb, which is 3.3 mb, or 34.1%, lower than in April 2021.

Fujairah

During the week ending 30 May 2022, **total oil product stocks in Fujairah** fell w-o-w by 0.12 mb to stand at 19.68 mb, according to data from Fed Com and S&P Global Platts. At this level, total oil stocks were 4.02 mb lower than the same time a year ago.

Light distillate stocks fell by 0.29 mb w-o-w to stand at 6.31 mb in the week to 30 May 2022, which is 1.09 mb higher than the same period a year ago. **Heavy distillate stocks** also fell w-o-w by 0.06 mb to stand at 10.84 mb, which is 3.81 mb lower than the same time last year. In contrast, **middle distillate stocks** rose by 0.23 mb to stand at 2.53 mb, which is 1.29 mb lower than a year ago.

Oil Market Report - June 2022

Flagship report — June 2022

About this report

The IEA Oil Market Report (OMR) is one of the world's most authoritative and timely sources of data, forecasts and analysis on the global oil market – including detailed statistics and commentary on oil supply, demand, inventories, prices and refining activity, as well as oil trade for IEA and selected non-IEA countries.

- World oil demand is forecast to reach 101.6 mb/d in 2023, surpassing pre-pandemic levels. While higher prices and a weaker economic outlook are moderating consumption increases, a resurgent China will drive gains next year, with growth accelerating from 1.8 mb/d in 2022 to 2.2 mb/d in 2023. In contrast to 2022 when the OECD led the expansion, non-OECD economies are set to account for nearly 80% of growth next year.
- Non-OPEC+ is set to lead world supply growth through next year, adding 1.9 mb/d in 2022 and 1.8 mb/d in 2023. As for OPEC+, total oil output in 2023 may fall as embargoes and sanctions shut in Russian volumes and producers outside the Middle East suffer further declines. Assuming Libya rebounds from a steep drop, the bloc's production could increase 2.6 mb/d this year, eroding its spare capacity cushion.
- Global refining capacity is set to expand by 1 mb/d in 2022 and 1.6 mb/d in 2023, boosting throughputs by 2.3 mb/d and 1.9 mb/d, respectively. Nevertheless, product markets are expected to remain tight, with a particular concern for diesel and kerosene supplies. While diesel cracks eased month-on-month in May, both jet fuel and gasoline cracks surged as demand picked up seasonally.
- Following nearly two years of declines, observed global oil inventories increased by 77 mb in April. OECD industry stocks also rose, by 42.5 mb (1.42 mb/d), helped by government stock releases of nearly 1 mb/d. At 2 669 mb, OECD industry stocks were nevertheless 290.3 mb below the 2017-2021 average. Preliminary data for May show total OECD stocks building by 6 mb.
- Despite economic headwinds, steady demand for light sweet crude in a tight physical market is boosting marker grade prices as they are in the same crude quality family. Since 6 June, WTI and Brent futures have averaged over \$120/bbl. North Sea Dated hit \$127.9/bbl on 13 June.

Small buffers

After seven consecutive quarters of hefty inventory draws, slowing demand growth and a rise in world oil supply through the end of the year should help world oil markets rebalance. This situation might prove short-lived, however, as tougher sanctions on Russia come into full force, oil demand in China recovers from Covid-lockdowns, if sharper Libyan losses persist and the OPEC+ spare production capacity cushion erodes.

Higher oil prices and a weaker economic outlook continue to temper our oil demand growth expectations. But in 2023, a resurgent China will boost non-OECD demand growth, offsetting a slowdown in the OECD. Following gains of 1.8 mb/d this year, world oil demand is forecast to expand by 2.2 mb/d to 101.6 mb/d in 2023.

Global oil supply may struggle to keep pace with demand next year, as tighter sanctions force Russia to shut in more wells and a number of producers bump up against capacity constraints. EU countries have agreed to ban 90% of the bloc's imports of Russian crude and oil products, to be phased out over the next six to eight months. Modest increases from OPEC+ will provide a partial offset, but non-OPEC+ will dominate gains for the remainder of the year and in 2023. Non-OPEC+ producers, led by the US, will add 1.9 mb/d of supply in 2022 and 1.8 mb/d next year.

Nevertheless, to keep the implied balance from tipping into deficit OPEC+ would have to further tap into its dwindling capacity cushion, reducing it to historic lows of just 1.5 mb/d.

For now though, oil inventories are rising and IEA Strategic Petroleum Reserve releases have helped reverse persistent declines in OECD industry stocks. Preliminary data show global oil stocks increased by 77 mb in April and made further gains in onshore stocks in May, yet oil prices continued their upward trajectory. At the time of writing, ICE Brent was trading at around \$124/bbl, up 11% on a month ago and 70% higher than in June 2021. With the start of summer, gains in oil product prices and cracks have been even stronger as refinery output has failed to keep up with demand for key products.

But as the refinery maintenance season winds down in the US, Europe and Asia and a rebound in Chinese throughputs gathers pace, global refinery activity is set for a solid recovery. Runs are forecast to rise by 3.5 mb/d from May through August, and by 2.3 mb/d for the year on average. A further 1.9 mb/d increase is expected next year, supported by new refinery start-ups in Africa, the Middle East and Asia. However, shortages in individual products may well persist due to uneven rates of demand growth and limits in the refining system. Diesel and kerosene supplies remain of particular concern. OECD industry stocks of middle distillates have fallen by 25% since January 2021 to their lowest levels since 2004. That very limited cushion is driving middle distillates prices to record highs, with a knock on effect for other products which could cause more pain at the pump just as pent-up demand is unleashed during the peak driving and summer cooling season.

IEA World Oil Supply and Demand Forecasts: Summary (Table)

2022-06-15 08:00:00.0 GMT

By Kristian Siedenburg

(Bloomberg) -- Following is a summary of world oil supply and demand forecasts from the International Energy Agency in Paris:

	4Q	3Q	2Q	1Q	4Q	3Q	2Q	1Q		
	2023	2023	2023	2023	2022	2022	2022	2022	2023	2022
Demand										
Total Demand	102.7	101.9	101.1	100.5	100.4	99.8	98.2	99.3	101.6	99.4
Total OECD	46.7	46.8	46.4	46.2	46.3	46.2	45.9	45.8	46.5	46.1
Americas	25.2	25.3	25.4	25.0	25.0	25.1	25.4	24.8	25.2	25.1
Europe	13.7	14.0	13.7	13.1	13.6	13.8	13.4	13.1	13.6	13.5
Asia Oceania	7.9	7.4	7.3	8.1	7.7	7.3	7.1	7.9	7.7	7.5
Non-OECD countries	56.0	55.1	54.8	54.3	54.0	53.5	52.3	53.5	55.1	53.3
FSU	4.7	4.7	4.5	4.5	4.6	4.6	4.5	4.7	4.6	4.6
Europe	0.8	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.8	0.8
China	16.8	16.3	16.2	16.0	15.9	15.7	14.5	15.5	16.3	15.4
Other Asia	14.4	13.7	14.2	14.3	13.8	13.2	13.7	13.8	14.2	13.6
Americas	6.3	6.3	6.2	6.1	6.2	6.2	6.1	6.0	6.2	6.1
Middle East	8.7	9.2	8.8	8.6	8.7	9.1	8.7	8.7	8.8	8.8
Africa	4.2	4.1	4.1	4.1	4.1	4.0	4.0	4.1	4.1	4.1
Supply										
Total Supply	n/a	n/a	n/a	n/a	n/a	n/a	n/a	98.7	n/a	n/a
Non-OPEC	66.1	66.0	65.5	64.8	65.6	66.0	64.7	64.9	65.6	65.3
Total OECD	31.6	31.1	30.8	30.8	30.6	30.0	29.2	28.8	31.1	29.6
Americas	27.6	27.3	27.1	26.9	26.7	26.2	25.5	25.0	27.2	25.9
Europe	3.5	3.4	3.3	3.4	3.4	3.2	3.2	3.3	3.4	3.3
Asia Oceania	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Non-OECD	29.1	29.1	29.2	29.1	29.8	30.4	30.3	31.4	29.1	30.5
FSU	11.7	11.6	11.7	11.7	12.4	13.1	13.2	14.4	11.7	13.3
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.2	4.3	4.3	4.3	4.2	4.2	4.3	4.2	4.3	4.2
Other Asia	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.7	2.7
Americas	5.9	5.9	5.9	5.8	5.8	5.7	5.4	5.4	5.9	5.6
Middle East	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.3	3.2
Africa	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Processing Gains	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.3
Total OPEC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	33.8	n/a	n/a
Crude	n/a	n/a	n/a	n/a	n/a	n/a	n/a	28.5	n/a	n/a
Natural gas										
liquids NGLs	5.5	5.5	5.4	5.4	5.4	5.4	5.4	5.3	5.5	5.4
Call on OPEC crude										
and stock change *	31.2	30.4	30.2	30.3	29.4	28.3	28.1	29.1	30.5	28.7

NOTE: Figures are in million of barrels per day. (*) equals total demand minus non-OPEC supply and OPEC natural gas liquids.

IEA changed the way it measures OPEC supply, adopting the industry-standard approach of counting most of Venezuela's Orinoco heavy oil as "crude oil."

SOURCE: International Energy Agency

To contact the reporter on this story: Kristian Siedenburg in Vienna at ksiedenburg@bloomberg.net

To contact the editors responsible for this story: Joshua Robinson at jrobinson37@bloomberg.net

Mark Evans

IEA: May Crude Oil Production in OPEC Countries (Table)

2022-06-15 08:00:00.2 GMT

By Kristian Siedenburg

(Bloomberg) -- Following is a summary of oil production in OPEC countries from the International Energy Agency in Paris:

	May	April	May
	2022	2022	MoM
Total OPEC	28.52	28.73	-0.21
Total OPEC10	24.47	24.52	-0.05
Algeria	1.01	1.00	0.01
Angola	1.16	1.18	-0.02
Congo	0.28	0.26	0.02
Equatorial Guinea	0.10	0.10	0.00
Gabon	0.19	0.19	0.00
Iraq	4.38	4.43	-0.05
Kuwait	2.67	2.65	0.02
Nigeria	1.11	1.23	-0.12
Saudi Arabia	10.50	10.43	0.07
UAE	3.07	3.05	0.02
Iran	2.55	2.55	0.00
Libya	0.77	0.90	-0.13
Venezuela	0.73	0.76	-0.03

NOTE: Figures are in million of barrels per day. Monthly level change calculated by Bloomberg. Production data excludes condensates.

OPEC10 excludes Iran, Libya and Venezuela.

SOURCE: International Energy Agency

To contact the reporter on this story:

Kristian Siedenburg in Vienna at ksiedenburg@bloomberg.net

To contact the editors responsible for this story:

Joshua Robinson at jrobinson37@bloomberg.net

Mark Evans

To view this story in Bloomberg click here:

<https://blinks.bloomberg.com/news/stories/RDIA1BGQITJ4>

IEA REPORT WRAP: Oil Demand to Surpass Pre-Covid Levels in 2023

2022-06-15 08:27:08.444 GMT

By Stephen Voss

(Bloomberg) -- Summary including stories from IEA's monthly

Oil Market Report on Wednesday:

* **IEA says world oil supply will struggle to meet demand in 2023**

** IEA's first estimate of 2023 demand in monthly report

** **Global demand to climb to 101.6m b/d in 2023**

** **Demand will surpass pre-pandemic levels in 2023**

- * 2022 demand est. was raised marginally
- ** 2022 changes included reduction for 3Q demand
- ** Surging gasoline prices are moderating car use
- * Click here for summary of key IEA supply/demand forecasts
- * OPEC crude output fell by 210k b/d in May: IEA
- ** Led by declines in African members
- ** See full table
- * Compliance percentages with pledged target cutbacks rose again in May as more countries can't deliver planned production increases
- ** OPEC-10 202%; non-OPEC 363%
- ** Combined OPEC+ 19 nations 261%
- ** Saudi Arabia 111%, Russia 377%
- * Russia's oil revenue jumps to \$20 billion in May
- * Road fuel demand may never return to pre-Covid levels
- * Strategic stockpiles provide welcome barrels to tight market
- * Refinery runs will be too low to meet diesel, jet demand
- * Global refining capacity to expand into next year
- * West African oil premiums rise on European refinery demand
- * Non-OPEC+ supply growth to come from conventional projects
- * TABLE: IEA's quarterly supply/demand forecasts
- * NOTE: OPEC issued its own monthly report on Tuesday, outlining threats to the rebound in demand
- * NOTE: At its latest June 2 meeting, the OPEC+ alliance agreed to larger monthly supply increases for July and August than in recent months, reviving output halted during the pandemic. It meets next on June 30

--With assistance from Bill Lehane, Jack Wittels, James Herron, Grant Smith, Rachel Graham, Kristian Siedenburger, Amanda Jordan and Julian Lee.

To contact the reporter on this story:

Stephen Voss in London at sev@bloomberg.net

To contact the editors responsible for this story:

Will Kennedy at wkennedy3@bloomberg.net

Nicholas Larkin

To view this story in Bloomberg click here:

<https://blinks.bloomberg.com/news/stories/RDID1RT0G1KW>

IEA Sees World Oil Supply Struggling to Meet Demand in 2023 (1)

2022-06-15 08:44:46.762 GMT

By Grant Smith

(Bloomberg) -- Global oil supply will struggle to meet rising demand next year, meaning consumers will continue to face tight fuel markets, the International Energy Agency said in its

first assessment of 2023.

A resurgent Chinese economy will bolster consumption, while tighter sanctions on Russia will curtail oil output, the agency forecast in its latest monthly report. The OPEC+ coalition of producers would need to deplete its spare production capacity to historically low levels to satisfy demand, it said.

The estimates from the IEA suggest little prospect of respite for households from high energy prices. Crude has climbed more than 50% this year to trade near \$120 a barrel in London, as supplies fail to satisfy the post-pandemic rebound in fuel demand.

Rampant inflation is battering the global economy, raising expectations of sharp interest rate increases and a possible recession. The political urgency to tackle the problem was underscored by Tuesday's announcement that President Joe Biden will travel to Saudi Arabia next month in an effort to stabilize relations with the world's biggest crude exporter.

Capacity Constraints

"Global oil supply may struggle to keep pace with demand next year, as tighter sanctions force Russia to shut in more wells and a number of producers bump up against capacity constraints," the Paris-based IEA said on Wednesday.

In 2023, growth in global demand is set to accelerate to 2.2 million barrels a day, while non-OPEC+ supplies will expand by 1.9 million a day. World consumption will average 101.6 million barrels a day, surpassing pre-pandemic levels, the IEA said.

READ: The Oil Price Shock Will Reverberate Into Next Year:
Javier Blas

Russian output will come under severe strain as a partial European Union embargo takes effect, slumping by 3 million barrels a day by the start of next year to 8.7 million a day, the agency said. Still, the IEA noted that the country's output has so far proved surprisingly resilient, increasing in May despite its initial predictions of a sharp drop.

To try and keep the market in equilibrium next year, the Organization of Petroleum Exporting Countries and its partners would need to open the taps even wider. But the coalition's reserves of idle output are already depleted and largely confined to Middle East heavyweights Saudi Arabia and the United Arab Emirates. By the end of 2023, the group's spare capacity could drop to a historic low of just 1.5 million barrels a day, the IEA said.

"The market is looking stretched," Toril Bosoni, head of the IEA's markets and industry division, said in a Bloomberg Television interview. "As we flip into 2023, as OPEC+ bumps up against their capacity constraints, oil demand recovers --

especially for China.”

More Pain

For the rest of this year, motorists may need to brace for “more pain at the pump just as pent-up demand is unleashed during the peak driving and summer cooling season,” the agency warned.

The recent tightening in global crude markets -- which has reduced inventories for seven straight quarters -- should abate as high prices rein in demand and lockdown measures hinder China, which is experiencing its first decline in demand growth this century.

“Higher prices, the weaker economic outlook is denting oil demand,” Bosoni said. “We’re seeing signs of a slowdown in transport fuels and in 2022 we’re seeing oil supplies rising, being able to meet that demand mostly.”

Yet those trends may bring little relief for US consumers, who are already grappling with record gasoline prices of \$5 a gallon. A shortage of refining capacity is limiting the availability of products, with supplies of diesel and kerosene - - used for aviation -- particularly constrained, the IEA said.

--With assistance from Francine Lacqua.

To contact the reporter on this story:

Grant Smith in London at gsmith52@bloomberg.net

To contact the editors responsible for this story:

James Herron at jherron9@bloomberg.net

Helen Robertson

To view this story in Bloomberg click here:

<https://blinks.bloomberg.com/news/stories/RDIF4VT0AFB6>

IEA World Oil Supply/Demand Key Forecasts

2022-06-15 08:00:00.3 GMT

By Kristian Siedenburg

(Bloomberg) -- World oil demand 2023 forecast at 101.6m b/d in Paris-based Intl Energy Agency’s latest monthly report.

* 2022 world demand was unrevised at 99.4m b/d

* Demand growth in 2023 est. 2.2% y/y or 2.2m b/d

* Non-OPEC supply 2023 estimated at 65.6m b/d

* Call on OPEC crude 2023 estimated at 30.5m b/d

* Call on OPEC crude 2022 was revised to 28.7 m b/d from 29.5m b/d

** OPEC crude production in May fell by 210k b/d to 28.52m b/d

* Detailed table: FIFW NSN RD19WVGFR4SG <GO>

* NOTE: Forecasts based off IEA's table providing one decimal point

To contact the reporter on this story:

Kristian Siedenburg in Vienna at ksiedenburg@bloomberg.net

To contact the editors responsible for this story:

Joshua Robinson at jrobinson37@bloomberg.net

Mark Evans

To view this story in Bloomberg click here:

<https://blinks.bloomberg.com/news/stories/RDIA2YGQOFSW>

OPEC Crude Output Fell 210k B/D in May on Africa Slump: IEA

2022-06-15 08:00:00.7 GMT

By Amanda Jordan

(Bloomberg) -- OPEC's May crude output fell 210k b/d from a month earlier to 28.52m b/d, led by declines among African members, the IEA said in its monthly report.

* Production in Nigeria dropped 120k b/d to 1.11m b/d -- 640k b/d short of its OPEC+ target and the lowest monthly level in almost 40 years

* Libyan output fell 130k b/d to 770k b/d amid civil unrest

* Production in Angola slipped 20k b/d to 1.16m b/d amid operational and technical issues at deepwater fields

* In the Middle East, Saudi Arabia pumped 10.5m b/d, up 70k b/d, while UAE production edged up 20k b/d to 3.07m b/d

* Iraqi output dropped 50k b/d to 4.38m b/d; Iran held steady at 2.55m b/d

* Although the major Gulf producers are "spending heavily" to boost spare capacity, that expansion won't offset declining capacity outside the region, especially in Angola and Nigeria, the IEA said

** For 2023, OPEC's crude oil capacity is forecast to slide by 40k b/d to 33.96m b/d

* OPEC's compliance with the OPEC+ output-cuts deal was 202% in May

* NOTE: On Tuesday, OPEC released its own production figures for May, estimating its 13 members pumped 28.51m b/d

To contact the reporter on this story:

Amanda Jordan in London at ajordan11@bloomberg.net

To contact the editors responsible for this story:

James Herron at jherron9@bloomberg.net

Christopher Sell

To view this story in Bloomberg click here:

<https://blinks.bloomberg.com/news/stories/RDIAELTOG1KY>

Russia's Oil Revenue Jumps to \$20 Billion in May, IEA Says

2022-06-15 08:00:08.218 GMT

By Bloomberg News

(Bloomberg) -- Russia's oil-export revenues surged to around \$20 billion in May despite shipping lower volumes, as a rally in global energy prices buoyed its coffers, according to the International Energy Agency.

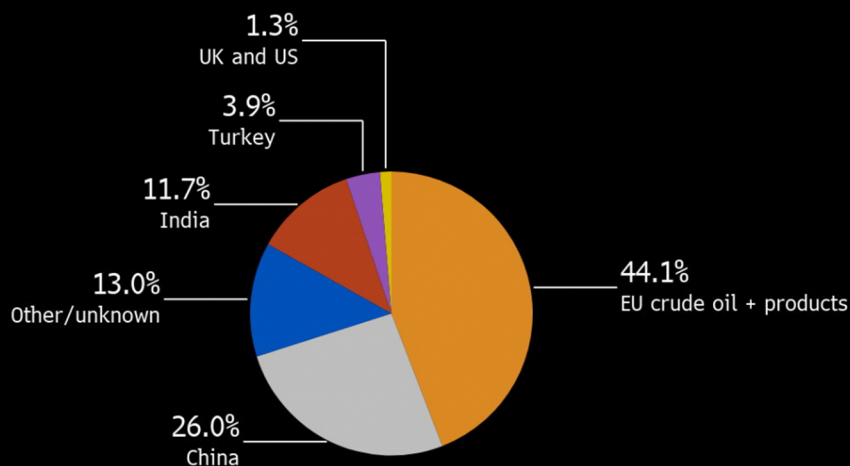
That's a 11% increase from a month earlier, taking Russia's total revenue for shipping crude and oil products roughly back to levels before the invasion of Ukraine, even as exports fell by about 3%, the IEA estimates in its monthly report published Wednesday.

The decline in overall export volumes is mainly due to lower oil-product flows, while Russian crude shipped in May grew nearly by 500,000 barrels a day compared to the start of the year, mainly thanks to higher deliveries to Asia.

"China and India, which have both sharply increased crude oil purchases from Russia, are net product exporters and have no need to lift Russian products," the IEA said.

Oil Destinations

Europe remained the key market for Russian oil producers in May



Source: IEA, Argus, Kpler

Bloomberg

Oil and gas supplies are the single-largest source of revenues for the Kremlin, and since Russia invaded Ukraine in February, Western nations and their allies have been imposing sanctions aimed at curbing the flow of money that finances the

war.

While the US has already banned imports of Russian fuel, the European Union and the UK are preparing for a gradual phaseout of Moscow's seaborne crude and oil products. Still, the nation's producers have been able to replace their traditional clients with new buyers from Asia.

Asian buyers have been snapping up the cargoes but are demanding record discounts of about 30% compared to international benchmark Brent crude prices. However, this year's Brent rally -- with prices surging almost 60% -- has partly offset the effects of the price reductions. Urals, Russia's main export blend, averaged \$78.81 a barrel in May, up almost 12% from a month before.

Still, Russia's budget has not been able to reap the full benefits of the price rally due to a stronger ruble, Bloomberg calculations show. The nation's currency gained almost 15% against the dollar last month as capital controls limited demand for foreign currency amid a flood of export revenues.

As a result, Russia's budget oil and gas revenues in May fell to 871 billion rubles (\$15.5 billion), sharply down from the record 1.81 trillion rubles in April, show calculations based on data from Russia's Finance Ministry.

To contact Bloomberg News staff for this story:

James Herron in London at jherron9@bloomberg.net

To contact the editors responsible for this story:

James Herron at jherron9@bloomberg.net

Helen Robertson

To view this story in Bloomberg click here:

<https://blinks.bloomberg.com/news/stories/RDI9XST1UM0X>

Road Fuel Demand May Never Return to Pre-Covid Levels, IEA Says

2022-06-15 08:00:00.4 GMT

By Rachel Graham

(Bloomberg) -- OECD demand for road fuel may never return to pre-Covid levels as prices rise and more people work from home, the IEA said in its monthly Oil Market Report.

* The move to electric cars is also a headwind, plus the pent-up demand that is supporting driving miles will dissipate eventually as summer driving season progresses

* "This could mean that road fuel demand is unlikely ever to attain pre-pandemic levels again"

** "Diesel faces fewer structural challenges, but is more exposed to the slowdown in global economic growth"

* High prices have curbed demand since April, with the start of

US driving season getting off to a lacklustre start

** Growth in gasoline sales at sampled stations in Great Britain

has slowed; truck traffic fell in May

* The move to higher prices and cracks after the invasion of Ukraine will probably act as a “persistent drag on demand”

* READ: New York Metro Area Gasoline Pump Price Just Hit a Fresh Record

* READ: UK Petrol Theft Surges in Early June With Prices Soaring

To contact the reporter on this story:

Rachel Graham in London at rgraham13@bloomberg.net

To contact the editors responsible for this story:

Alaric Nightingale at anightingal1@bloomberg.net

Christopher Sell

To view this story in Bloomberg click here:

<https://blinks.bloomberg.com/news/stories/RDIAUBTOG1LO>

Strategic Stocks Provide Welcome Barrels to Tight Market: IEA

2022-06-15 08:00:00.5 GMT

By Julian Lee

(Bloomberg) -- **Release of crude, products from strategic stockpiles is “providing welcome barrels to a tight oil market,” with more than 50m bbl released** in March and April, the IEA says in its latest monthly report.

* Government stocks in OECD countries drawn down by 22.1m bbl in March, 28.1m bbl in April, according to preliminary data

* So far all the US volumes and 98% in Asia Oceania have been crude, while in Europe 80% were refined products, with 76% middle distillates

* In April, Japan invited a bid for as much as 4.8m bbl, with the release scheduled for after 2H June

* At the end of May, the US announced the sale of 40.1m bbl by August 15

* NOTE: About 260m bbl of oil will be withdrawn from public stockpiles between March to end-October 2022

To contact the reporter on this story:

Julian Lee in London at jlee1627@bloomberg.net

To contact the editors responsible for this story:

Alaric Nightingale at anightingal1@bloomberg.net

Christopher Sell

To view this story in Bloomberg click here:

<https://blinks.bloomberg.com/news/stories/RDIC72T0AFB5>

Refinery Runs Will Be Too Low to Meet Diesel, Jet Demand: IEA

2022-06-15 08:00:00.23 GMT

By Jack Wittels

(Bloomberg) -- Forecast refinery throughputs are insufficient to fully meet middle distillates demand in 2022 or 2023, the International Energy Agency said in its monthly Oil Market Report.

* Refinery throughput outlook is “constrained by the lack of available operable capacity, including the impact of Russian sanctions and potential delays for new plants coming online”

* Actual market under-supply could be volumetrically less than in 2021, but inventories are at much lower levels, having been constantly drawn during 2021 and this year

** In the OECD, middle distillates commercial stocks have decreased by 25% since January 2021, falling to their lowest levels since 2004

** “As such, their cushioning effect is limited now, contributing to the extraordinary levels of middle distillates prices”

* Global diesel and jet/kerosene demand combined peaked in 4Q of 2018 at 36.7m b/d and “is not expected to reach that level again before end-2023”

** However, diesel demand, alone, reached an all-time high in 4Q of last year at 29m b/d

* Total diesel and jet/kerosene demand last year rose by an unprecedented 1.9m b/d y/y, and is set to rise by a further 1.1m b/d y/y this year and next

To contact the reporter on this story:

Jack Wittels in London at jwittels1@bloomberg.net

To contact the editors responsible for this story:

Alaric Nightingale at anightingal1@bloomberg.net

Dylan Griffiths

To view this story in Bloomberg click here:

<https://blinks.bloomberg.com/news/stories/RDIBNTT1UMOZ>

Global Oil Refining Capacity to Expand Into Next Year, IEA Says

2022-06-15 08:00:00.6 GMT

By Rachel Graham

(Bloomberg) -- Net expansion of refining capacity is forecast at 1m b/d in 2022 and 1.6m b/d in 2023, the IEA said in its monthly Oil Market Report.

* Still, product markets will remain tight

* “Over 2022 and 2023, net capacity growth is slightly less than in 2019, but is among the fastest rates for net additions observed over the last two decades”

* In terms of total crude throughput, the IEA forecasts runs to increase this year by 2.3m b/d to 80.4 million, resulting in overall net product inventory draws for the second consecutive year

** For 2023, IEA forecasts an increase of 1.9m b/d in refinery throughput to 82.2m, almost entirely from new capacity

** This would be largely sufficient to meet the expected call on refineries next year; shortages in individual products will probably persist

* While China has surpassed the US in terms of total installed capacity, the IEA said its throughput will lag the US by 2m b/d this year and 1.4m b/d next year

** China “now sits on the largest fleet of spare refinery capacity”

To contact the reporter on this story:

Rachel Graham in London at rgraham13@bloomberg.net

To contact the editors responsible for this story:

Alaric Nightingale at anightingal1@bloomberg.net

Christopher Sell

West African Oil Premiums Rise on European Refinery Demand: IEA

2022-06-15 08:00:00.22 GMT

By Bill Lehane

(Bloomberg) -- West African crude differentials made

“substantial gains” in May as European refiners sought to “fill out their crude slates” with light sweet grades amid strong

refinery margins, the IEA said in its market report.

* Distillate-rich Nigerian Forcados rose \$2.98/bbl m/m against Dated Brent to \$4.35/bbl, and climbed to \$6.90/bbl in early June

** READ, June 7: Refiners Pay Soaring Premiums for Diesel-Rich Oil from Nigeria

* Heavy sweet Angolan grades were boosted by strong low-sulfur vacuum gasoil and low-sulfur fuel oil values for the bunker fuel and refinery feedstock markets following the loss of access to Russian VGO and straight-run fuel oil

* Angola’s Girassol and Cabinda premiums both increased by more than \$3.30/bbl from late April to the end of May, reaching Dated Brent +\$3.33/bbl and +\$3.58/bbl, respectively

To contact the reporter on this story:

Bill Lehane in London at blehane@bloomberg.net

To contact the editors responsible for this story:
Alaric Nightingale at anightingal1@bloomberg.net
Amanda Jordan

To view this story in Bloomberg click here:
<https://blinks.bloomberg.com/news/stories/RDIC8OT1UM0X>

Non-OPEC+ Supply Growth to Come From Conventional Projects: IEA
2022-06-15 08:00:00.13 GMT

By Rachel Graham
(Bloomberg) -- Most of the increase in non-OPEC+ oil supply next year will come from conventional projects, a shift from recent years, the IEA said in its monthly Oil Market Report.
* Brazil is the largest source of new conventional supply in the short term, followed by Norway, the US Gulf of Mexico and Guyana
* "Almost all of the new projects are concentrated in a handful of mature basins of well-established oil producing countries. This reflects years of dwindling exploration budgets as companies sought to reduce risks and uncertainty regarding the path of the energy transition"
* The share of supply growth in 2023 stemming from US LTO is forecast to fall

To contact the reporter on this story:
Rachel Graham in London at rgraham13@bloomberg.net
To contact the editors responsible for this story:
Alaric Nightingale at anightingal1@bloomberg.net
Lars Paulsson

To view this story in Bloomberg click here:
<https://blinks.bloomberg.com/news/stories/RDICDDT0AFB6>

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

SHARE

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.

Does Joe Biden misunderstand something about him? “Simply, I do not care,” MBS replied. “It’s up to him to think about the interests of America.” He gave a shrug. “Go for it.”

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.

"Saudi Arabia is based on pure monarchy," MBS said. To remove himself from that system would amount to a betrayal of all the Saudis beneath him. "I can't stage a coup d'état against 14 million citizens."

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 pattering 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 Enghein, 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](#).

DOE Announces Contract Awards and Issues Fourth Emergency Sale of Crude Oil From the Strategic Petroleum Reserve

JUNE 14, 2022

1. DOE Announces Contract Awards and Issues Fourth Emergency Sale of Crude Oil From the Strategic Petroleum Reserve

Releases Are Part of President Biden's Comprehensive Plan to Help Protect Americans from Putin's Price Hike at the Pump

WASHINGTON, D.C.— The U.S. Department of Energy (DOE) today announced the [fourth Notice of Sale](#) of 45 million barrels of crude oil from the Strategic Petroleum Reserve (SPR). This Notice of Sale is part of President Biden's [announcement](#) on March 31, 2022 to release one million barrels of crude oil a day for six months to address the global supply disruption caused by Putin's war on Ukraine and help stabilize volatile energy costs for American families.

DOE also announced that contracts have been awarded for the purchase of crude oil from the SPR announced in a [Notice of Sale](#) on May 24, 2022. These barrels will be released between June 15 and July 31, 2022.

Combined with 3.3 million barrels of SPR crude oil scheduled for delivery this month from emergency exchanges authorized earlier this year, a total of 17 companies responded to the notice, submitting 124 bids for evaluation. Contracts were awarded to the following nine companies:

- Atlantic Trading & Marketing, Inc. (1.85 million barrels)
- Chevron USA (0.90 million barrels)
- Equinor Marketing & Trading (2.05 million barrels)
- ExxonMobil Oil Corporation (5.15 million barrels)
- Marathon Petroleum Supply and Trading LLC (8.51 million barrels)
- Motiva Enterprises LLC (4.20 million barrels)
- Phillips 66 Company (1.30 million barrels)
- Shell Trading (US) Company (0.700 million barrels)
- Valero Marketing and Supply Company (11.65 million barrels)

Deliveries from the fourth Notice of Sale will take place from August 16, 2022 through September 30, 2022. DOE must receive bids for the first Notice of Sale no later than 10:00 a.m. Central Time on June 28, 2022, and will award contracts to successful offers no later than July 8, 2022.

The May through July sales will be conducted with crude oil from the following four SPR sites:

- Up to 8.25 million barrels from Bryan Mound
- Up to 15.5 million barrels from Big Hill
- Up to 14 million barrels from West Hackberry
- Up to 7.25 million barrels from Bayou Choctaw

The SPR is the world's largest supply of emergency crude oil, and the federally owned oil stocks are stored in underground salt caverns at four storage sites in Texas and Louisiana. The SPR has a long history of protecting the economy and American livelihoods in times of emergency oil shortages.

For more information on the SPR please visit [Infographic: Strategic Petroleum Reserve](#) and [Fact Sheet: Strategic Petroleum Reserve](#). Sign up to receive future FECM news alerts [here](#).

<https://www.globaltimes.cn/page/202206/1268413.shtml>

Transmission chain of Heaven Supermarket bar-related outbreak basically stifled: Beijing official

By [Zhao Yusha](#)

Published: Jun 18, 2022 01:59 PM Updated: Jun 18, 2022 01:56 PM

Beijing has not recorded coronavirus transmission outside the quarantined compounds for three consecutive days as of Saturday, and the transmission chain of the Heaven Supermarket bar-related outbreak has been squashed, said a city official.

The capital has weathered the unprecedented challenges and risks during the recent 10 days since the newest outbreak took place on June 9, Xu Hejian, the spokesperson of the Beijing government, said at a Saturday conference. Yet the city has not seen new COVID-19 cases outside the quarantined area for three days, and the transmission chain of the current outbreak has been squashed, said Xu.

Beijing recorded a total of nine COVID-19 cases for Friday, all of them related to the raucous Heaven Supermarket Bar, the epicenter of the capital city's latest outbreak. This marks the first time the number of confirmed cases has dropped to a single digit since the newest outbreak attacked Beijing last week.

All the cases were found in quarantined areas, local authorities said on Saturday. Beijing is also scheduled to resume on Sunday the operation of subway stations that were closed due to the outbreak.

As of Friday, a total of 369 cases were reported during the outbreak linked to the Heaven Supermarket since June 9.

"The continuous declining of cases surely is a positive trend that means we may already be at the tail of this outbreak," said a Beijing-based immunologist, who declined to give his name. But the immunologist believed that even if this outbreak was effectively staunched, sporadic cases may still emerge in the city, as the source of the Heaven Supermarket Bar remain unknown.

The recent outbreak was triggered by a customer of the bar last week who had not taken a test for 14 days prior to his visit of the bar. Beijing has been asking all its residents to undergo a nucleic acid test every three days, and if not, the health code will send notifications. People are also required to show their health codes before entering any public places.

Yet the immunologist believed with effective testing and quarantine measures in hand, and accumulated experience in battling the more infectious Omicron variant, Beijing won't experience a major outbreak in the near future. "The hot weather also helps [in cutting off the viral transmission]," he added.

During a press conference on Friday, Liu Xiaofeng, deputy head of the Beijing municipal centers for disease prevention and control, said that Beijing is seeing a positive trend in containing the virus, yet there should be no relaxation of antiviral prevention efforts, and urged people to stick to all virus prevention policies.

Since the outbreak in Heaven Supermarket, Beijing has conducted sweeping examination of public places, especially entertainment venues and restaurants in Chaoyang district, where the bar is located, of their implementation of COVID-19 prevention policies.

A total of 68 companies, including some barbecue restaurants in Chaoyang district, were warned for failed efforts in carrying out COVID-19 prevention measures.

Several other employees at public service sectors in Beijing, including a branch at Beijing Municipal People's Procuratorate, were also punished for violating COVID-19 policies by gathering for drinking.

Aviation Indicators Weekly

BloombergNEF is tracking the evolution of passenger flight schedules and departures globally. This note provides a weekly update of these data points to guide expectations of the demand for aviation fuel.

Metric	Frequency	June 2 to June 8
Passenger flight schedule	Weekly	Scheduled departures increased by a small amount week-on-week
Implied fuel consumption	Weekly	Implied fuel consumption decreased week-on-week but grew year-on-year
Asia Pacific jet fuel demand	Weekly	Jet fuel demand in Asia Pacific increased week-on-week and year-on-year
Europe jet fuel demand	Weekly	Jet fuel demand in Europe increased week-on-week and year-on-year
Americas jet fuel demand	Weekly	Jet fuel demand in the Americas increased week-on-week and year-on-year
Rest of World jet fuel demand	Weekly	Rest of World jet fuel demand increased week-on-week and year-on-year

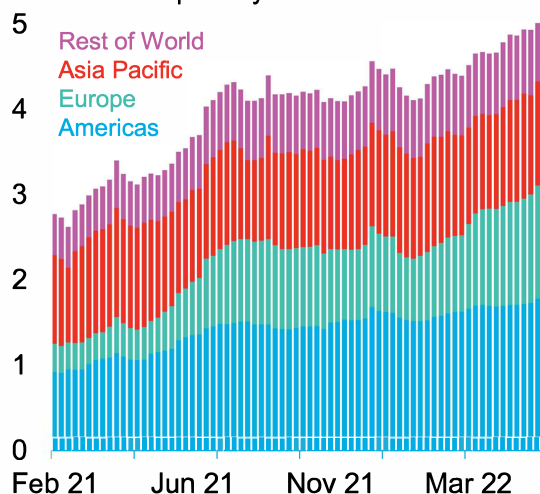
Source: DATA FLY<GO>, BloombergNEF. Note: Green signals an upturn from the disruption caused by Covid-19, red indicates no upturn, orange indicates a possible upturn.

- Global passenger jet fuel demand rose by 3.7% week-on-week from June 2-8. All regions saw a weekly gain of more than 3%, with the highest increases being recorded in Asia Pacific (4.5%) and Europe (4.2%).
- Cancellations since the previous week have removed on average 12,877 barrels per day of jet fuel demand over the next four weeks, largely driven by Europe, the Middle East and Africa.
- In Europe, departures in the Eurocontrol area increased by 2.3% week-on-week as a result of summer schedules commencing. KLM, Lufthansa and Turkish Airlines were among the carriers that boosted activity.
- However, the start-of-summer boost in flight schedules has coincided with staff shortages and operational issues at airports, leading British Airways, EasyJet and TUI to experience delays and cancellations.
- US passenger numbers increased by 4.3% week-on-week as the country heads into the summer travel months, and due to the recent removal of Covid-19 testing requirements by the Centers for Disease Control and Prevention (CDC).
- In China, the number of scheduled domestic flights is set to increase by 72.4% over the next four weeks, according to current flight schedules, as major cities continue to ease lockdown restrictions. However, this growth may not materialize, as China has routinely cut several thousands of flights from the schedule a week or so before the due departure date. Air China, China Southern and Xiamen Airlines are among the carriers that reduced the number of flights operated over the past week.

Commercial passenger flight jet fuel demand

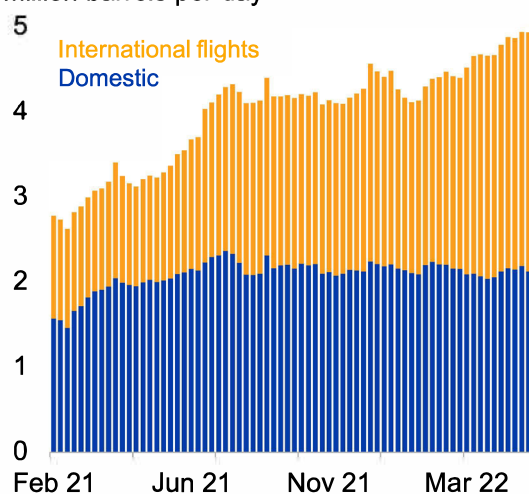
Demand by departure region

Million barrels per day



Demand by flight type

Million barrels per day



- Global passenger jet fuel demand rose by 3.7% week-on-week from June 2-8.
- All regions registered weekly gains of more than 3%, with the highest increases being recorded in Asia Pacific (4.5%) and Europe (4.2%).
- Jet fuel demand from domestic flights climbed by 3.7% week-on-week.
- All regions recorded year-on-year growth in jet fuel demand, led by Europe.
- For more cuts of this data, see [DATA FLY<GO>](#).

For more on demand and pricing fundamentals, see BNEF's Oil Price Indicators Weekly

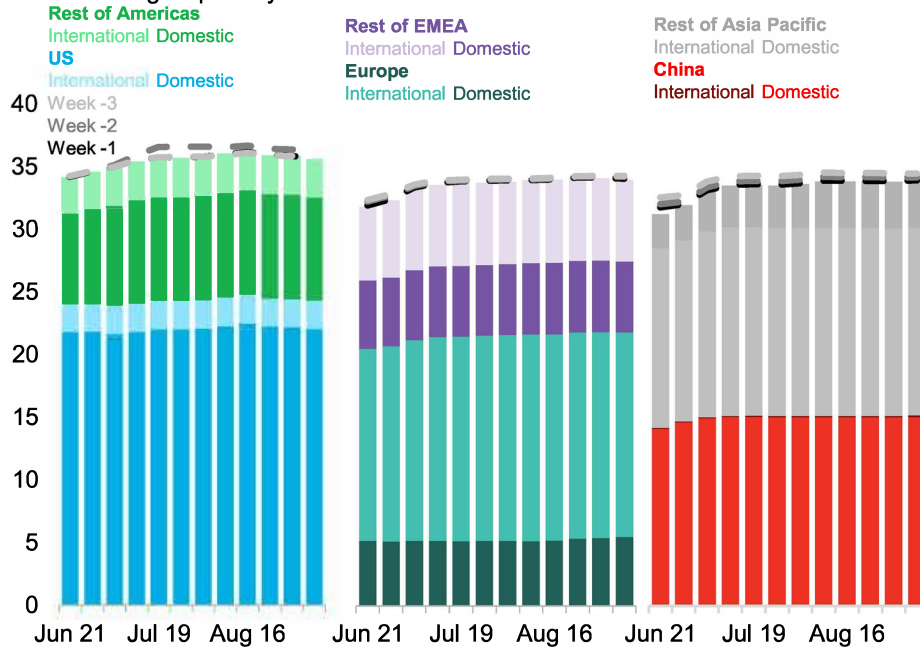


K bbl per day	Latest	Week Δ	Four-week Δ	Year-on-year Δ	K bbl per day	Latest	Week Δ	Four-week Δ	Year-on-year Δ
World	5,111	183.7 (+3.7%)	241.0 (+4.9%)	1611.8 (+46.1%)	International	2,805	105.4 (+3.8%)	200.1 (+7.4%)	1502.6 (+106.7%)
Americas	1,787	53.2 (+3.1%)	77.5 (+4.5%)	486.2 (+37.4%)	Domestic	2,122	78.3 (+3.7%)	40.9 (+1.9%)	109.2 (+5.2%)
Europe	1,322	52.8 (+4.2%)	115.0 (+9.5%)	772.3 (+140.5%)					
Asia Pacific	1,214	52.4 (+4.5%)	25.5 (+2.2%)	150.3 (+14.1%)					
Rest of World	789	25.4 (+3.3%)	23.0 (+3.0%)	203.0 (+34.7%)					

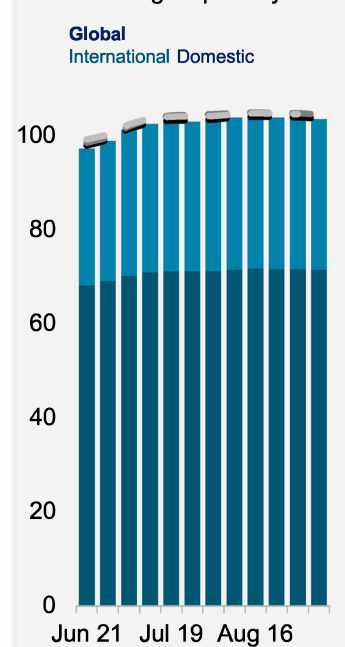
Source: BloombergNEF, Bloomberg Terminal [DATA FLY<GO>](#). Note: The model does not account for load factors of aircraft, route inefficiencies or cargo flights.

12-week-ahead passenger departure schedule

Thousand flights per day



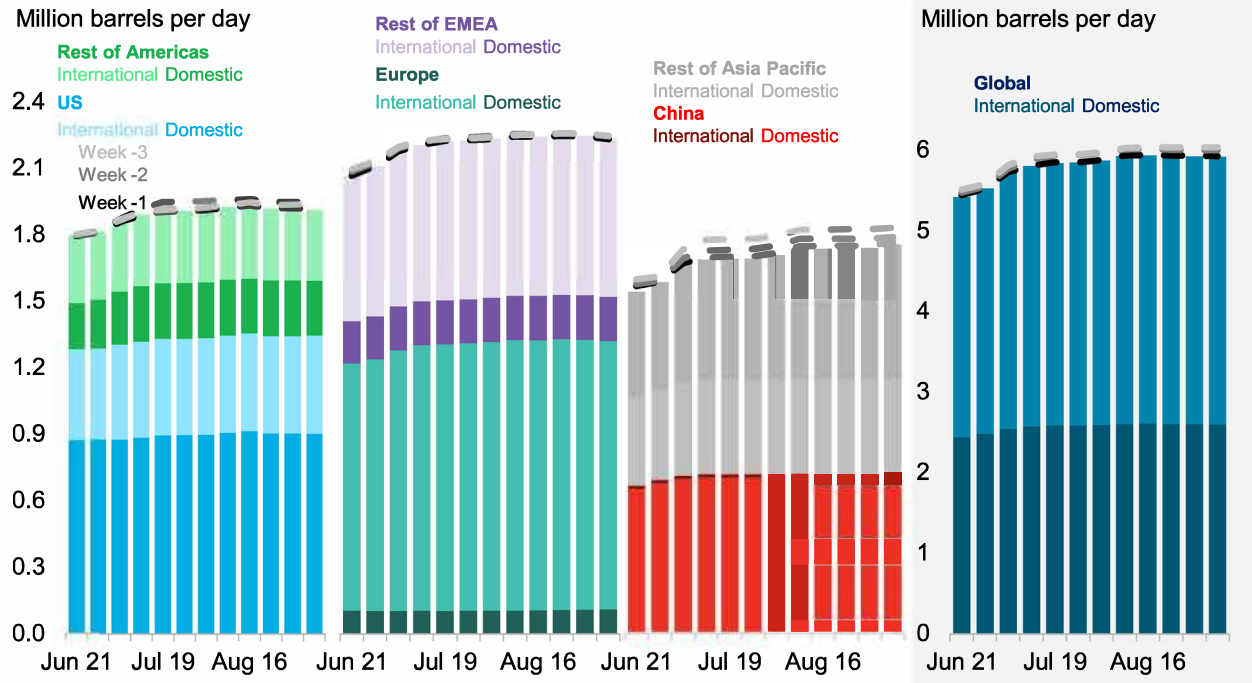
Thousand flights per day



- Globally, the passenger flight schedule for the 12 weeks ahead is 0.26% lower than the previous week – essentially unchanged.
- The number of domestic passenger flights in Russia for the week of June 7-13 increased by 11.3% versus the previous week, as the country tries to normalize travel patterns.
- Turkey and Tajikistan are the main destinations for international flights departing from Russia, with the number of flights set to increase by 4.0% and 1.9%, respectively, over the next week, based on current schedules.
- Terminal users can track the Russian aviation market [here](#).

Source: BloombergNEF, Bloomberg Terminal [DATA FLY<GO>](#). Note: As of June 8, 2022. Based on more than 11,000 commercial airports, taking the average daily scheduled flight departures per week. Excludes cargo flights. Europe is defined as the EU 27, European Free Trade Association (EFTA) and the UK. Intra-Europe flights are defined as international.

Jet fuel demand implied by scheduled flights



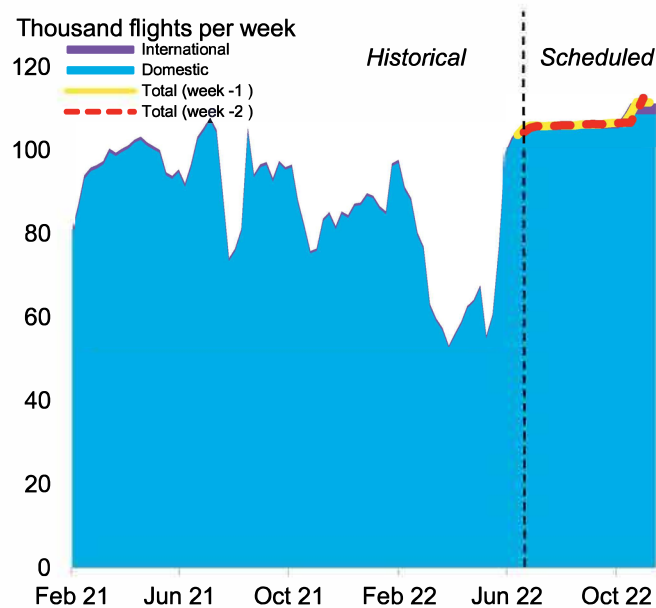
- Based on the number of passenger flights scheduled, jet fuel demand over the next four weeks will average 5.61 million barrels per day. Fuel consumed in cargo flights is not included in this number.
- Cancellations since last week have removed on average 12,877 barrels per day of jet fuel demand over the same four weeks.
- For more cuts of this data see [DATA FLY<GO>](#).

Source: BloombergNEF, Bloomberg Terminal [DATA FLY<GO>](#). Note: As of June 8, 2022. Oil consumption is based on the aircraft model, distance between origin and destination airport and the fuel efficiency of each aircraft type. Consumption is allocated to the departure airport and does not account for load factor, or inefficiencies such as longer routes or circling at an arrival airport. Intra-Europe flights are defined as international.

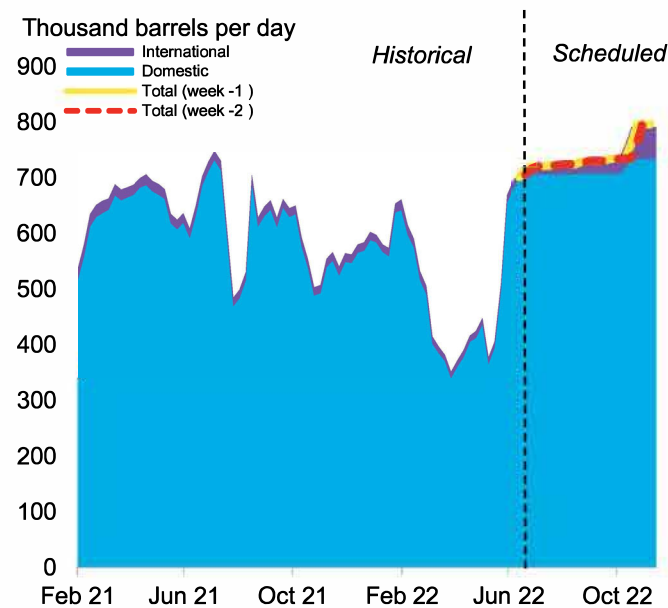


Spotlight: China

Number of flights



Implied jet fuel demand



- The number of scheduled domestic flights in China is set to rise by 72.4% to 103,000 per week in the next four weeks, as some major hubs continue to emerge from lockdowns.
- Implied jet fuel demand over the same period will increase by 77.0% to 699,000 barrels per day, should all flights operate as planned.
- The scheduled number of flights and implied jet fuel demand over the coming weeks may not materialize, as China has routinely cut several thousands of flights from the schedule a week or so before the due departure date.
- Air China, China Southern and Xiamen Airlines are among the carriers that canceled flights over the past week.

Source: BloombergNEF, Bloomberg Terminal FLY <GO>. Note: Last updated June 12, 2022. Excludes cargo flights. The future flight schedule is subject to change. Terminal users can check DATA FLY <GO> for further details.



Chairman of the Board of Rosneft Oil Company Igor Sechin

<https://tass.ru/ekonomika/14962411>

4 hours ago,

[SPIEF-2022](#)

Sechin said that unfriendly countries will receive Russian oil at a price with a premium

According to the head of Rosneft, there is a movement towards a new configuration of the oil market ST. PETERSBURG, June 18. /TASS/. The global oil market is currently moving towards a new configuration with a premium to the oil price for unfriendly countries, Rosneft CEO Igor Sechin said on the sidelines of SPIEF 2022.

"We are already seeing a movement towards a new configuration of the oil market, where two price contours are being formed: for friendly countries - a fair market price, and for unfriendly countries - a premium is added to the price, which will be used to pay off our costs associated with the violation of rules and obligations by our former partners," he said.

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[SPIEF-2022](#)

Sechin: Europe's "energy suicide" will have long-term consequences

© Maxim Guchek/BeITA/TASS

According to the head of Rosneft, the level of competitiveness of Europe is also undermined by the rejection of Russian oil and gas

ST. PETERSBURG, June 18. /TASS/. The "energy suicide" now committed by Europe will have long-term consequences, a decrease in its economic potential is already observed, said the head of Rosneft, Igor Sechin, on the sidelines of SPIEF-2022.

"Europe's energy suicide will have long-term consequences. We are already seeing a decline in its economic potential, loss of competitiveness and direct losses for investors. Thus, in France, the CAC 40 stock index fell by 18%, in Germany the DAX index fell by 19%, in Italy - by 22%. In total, investors in the three European countries have already lost about \$1.6 trillion," Sechin said.

Europe's level of competitiveness is also undermined by the abandonment of Russian oil and gas, which has made it the region with the highest cost of energy in the world, the head of Rosneft said.

Social degradation

The imposition of anti-Russian sanctions imposed on it by the European Union has led to the fact that European countries are faced with social degradation, Sechin believes.

"In fact, what Europe faced, having adopted the anti-Russian sanctions imposed on it, is social degradation. In fact, the dismantling of the social market economy model. Both social and market economy," he said. "This is the collapse of a great model post-war Germany: Ludwig Erhard and Alfred Müller-Armack's "Welfare for All" - what the Germans were so proud of and considered a model for the whole world.

<https://tass.ru/ekonomika/14962297>

4 hours ago, updated 4 hours ago

[SPIEF-2022](#)

Sechin told who will suffer the most from rising energy prices in the world

These are steelmakers, producers of ammonia and fertilizers, said the head of Rosneft

ST. PETERSBURG, June 18. /TASS/. The largest LNG producers in the world will not be able to increase gas production to replace Russian supplies to Europe. Rising energy prices as a result will hit steelmakers and fertilizer

producers, Igor Sechin, head of Rosneft, said during a report on the sidelines of the St. Petersburg International Economic Forum.

"Europe and the rest of the world have cause for concern. Even such major LNG producers as Australia, Qatar and the United States cannot sharply increase gas production," Sechin said. He added that the United States can increase gas production by only 10% of the volume required to replace Russian supplies. Europe, he said, will have to buy up LNG from other markets, provoking a rise in prices for them.

Sechin also noted that as a result of the rise in energy prices, there is a catastrophic deterioration in economic conditions for enterprises. "The steel industry may be the most affected, because without Russian gas it is impossible to maintain a continuous cycle of steel smelting," he explained. Significant losses, according to him, expect producers of ammonia and fertilizers. As a result, Europe may face a collapse in all industrial production and an increase in unemployment, Sechin added.

<https://tass.ru/ekonomika/14962361>

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updated 4 hours ago

SPIEF-2022

Sechin considers it necessary to increase the share of settlements in national currencies "more boldly and faster"

According to the head of Rosneft, the dollar and the euro have lost the status of reliable

ST. PETERSBURG, June 18. /TASS/. The head of Rosneft, Igor Sechin, during a report on the sidelines of the SPIEF-2022, called for "bolder and faster" to increase the share of settlements in national currencies due to the loss of the status of reliable currencies by the dollar and the euro amid the blocking of Russia's gold and foreign exchange reserves.

"Against the background of the blocking of Russian gold and foreign exchange reserves, the dollar and the euro themselves lost the status of reliable currencies, as it became obvious that access to them could be limited at any moment. and commodity deliveries, intensify contacts between national banks and strengthen the integration of national payment systems of various countries," he said, adding that mutual investment could become another direction to strengthen cooperation and normalize trade balances. Expanding partnerships and building joint institutions will create an effective alternative to a unipolar world, Sechin stressed.

"The value of the euro as the world reserve currency is declining. The abandonment of Russian energy resources and the decrease in the competitiveness of the European economy have already led to capital flight and the fall of the euro against the dollar by 8%, from 1.13 at the beginning of the year to 1.04 now. In fact, By banning trade relations with Russia, Europe has limited the circulation of its currency, reducing its attractiveness for international settlements," the head of Rosneft said.

<https://tass.ru/ekonomika/14962395>

4 hours ago,

SPIEF-2022

Sechin announced a "coal renaissance" in the world

Coal-fired generation in Europe may grow by more than a third this year, head of Rosneft noted

ST. PETERSBURG, June 18. /TASS/. The share of coal in the energy balance of Europe increased by 18% in 2021, and in 2022 it can grow by more than a third, there is a real "coal renaissance". This was stated by the head of Rosneft Igor Sechin on the sidelines of SPIEF-2022.

"At the same time, the demand for cheaper substitutes is growing and the share of coal in the energy balance is increasing. Thus, coal-fired generation in Europe, which has already grown by 18% in 2021, can grow by more than a third in 2022. There is a real "coal renaissance", largely undermining global efforts to reduce the carbon footprint," said the head of Rosneft.

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4 hours ago

SPIEF-2022

Sechin: the US can get to their companies, having exhausted the resource of sanctions against other countries

Among them, the head of Rosneft named Iran, Venezuela and Russia
ST. PETERSBURG, June 18. /TASS/. The United States can get to their companies, having exhausted the resource of sanctions against Iran, Venezuela and the Russian Federation, the head of Rosneft, Igor Sechin, believes. Speaking as part of the energy panel at SPIEF, Sechin cited excerpts from US President Joe Biden's address to the country's oil companies about the historically high margins of refineries and the response of the American Fuel and Petrochemical Association and the American Petroleum Institute. "Today's problems are largely the result of high oil prices due to: first, the imbalance of supply and demand, second, the redistribution of logistics ties as the world emerges from the pandemic, high consumer demand, as well as a ban on Russian products, and third, political decisions made over the years <...>", Sechin quoted the letter. "All this suggests that, having exhausted the sanctions resource against Iran, Venezuela and Russia, the administration can get to the market players in the United States itself," the Rosneft president said.

<https://tass.ru/ekonomika/14962119>

updated 4 hours ago

SPIEF-2022

Sechin: the EU court recognized the purpose of sanctions against Rosneft to cause damage to the Russian economy

© Mikhail Klimentiev/Press Service of the President of the Russian Federation/TASS

According to the head of Rosneft, the court recognized that the company's activities are critical for filling the budget of the Russian Federation and developing the country

ST. PETERSBURG, June 18. /TASS/. The European Court of Justice recognized that the sanctions against Rosneft, introduced in 2014, are aimed at causing damage to the Russian economy and causing such damage, according to the court, is permissible and lawful. This was stated by the head of Rosneft Igor Sechin during a report on the sidelines of SPIEF-2022.

According to the head of the oil company, the EU court, refusing to lift the imposed sanctions on Rosneft, recognized that the company's activities are critical for filling the budget of the Russian Federation and developing the country. For this reason, the imposition of sanctions is justified.

"Thus, the EU Court expressly recognized that the purpose of the sanctions against Rosneft is to cause damage to the Russian economy and its citizens, that such damage is permissible and lawful if it meets the EU's foreign policy goals," Sechin summed up.

[Iranian oil](#)

The accusations of the US presidential administration against Rosneft in the supply of Iranian oil to Europe are unlawful and unfounded, the head of Rosneft said.

"US administration officials once again absolutely unfoundedly and wrongfully accused our company of supplying Iranian oil to Europe," he said, thanking the Russian Foreign Ministry, which protested against the "fictitious" accusations by high-ranking US officials.

<https://tass.ru/ekonomika/14962223>

4 hours ago

SPIEF-2022

Sechin said sanctions against Russia ended the "green transition" in the world

According to the head of Rosneft, "residual" green rhetoric "completely contradicts real practice"

ST. PETERSBURG, June 18. /TASS/. Sanctions against the Russian Federation have ended the "green transition" in the world, says the head of Rosneft, Igor Sechin. He stated this while delivering a report at the SPIEF.

"Anti-Russian sanctions essentially ended the green transition," Sechin said. According to him, the residual "green rhetoric" contradicts real practice, which is aimed "at any cost to search for any sources of hydrocarbons to replace Russian ones," he said.

According to the head of Rosneft, the "green transition" is no longer really needed as a way to manipulate the market when more rude and radical approaches are available. "In particular, an attack for the purpose of stealing someone else's property, committed with the use of violence - "robbery", article 162 of the Criminal Code of the Russian Federation," Sechin said.

<https://twitter.com/transportgovuk/status/1536638351784173570>

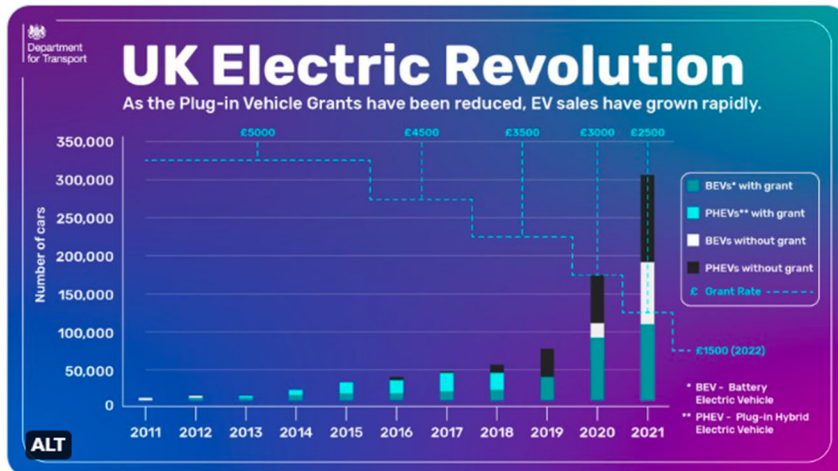


Department for Transport
@transportgovuk

...

The Plug-in Vehicle Grant has helped successfully kickstart the electric car market, so we're now focusing support on getting even more types of electric vehicles on the road, from taxis to vans, to power the green revolution. ⚡

[gov.uk/government/new...](https://www.gov.uk/government/new...)



3:15 AM · Jun 14, 2022 · Twitter Web App

<https://www.gov.uk/government/news/plug-in-grant-for-cars-to-end-as-focus-moves-to-improving-electric-vehicle-charging>

News story

Plug-in grant for cars to end as focus moves to improving electric vehicle charging

Government to concentrate funding on expanding the public chargepoint network as well as electric taxis, vans, trucks, motorcycles and wheelchair accessible vehicles.

From:

[Department for Transport](#), [Office for Zero Emission Vehicles](#), and [Trudy Harrison MP](#)

Published

14 June 2022



- £300 million in grant funding for sales of electric vans, taxis and motorcycles to boost drive to net zero
- success in the UK's electric car revolution leads the government to refocus plug-in grant funding to encourage other vehicles to 'charge up and go green'
- part of government's zero-emission travel plans, already supported by generous electric car tax incentives and £2.5 billion investment

The government is today (14 June 2022) closing the plug-in car grant scheme to new orders after successfully kickstarting the UK's electric car revolution and supporting the sale of nearly half a million electric cars.

The scheme has succeeded in creating a mature market for ultra-low emission vehicles, helping to increase the sales of fully electric cars from less than 1,000 in 2011 to almost 100,000 in the first 5 months of 2022 alone.

Battery and hybrid electric vehicles (EVs) now make up more than half of all new cars sold and fully electric car sales have risen by 70% in the last year, now representing 1 in 6 new cars joining UK roads.

The government has always been clear the plug-in car grant was temporary and previously confirmed funding until 2022-23. Successive reductions in the size of the grant, and the number of models it covers, have had little effect on rapidly accelerating sales or on the continuously growing range of models being manufactured.

Due to this, the government is now refocusing funding towards the main barriers to the EV transition, including public charging and supporting the purchase of other road vehicles where the switch to electric requires further development.

To continue the government's drive towards net zero and ensure effective use of taxpayer funds, £300 million in grant funding will now be refocused towards extending plug-in grants to boost sales of plug-in [taxis](#), [motorcycles](#), [vans and trucks](#) and [wheelchair accessible vehicles](#), as announced in the [autumn statement](#).

The shift in focus will also help allow government funding to target expanding the public chargepoint network, helping to eradicate “range anxiety” and ensure the transition to zero-emission transport is easy and convenient for all drivers across the UK. The government has already [committed £1.6 billion to building the UK’s public chargepoint network](#).

Significant savings in running costs for electric cars compared to petrol or diesel equivalents can often exceed the current £1,500 value of the grant, and electric car drivers will continue to benefit from generous incentives including zero road tax and favourable company car tax rates, which can save drivers over £2,000 a year.

All existing applications for the grant will continue to be honoured and where a car has been sold in the 2 working days before the announcement, but an application for the grant from dealerships has not yet been made, the sale will also still qualify for the grant.

Transport Minister Trudy Harrison said:

The government continues to invest record amounts in the transition to EVs, with £2.5 billion injected since 2020, and has set the most ambitious phase-out dates for new diesel and petrol sales of any major country. But government funding must always be invested where it has the highest impact if that success story is to continue.

Having successfully kickstarted the electric car market, we now want to use plug-in grants to match that success across other vehicle types, from taxis to delivery vans and everything in between, to help make the switch to zero emission travel cheaper and easier.

With billions of both government and industry investment continuing to be pumped into the UK’s electric revolution, the sale of electric vehicles is soaring.

We are continuing to lead the way in decarbonising transport, with generous government incentives still in place, while creating high-skilled jobs and cleaner air across the UK.

The government’s measures to support the uptake of electric cars over the past decade have helped to exceed electric car projections, with 39,000 new EV registrations in March 2022 – more than in the whole of 2019. Since its inception in 2011, the government’s plug-in car grant has provided over £1.4 billion and supported the purchase of nearly half a million clean vehicles.

A new [public evaluation report](#) has been published today highlighting while the plug-in car grant was vital in building the early market for electric vehicles, it has since

been having less of an effect on demand, with other existing price incentives such as company car tax, continuing to have an important impact. The report also found the plug-in van market will benefit from grant incentives more to support businesses and their fleets in making the switch.

While benefitting from significantly lower running and refuelling costs – as low as 2p per mile, EV drivers can also expect to see a surge in cheaper, more reliable and quicker public chargepoints, as the government delivers its commitment to install 10 times more on-street chargers by 2030.

Since 2020, the government has committed £2.5 billion to plug-in vehicle grants, infrastructure and the wider transition to electric vehicles in the UK. The industry is further boosting the switch to greener vehicles by expanding its range of more affordable zero emission cars. A total of 24 models are currently priced under £32,000, compared to just 15 a year ago, and the cost of monthly purchase and rental schemes has fallen significantly.

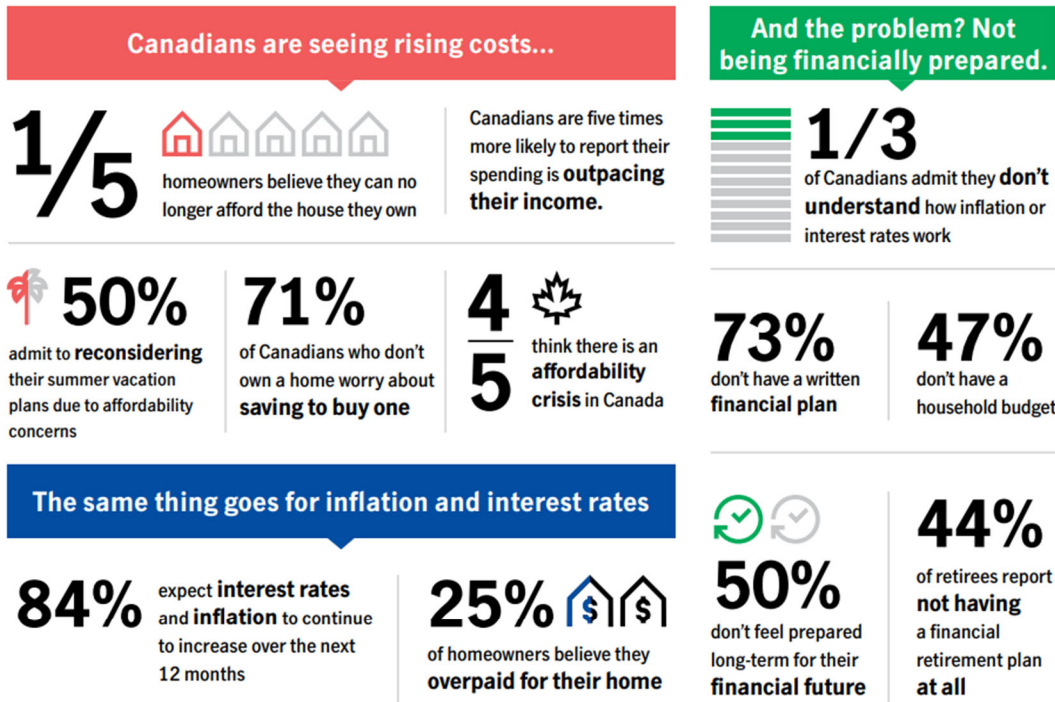
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About our Debt Survey

Now in its eleventh year, the Manulife Bank of Canada poll surveyed 2,001 Canadians in all provinces between ages 20 and 69 with household income of more than \$40,000. The survey was conducted online by Ipsos between April 14 and April 20, 2022. National results were weighted by gender, age, region, and education. This survey has a credibility interval of +/- 2.5 per cent 19 times out of 20, of what the results would have been had all Canadian adults between the ages of 20 and 69 been surveyed.

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<https://www.newswire.ca/news-releases/buyer-s-remorse-manulife-bank-s-debt-survey-reveals-close-to-1-in-4-homeowners-say-if-interest-rates-were-to-increase-further-they-would-be-forced-to-sell-their-home-808521222.html>

Buyer's remorse? Manulife Bank's Debt survey reveals close to 1 in 4 homeowners say if interest rates were to increase further, they would be forced to sell their home



NEWS PROVIDED BY
Manulife Financial Corporation
Jun 13, 2022, 07:00 ET
C\$ unless otherwise stated

The survey takes a closer look at the impact of interest rates, inflation and housing prices on affordability in Canada

- Over one in five Canadians expect rising interest rates to have a significant negative impact on their overall mortgage, debt and financial situation.
- As many as eighteen per cent of homeowners believe they can no longer afford the house they own.
- Indebted Canadians are more likely to report that debt is causing them stress with close to half saying it is negatively impacting their mental health.
- The housing market is out of reach for most – two-thirds do not view home ownership as being affordable, in their local community.
- Nearly half of Canadians said they would struggle to handle unexpected expenses or are reconsidering summer vacation plans due to affordability concerns.

TORONTO, June 13, 2022 /CNW/ - Home ownership has been viewed as out of reach for many Canadians, for quite some time. In June 2021, Manulife Bank's Debt Survey revealed seven out of ten Canadians (71%) who do not own a home worry about saving up for one, including as many as two in five who worry a lot about this. In June 2022, the bi-annual Debt Survey reveals with interest rates, inflation and housing prices increasing, many who are already homeowners say if interest rates were to increase further, they would be forced to sell their home.

The affordable housing crisis has been well-documented for some time, and the renewed data from this year's Debt Survey highlights the impact interest rates, inflation and housing prices continue to have on Canadians' standard of living and livelihoods.

Among those surveyed, fewer than half feel prepared for rising interest rates (46%), inflation (42%), or housing prices (40%), which underscores how further increases in inflation, interest rates, and/or housing prices could be damaging for many Canadians.

"The survey revealed nearly one third of Canadians admit they don't understand how inflation or interest rates work, close to three in four do not have a written financial plan and almost half do not have a household budget, and that's particularly telling when reviewing the results of this season's Manulife Bank Debt Survey results," said Lysa Fitzgerald, Vice President of Sales, Manulife Bank. "However, Canadians can gain confidence and control of their financial lives by acquiring a better understanding of the impact interest rates and inflation have on their personal finances, and taking that into account when creating their personal financial plans – whether that's independently or through the support of a certified financial advisor".

The survey responses also reveal four in five Canadians think there is an affordability crisis in Canada, a figure which suggests this is a major issue that might become worse if inflation continues its upward trajectory. In addition, over one in five Canadians expect rising interest rates to have a significant impact on their overall financial situation. Around one in five of those who are in debt expect rising interest rates to have a significant impact on their debt situation. And around one in five of those who have a mortgage expect rising interest rates to have a significant impact on their mortgage situation.

"In the past few years, we've seen a huge shift in the housing market, and in parallel we're witnessing interest rates and inflation rising – all contributing to concerns around Canadian home ownership, affordability and Canadians' mental health," said Fitzgerald. "As we move forward, it's imperative Canadians use resources available to them to talk to certified professionals and find ways to try and become more financially flexible and ensure they're taking a detailed look at their personal financial plans before making major financial decisions."

Learn more about the Manulife Bank of Canada Debt Survey and ways to manage finances by visiting: www.manulifebank.ca/debtresearch

About the Manulife Bank of Canada Debt Survey

Now in its twelfth year, the Manulife Bank of Canada poll surveyed 2,001 Canadians in all provinces between ages 20 and 69 with household income of more than \$40,000. The survey was conducted online by Ipsos between April 14 and April 20, 2022. National results were weighted by gender, age, region, and education. This survey has a credibility interval of +/- 2.5 per cent 19 times out of 20, of what the results would have been had all Canadian adults between the ages of 20 and 69 been surveyed.

About Manulife Bank

[Manulife Bank](#) is one of Canada's original digital banks. Since our launch in 1993, we've been designing efficient, flexible products that fit seamlessly into our customers' lives to help make their decisions easier and lives better. Today, Manulife Bank has over \$27 billion in assets and serves clients across Canada in all provinces and territories.

SAF ^{GROUP} **Dan Tsubouchi** @Energy_Tidbits · 1h ...
RUS #NatGas squeeze play is real. @berlindiary just reported "Germany will restart #Coal-fired power plants and offer incentives for companies to curb natural gas consumption, marking a new step in the economic war between Europe and Russia". #OOTT

[wsj.com/articles/germa...](https://www.wsj.com/articles/germa...)

SAF ^{GROUP} **Dan Tsubouchi** @Energy_Tidbits · 2h
Russia starts #NatGas squeeze play on EU. Never let a good crisis go to waste. #FreeportLNG 2.2 bcf/d goes down, then 2.4 bcf/d cut in #NordStream available capacity. EU needs to urgently cut #NatGas consumption to try to avoid winter 22/23 shortages. Bullish for #LNG #Coal. #OOTT twitter.com/Energy_Tidbits...

SAF ^{GROUP} **Dan Tsubouchi** @Energy_Tidbits · 2h ...
Russia starts #NatGas squeeze play on EU. Never let a good crisis go to waste. #FreeportLNG 2.2 bcf/d goes down, then 2.4 bcf/d cut in #NordStream available capacity. EU needs to urgently cut #NatGas consumption to try to avoid winter 22/23 shortages. Bullish for #LNG #Coal. #OOTT

SAF ^{GROUP} **Dan Tsubouchi** @Energy_Tidbits · Jun 14
#NordStream down 2.4 bcf/d as #Siemens hasn't returned compressors. Siemens says turbines being overhauled in CAN, so can't deliver due to CAN sanctions on RUS. No question, have to properly operate pipeline, but also seems timely given #FreeportLNG 2.2 bcf/d outage? #NatGas #OOTT twitter.com/GazpromEN/stat...

SAF ^{GROUP} **Dan Tsubouchi** @Energy_Tidbits · 4h ...
#Eni wins 3.125% in @qatar_energy North Field East #LNG expansion adds ~4.3 bcf/d by end 2025. But @eni is not in North Field South that adds ~2.2 bcf/d in 2027. Current Qatar 10.1 bcf/d reaches ~16.6 bcf/d in 2027. #NatGas #OOTT

<https://www.eni.com/en-IT/media/press-release/2022/06/eni-entra-grande-progetto-gnl-qatar.html>
19 JUNE 2022 - 11:50 AM CEST

Doha (Qatar), 19 June 2022 - Eni has been selected by QatarEnergy as a new international partner in the North Field East (NFE) expansion project.
The Minister of State for Energy Affairs, President and CEO of QatarEnergy, Saad Sherida Al-Kaabi, and Eni CEO, Claudio Descalzi, signed the partnership agreement for the creation of the new Joint Venture company during an official ceremony today. QatarEnergy will hold a 75% interest while Eni the remaining 25% interest. The JV will hold 12.5% interest in the entire NFE project, including the 4 mega LNG trains with a combined capacity of 32 MTPA.
The NFE project will expand Qatar's LNG export capacity from the current 77 million tons per annum (MTPA) to 110 MTPA. A \$28.75 billion investment, NFE is expected to start production before the end of 2025 and will deploy state of the art technologies to minimize overall carbon footprint, including carbon capture and sequestration.
The agreement marks the completion of a competitive process started in 2019 and has a duration of 27 years. It is a strategic move for Eni, which expands Eni's presence in the Middle East and gains access to a world leading LNG producer, retaining among the largest natural gas reserves in the world. It is also a significant milestone in the Company's diversification strategy, adding a cleaner and reliable energy source to its portfolio.
In his remarks during the ceremony, Eni CEO Descalzi said: "We are honored and delighted for having been selected as partner in the North Field East expansion project. As a newcomer joining this world leading LNG project, we feel the privilege and the responsibility of being a strategic partner of choice for the State of Qatar. This agreement is a significant milestone for Eni and fits our objective to diversify into cleaner and more reliable energy sources in line with our decarbonization strategy. Eni looks forward to working with QatarEnergy on this project to positively contribute to increasing worldwide gas security of supply."

SAF GROUP Dan Tsubouchi @Energy_Tidbits · 19h ...
 "Beijing has not recorded coronavirus transmission outside the quarantined compounds for three consecutive days as of Saturday, and the transmission chain of the Heaven Supermarket bar-related outbreak has been squashed, said a city official" reports @globaltimesnews. #OOTT

<https://www.globaltimes.cn/page/202206/1268413.shtml>
Transmission chain of Heaven Supermarket bar-related outbreak basically stifled: Beijing official
 By Zhao Yuhua
 Published: Jun 18, 2022 01:59 PM Updated: Jun 18, 2022 01:56 PM

Beijing has not recorded coronavirus transmission outside the quarantined compounds for three consecutive days as of Saturday, and the transmission chain of the Heaven Supermarket bar-related outbreak has been squashed, said a city official.

The capital has weathered the unprecedented challenges and risks during the recent 10 days since the newest outbreak took place on June 9. Xu Meilan, the spokesperson of the Beijing government, said at a Saturday conference. Yet the city has not seen new COVID-19 cases outside the quarantined area for three days, and the transmission chain of the current outbreak has been squashed, said Xu.

Beijing recorded a total of nine COVID-19 cases for Friday, all of them related to the raucous Heaven Supermarket bar, the epicenter of the capital city's latest outbreak. This marks the first time the number of confirmed cases has dropped to single digit since the newest outbreak attacked Beijing last week.

All the cases were found in quarantined areas, local authorities said on Saturday. Beijing is also scheduled to resume on Sunday the operation of subway stations that were closed due to the outbreak.

As of Friday, a total of 369 cases were reported during the outbreak linked to the Heaven Supermarket since June 9.

"The continuous declining of cases surely is a positive trend that means we may already be at the tail of this outbreak," said a Beijing-based immunologist, who declined to give his name. But the immunologist believed that even if this outbreak was effectively stanchoned, sporadic cases may still emerge in the city, as the source of the Heaven Supermarket bar remains unknown.

The recent outbreak was triggered by a customer of the bar last week who had not taken a test for 14 days prior to his visit of the bar. Beijing has been asking all its residents to undergo a nucleic acid test every three days, and if not, the health code will send notifications. People are also required to show their health codes before entering any public places.

Yet the immunologist believed with effective testing and quarantine measures in hand, and accumulated experience in battling the more infectious Omicron variant, Beijing won't experience a major outbreak in the near future. "The hot weather also helps [in cutting off the viral transmission]," he added.

During a press conference on Friday, Liu Xiaofeng, deputy head of the Beijing municipal centers for disease prevention and control, said that Beijing is seeing a positive trend in containing the virus, yet there should be no relaxation of antiviral prevention efforts, and urged people to stick to all virus prevention policies.

Since the outbreak in Heaven Supermarket, Beijing has conducted sweeping examination of public places, especially entertainment venues and restaurants in Chaoyang district, where the bar is located, of their implementation of COVID-19 prevention policies.

A total of 68 companies, including some barbecue restaurants in Chaoyang district, were warned for failed efforts in carrying out COVID-19 prevention measures.

Several other employees at public service sectors in Beijing, including a branch at Beijing Municipal People's Procuratorate, were also punished for violating COVID-19 policies by gathering for drinking.

SAF GROUP Dan Tsubouchi @Energy_Tidbits · 20h ...
 #Vortexa crude #Oil floating storage at 06/17 est 100.41 mmb, -2.33 mmb WoW vs revised up 102.74 mmb as of 06/10. Last few months generally +/- 100 mmb. Thx @Vortexa @business #OOTT

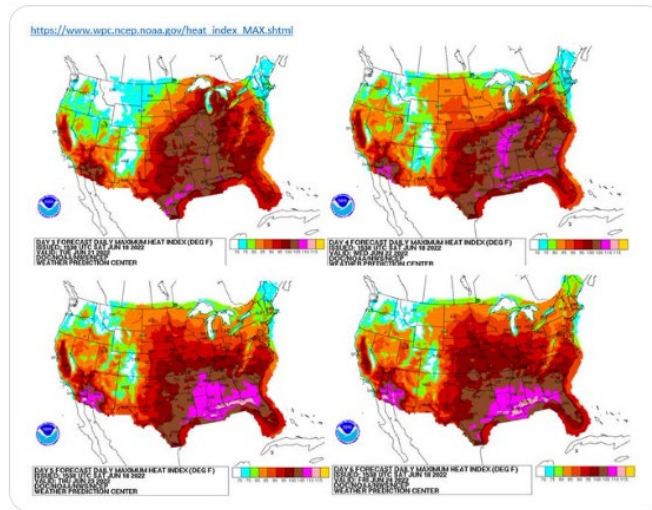


Source: Bloomberg, Vortexa

Est as of June 18, noon MT					Est as of June 11, noon MT					Est as of June 4, noon MT				
F2WVFST	VIXA	Inde	06/17/2022		F2WVFST	VIXA	Inde	06/11/2022		F2WVFST	VIXA	Inde	06/03/2022	
ID	3D	1M	6M	YTD	ID	3D	1M	6M	YTD	ID	3D	1M	6M	YTD
Fr	06/17/2022				Fr	06/10/2022				Fr	06/03/2022			
Fr	06/10/2022				Fr	06/03/2022				Fr	05/27/2022			
Fr	06/03/2022				Fr	05/27/2022				Fr	05/20/2022			
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Fr	05/20/2022				Fr	05/13/2022				Fr	05/06/2022			
Fr	05/13/2022				Fr	05/06/2022				Fr	04/29/2022			
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Fr	04/08/2022				Fr	04/01/2022				Fr	03/25/2022			

Source: Bloomberg, Vortexa

SAF ^(420x) **Dan Tsubouchi** @Energy_Tidbits · 23h ...
June continues to be a good month for weather demand for #NatGas. Continued hot weather expected across eastern half of US & SW US thru Friday. Thx @NOAA #OOTT



SAF ^(420x) **Dan Tsubouchi** @Energy_Tidbits · 23h ...
great recap thread of US refineries that have closed or are being closed by @LauraSanicola #OOTT

Laura Sanicola @LauraSanicola · Jun 17

FACTS: Which U.S. refineries have shut since the global pandemic, and why?

Since the onset of the global pandemic, the US has lost nearly 1 million barrels per day of oil refining capacity, with more set to be shuttered in the next few years.

These are the plants:

1/x

[Show this thread](#)

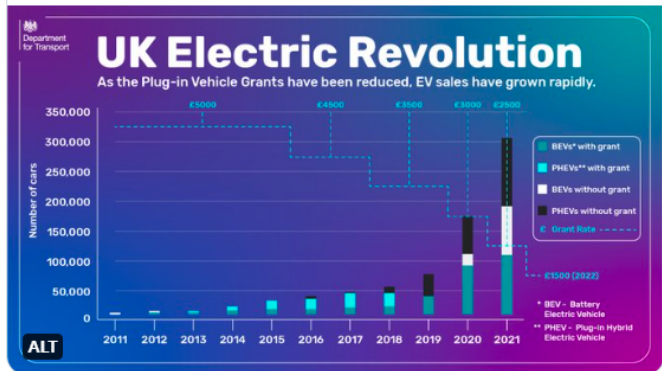
SAF READER **Dan Tsubouchi** @Energy_Tidbits · Jun 17 ...

Will be a good test for #EV sales in UK with end of plug-in vehicle grant. How many buyers won't be able to pay more up front to buy so don't care about better on road charging convenience? Also will EV makers sharpen the pencil and try to minimize EV price increases? #OOTT

Department for Transport @transportgovuk · Jun 14

The Plug-in Vehicle Grant has helped successfully kickstart the electric car market, so we're now focusing support on getting even more types of electric vehicles on the road, from taxis to vans, to power the green revolution. ⚡

gov.uk/government/new...



SAF READER **Dan Tsubouchi** @Energy_Tidbits · Jun 17 ...

Game changer for #LNG. See 📌 Thurs thread, \$BKR pullout is huge. RUS admits delays in new LNG adds, hopes no more than 1-2 yrs. Arctic LNG-2 2.6 bcf/d from 3 phases, phase 1 0.87 bcf/d starting in 2023, all on in 2026. Urgent need for FIDs ie. #LNGCanada Phase 2. #OOTT #NatGas

<https://tass.ru/ekonomika/14944991>
2 hours ago
updated 2 hours ago

The Ministry of Energy admitted that new LNG projects will be launched with a shift of no more than one or two years

According to First Deputy Minister Pavel Sorokin, Russia maintains plans to increase LNG production to 120-140 million tons by 2035

ST. PETERSBURG, June 17. /TASS/. New LNG projects in Russia can be launched with a time shift of no more than one or two years. This was stated by the First Deputy Head of the Ministry of Energy Pavel Sorokin at SPIEF.

There may be shifts in terms, new projects may appear," he said. "It is critical not to allow shifts for more than one or two years.

According to him, Russia maintains plans to increase LNG production to 120-140 million tons by 2035. He added that Russia could take a share of 15-20% of the world market, which could reach 700 million tons by 2030.

Tags:
[Russia](#)

SAF READER **Dan Tsubouchi** @Energy_Tidbits · Jun 16

1/2. Game Changer for #LNG. 6.2 bcf/d RUS LNG is now at risk incl operating 1.3 bcf/d Sakhalin-2 LNG & 2.3 bcf/d Yamal LNG, and under construction 2.6 bcf/d Arctic LNG-2 w/ phase 1 0.87 planned 2023 in service. #OOTT #NatGas

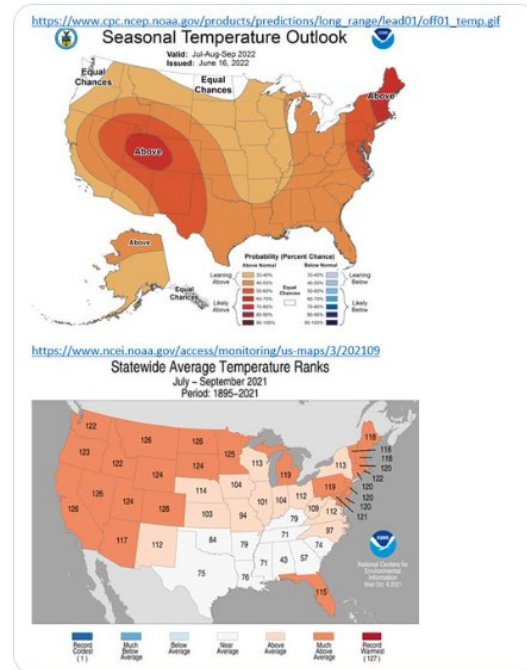
[Show this thread](#)

SAF GROUP

Dan Tsubouchi @Energy_Tidbits · Jun 16

...

Positive for #NatGas prices. @NOAA's updated seasonal temperature outlook still calls for well above normal temps for Jul/Aug/Sep. Even with 2.2 bcf/d #FreeportLNG is down, HH is still \$7.50! #OOTT



SAF GROUP

Dan Tsubouchi @Energy_Tidbits · Jun 16

...

. @JohnBerman sums up to @SecGranholm her policy problem "you're asking me [#Oil Co's] to do more now, invest more now, when in fact five or 10 years from now we don't think that demand will there be, and the administration doesn't even necessarily want it to be there." #OOTT

The screenshot shows a CNN news segment titled "NEW THIS MORNING" with the headline "BIDEN WARNS OIL COMPANIES, DEMANDS THEY BOOST SUPPLY" and "Jennifer Granholm Energy Secretary". A "GAS PRICES" graphic shows the price per gallon: TODAY \$5.01, YESTERDAY \$5.02, A WEEK AGO \$4.96, and A MONTH AGO \$4.47. Below the screenshot is a transcript of an excerpt of Energy Secretary Jennifer Granholm's comments with CNN's John Berman on CNN New Day June 15, 2022. Items in "Italics" are SAF Group created transcript.

Berman "Five years from now, 10 years from now, are you telling me you want them drilling for more oil? You want the refineries putting out more gasoline in five or 10 years?"

Granholm "What we're saying is today we need that supply increased. Of course, in five or 10 years, *actually in the immediate*, we are also pressing on the accelerator, if you will, to move toward clean energy so we don't have to be under the thumb of *petro dictators like Putin*. Or at the whim of the volatility of fossil fuels. *Ultimately*, America will be most secure when we can rely upon our own clean domestic production of energy".

Berman "But that's the problem for these companies. These companies are saying, you know, you're asking me to do more now, invest more now, when in fact five or 10 years from now we don't think that demand will there be, and the administration doesn't even necessarily want it to be there."

Prepared by SAF Group

SAF

Dan Tsubouchi @Energy_Tidbits · Jun 17

...

#Biden admin also has the data to restricting exports should work, they saw what happened this week to HH #NatGas prices (down ~20%) when #FreeportLNG shut down and forced more US #NatGas supply to stay in US market. #OOTT



Ari Natter @AriNatter · Jun 16

NEW: Top Biden administration officials are weighing limits on exports of fuel as the White House struggles to contain gasoline prices that have topped \$5 per gallon.

[bloomberg.com/news/articles/...](https://www.bloomberg.com/news/articles/...) w/@jendlouyhyc

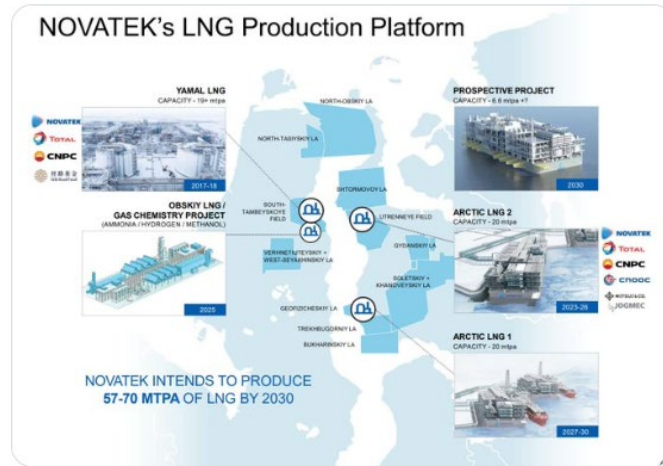
[Show this thread](#)

SAF PROXY

Dan Tsubouchi @Energy_Tidbits · Jun 16

...

1/2. Game Changer for #LNG. 6.2 bcf/d RUS LNG is now at risk incl operating 1.3 bcf/d Sakhalin-2 LNG & 2.3 bcf/d Yamal LNG, and under construction 2.6 bcf/d Arctic LNG-2 w/ phase 1 0.87 planned 2023 in service. #OOTT #NatGas



3 10 29

SAF PROXY

Dan Tsubouchi @Energy_Tidbits · Jun 16

...

2/2. Must read, @Kommersant reports #BakerHughes stopping service/replacement parts for existing #LNG & shipping gas turbines for Arctic LNG-2. Projects are designed for specific turbines. Urgent need for LNG FIDs ie. how about @Shell #LNGCanada Phase 2 is 1.8 bcf/d. #NatGas #OOTT

<https://www.kommersant.ru/en/241111>
06/16/2022, 00:30

Baker Hughes terminates service agreements for LNG projects in Russia

According to Kommersant's information, the American Baker Hughes stops working on Russian LNG projects. In particular, the company is withdrawing service engineers from Gazprom's Sakhalin-2 and NOVATEK's Yamal LNG projects, as well as design production from NOVATEK's Arctic LNG-2 and construction of "Treninnyy" liquefaction plant. Baker Hughes will also withdraw from the Arctic LNG-2 project, including gas turbines. The timing of the completion of the construction of the first line of the Arctic LNG-2 directly depends on the speed of the work.

The American Baker Hughes recalls its engineers for the maintenance of key technological equipment (gas turbines and compressors) from the Yamal LNG projects of NOVATEK and Sakhalin-2 of Gazprom, project engineers from the Arctic LNG-2 project of NOVATEK under construction, and also stops all shipments of equipment for LNG projects in Russia. This was reported to Kommersant by sources among the Russian counterparties of the company. According to them, in fact, this calls into question the further operation and maintenance of the equipment.

The American company is terminating the agreements, despite the fact that there are no direct sanctions against the service and supply of gas turbines in the Russian Federation (the conclusion of new contracts is prohibited), and Gazprom and NOVATEK are not under direct US or EU sanctions.

Completion of the construction of the first Arctic LNG-2 line for 6.6 million tons is now directly dependent on the supply of Baker Hughes LM5000 gas turbines.

17000 seven turbines are to be delivered to the first line (and for the LNG production process, used for power generation). But according to Kommersant, only half of the machines have been shipped to NOVATEK so far. There is, in fact, nothing to replace the equipment when analogues are not produced in the Russian Federation, and LNG production lines have already been designed for the LM5000.

NOVATEK did not respond to Kommersant's request about a possible delay in commissioning the first Arctic LNG-2 line and the number of turbines received. Sakhalin-2 (Gazprom has 50% + 1 share) has signed a long-term service contract for the maintenance of four Frame 7EA turbines (used in the process, power - 90 MW) and five Frame 5 turbines (25 MW, for power generation). The project company Sakhalin Energy did not respond to Kommersant's request.

The head of NOVATEK, Leonid Mishchenko, said on May 19 that the company will maintain plans to launch the first line of Arctic LNG-2. To do this, a floating platform from Murmansk to the waters of the Gulf of GDA should be used by November in 2022, which was last until about the end of August. "There are big difficulties today with the imposition of sanctions, and not only the sanctions for the products and services themselves, there are many logistical difficulties... We manage to overcome these difficulties so far, and so far we have not changed plans for the timing of the introduction," Mr. Mishchenko explained.

As part of Arctic LNG-2, NOVATEK planned to build three lines for the production of LNG with a capacity of 6.6 million tons per year each. The launch of the second line was planned for 2023, the third - for 2025. At the same time, the head of TotalEnergies Patrick Pouyannou (the company has 10% in the project) reported that the first Arctic LNG-2 platform is 90% ready and has a high chance of completion, but "there may be some body movement", because some of the equipment is still not delivered in the Russian Federation (quote from Bloomberg).

According to Mr. Mishchenko, the localization of the equipment for Arctic LNG-2, in particular, the cryogenic equipment necessary for the production of LNG, may take two to three years.

While localization is about 50%, Leonid Mishchenko specified that NOVATEK had already begun pre-project work on the construction of a new LNG plant using Russian technology with a capacity of 5 million tons.

NOVATEK plans new LNG plant with Russian equipment

Sergey Melnikov, Head of Hydrogen and Energy Efficiency at the Energy Center of the Skolkovo School of Management, notes that aircraft-type gas turbines, typical of the oil and gas industry and known under the General Electric (GE) brand, have been produced and serviced by Baker Hughes since about 2010. In the Russian Federation, the production of turbines that are used in Sakhalin and Yamal is not localized: REP Holding, in partnership with GE, has been engaged in a turbine of a different size since 2013 - MS5002E (32 MW). Therefore, the expert admits, objective difficulties in service can be expected if Baker Hughes decides to stop work on service contracts and the supply of spare parts. The most serious problems, in his opinion, may arise with the maintenance of parts of the hot path - the combustion chamber and the first stages of the turbine.

Felena Guadri

SAF **Dan Tsubouchi** @Energy_Tidbits · Jun 16

Buckle up. Reducing flows on 5.3 bcf/d #NordStream at a time when 2.2 bcf/d #FreeportLNG is down is already setting up #NatGas supply squeeze in winter 22/23. IF a complete shutdown 📉, would be a setup for big shortages. EU will be pulling every possible #LNG cargo. #OOTT

CGTN @CGTNOfficial · Jun 16

China state-affiliated media

The Nord Stream 1 pipeline, which supplies gas from #Russia to Europe under the Baltic Sea, could be suspended due to problems over the repair of its turbines in Canada, Russia's ambassador to the EU told the state news agency RIA Novosti on Thursday.


SAF **Dan Tsubouchi** @Energy_Tidbits · Jun 16

Russia June #Oil production is +600,000 b/d MoM, "in fact we are already close to recovering the February levels" "in June, there will be a slight decrease (in exports)" says #Novak. #OOTT

<https://tass.ru/ekonomika/14924605>

4 hours ago, updated 3 hours ago
SPEF-2022

Novak says Russia may increase oil production in July compared to June



Deputy Prime Minister of the Russian Federation Alexander Novak
© Maxim Shvachkov/TASS

Deputy Prime Minister noted that the country did not mothball of wells

ST. PETERSBURG, June 16. /TASS/. Russia may continue to restore oil production in July and increase it compared to June. Oil exports will also grow this month, Russian Deputy Prime Minister Alexander Novak told reporters on the sidelines of the St. Petersburg International Economic Forum.

"Through their own provisions that we would continue to increase production in July. We see that we have a fairly significant increase in June compared to May - this is an plus of 600 thousand barrels (per day). In fact, we are already close to recovering the February level," he said.

According to him, Russia plans to increase oil refining in June, slightly reducing exports.

"Export (in June) will be lower, because it increased significantly when there was a reduction to oil refining, so the released volumes (in April-May) were exported. In June there will be a slight decrease (in exports), because the loading of oil refineries will increase," he noted.

Oil price

Russia admits that the price of oil may rise even more before the end of the year, but everything will depend on the balance of supply and demand. At the same time, Russia hopes for an increase in demand in the world, although uncertainty remains due to the possibility of a lockdown in China due to Covid-19, the Deputy Prime Minister said. "There are different forecasts, including that oil will continue to grow. Everything depends on the balance of supply and demand," he said.

"I hope that demand will continue to recover during the year, as planned, but there are certain risks associated with lockdowns in the People's Republic of China. Therefore, we will see how the global economy and consumption develop," he added.

Well conservation

Russian oil companies have not mothballed wells, so the country has the technical ability to increase production to pre-crisis levels, Novak said.

"I don't think that we had any conservation of wells. The process is technological, they can be adjusted," he said.

Novak added that companies are currently redirecting export flows and establishing new connections and production chains.

The St. Petersburg International Economic Forum, organized by the Roscongress Foundation, takes place from June 15 to 18. The theme of the forum this year is "New World - New Opportunities". As part of the event, forums for SMEs, creative business, Drug Safety, SPIEF Junior and SPIEF Sport Week are also planned. TASS acts as a photo host agency and media partner of the event.

Follow our news on Telegram - <https://t.me/05060606>

Tags: [Novak, Alexander](#) [Laptev](#) [SPEF-2022](#)

SAF **Dan Tsubouchi** @Energy_Tidbits · Jun 15

. @exxonmobil could have/should have closed their response to #Biden with "You're welcome". Great reminder of the facts that #Exxon (to some criticism by investors) spent thru the pandemic to move on its massive Beaumont refinery expansion. Below is 03/05/20 Beaumont slide. #OOTT

<https://www.exxonmobil.com/newsroom/news-releases/2022/0615-ExxonMobil-statement>

5HT-CRUDE EXPANSION


competitiveness

Statement regarding President Biden Letter to OIL

ExxonMobil today released the following statement in response to a letter from President Biden:

"We are pleased to work with the administration to update the President and his staff on how ExxonMobil is committed to developing U.S. oil and gas supplies. This includes investments in our U.S. production, resulting in an almost 50% increase in our U.S. production of oil and gas over what we've earned over the past five years -- \$118 billion on new production. This is a reflection of the company's long-term growth strategy, and our commitment to our products.

"In the U.S., we've been investing through the downturn to increase refinery capacity -- the equivalent of adding a new medium-sized refinery every year. We've lost more than \$20 billion and had to borrow more than \$30 billion to do this. We're confident that the government could enact measures often used in emergencies following the passage of the Energy Act provisions and some fuel specifications to increase supply and demand through clear and consistent policy that supports U.S. resources, as well as streamlined regulatory approval and support for infrastructure."



- Efficiently expands production capability
 - Project adds 250,000 bbl/d
 - Expands site hydrocracking
 - Leverages U.S. Gulf of Mexico capacity
- Product optionality for customers
- Further cost reductions

SAF REPOST **Dan Tsubouchi** @Energy_Tidbits · Jun 15 ...
looks like city prediction of #Calgary Elbow River cresting yesterday were off. based on the marker tree across the river, it was up at least another foot overnight and also noticeably since earlier this morning. hard to tell but our lowest level now mostly covered.



SAF REPOST **Dan Tsubouchi** @Energy_Tidbits · Jun 15 ...
Here's why #Biden has to keep selling #Oil from SPR. #IEA June OMR: helped by govt stock releases of nearly 1 mb/d, OECD industry stocks at Apr 30 were "nevertheless 290.3 mb below 2017-2021 average". @IEA May OMR had Mar 31 stocks at 299 mb below 2017-21 ave. #OOTT

SAF **Dan Tsubouchi** @Energy_Tidbits · Jun 14
US announces "sale" not exchange of 45 mmb from #SPR to be released 06/15/22 thru 07/31/22 ie. 1 mmb/d. basically offsets Libya's new loss of ~1 mmb/d. #OOTT

energy.gov/articles/does-a...

SAF REPOST **Dan Tsubouchi** @Energy_Tidbits · Jun 14 ...
US announces "sale" not exchange of 45 mmb from #SPR to be released 06/15/22 thru 07/31/22 ie. 1 mmb/d. basically offsets Libya's new loss of ~1 mmb/d. #OOTT



energy.gov

DOE Announces Contract Awards and Issues Fourth Emergency Sale ... Releases Are Part of President Biden's Comprehensive Plan to Help Protect Americans from Putin's Price Hike at the Pump

SAF ORIG Dan Tsubouchi @Energy_Tidbits · Jun 14 ...
#Calgary Elbow River still hasn't crested as of 530pm. using the tree across the river, looks like it is up a couple feet today.



SAF ORIG Dan Tsubouchi @Energy_Tidbits · Jun 14 ...
Day before Biden's 🗳️ Exxon "start paying your taxes", @ginamccarthy46 said to @alexi "Look, President Biden doesn't focus on, and neither do I, on bashing the fossil fuel companies, but, frankly, they have to get their act together." bashing definition is strong criticism. #OOTT

SAF Dan Tsubouchi @Energy_Tidbits · Jun 10

"#Exxon, start investing, start paying your taxes" and "the reason they're [EXOM] not drilling is they're buying back their own stock — which should be taxed, quite frankly" says #Biden. #Oil #NatGas sector to be THE prominently featured villain in Dems mid-terms messaging. #OOTT

Excerpt <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/06/10/remarks-by-president-biden-on-inflation-and-actions-taken-to-lower-prices-and-address-supply-chain-challenges/>

THE WHITE HOUSE

Remarks by President Biden on Inflation and Actions Taken to Lower Prices and Address Supply Chain Challenges

JUNE 10, 2022-SPEECHES AND REMARKS

USS Iowa
Port of Los Angeles
Los Angeles, California

Q Are you going to go after Exxon's profits, sir? Exxon's profits — are you going to — are you going to go after them?

THE PRESIDENT: We're going to make sure that everybody knows Exxon's profits. Why don't you tell them what Exxon's profits were this year — this quarter? Exxon made more money than God this year. And, by the way, nothing has changed.

And they're not — by the way, one thing I want to say about the oil companies: They talk about how we have — they have 9,000 permits to drill. They're not drilling. Why aren't they drilling? Because they make more money not producing more oil. The price goes up, number one. And, number two, the reason they're not drilling is they're buying back their own stock — which should be taxed, quite frankly — buying back their own stock and making no new investments.

So I — I always thought Republicans are for investment. Exxon, start investing, start paying your taxes.

Thanks.

11:11 A.M. PDT

SAF (owner) **Dan Tsubouchi** @Energy_Tidbits · Jun 14 ...
#NordStream down 2.4 bcfd as #Siemens hasn't returned compressors. Siemens says turbines being overhauled in CAN, so can't deliver due to CAN sanctions on RUS. No question, have to properly operate pipeline, but also seems timely given #FreeportLNG 2.2 bcfd outage? #NatGas #OOTT

← **Gazprom** (verified) @GazpromEN · Jun 14

Regarding operation of Portovaya compressor station.

Information on the operation regime of the Portovaya compressor station (CS) was reviewed today during a briefing at Gazprom.

Due to the failure by Germany's Siemens to return gas compressor units (GCUs) in due time after their repair, the expiration of time between overhauls set out for GCUs, and the malfunctions detected in engines (a non-compliance notification requiring temporary suspension of activities was received from Rostekhnadzor), only three of the GCUs installed at the Portovaya CS can be used at the moment.

Currently, it is possible to supply to 100 million cubic meters of gas per day into the Nord Stream gas pipeline (whereas the planned supply amount is 167 million cubic meters per day).

SAF (owner) **Dan Tsubouchi** @Energy_Tidbits · Jun 14 ...
looks like good news as city says #Calgary Elbow River supposed to crest later today. it's up a foot or two in last day based on the marker tree across the river and only just now on our lowest level



SAF PROOF

Dan Tsubouchi @Energy_Tidbits · Jun 14

...

What did #MBS get from #Biden to agree to this? He has to enjoy the optics of this, but there must be more than the photo op validation. @spagov announcement of Biden visit to Saudi Arabia on July 15/16. July 15, Biden to meet with King and MBS. #OOTT

<https://www.spa.gov.sa/viewfullstory.php?lang=en&newsid=2362344#2362344>

Royal Court: Upon the Invitation of the Custodian of the Two Holy Mosques... President of the United States of America will visit the Kingdom of Saudi Arabia on July 15-16, 2022

Tuesday 1443/11/15 - 2022/06/14



Riyadh, June 14, 2022, SPA -- The Royal Court issued today the following statement:
"A Royal Court Statement"

Upon the invitation of the Custodian of the Two Holy Mosques King Salman bin Abdulaziz Al Saud, and to enhance the bilateral historic relations and strategic partnership between the Kingdom of Saudi Arabia and The United States of America, and reflecting the shared desire to develop the partnership in all fields, President Joseph R. Biden, President of the United States of America will be conducting an official visit to the Kingdom of Saudi Arabia on July 15-16, 2022.

During the visit, President Biden will meet with the Custodian of the Two Holy Mosques King Salman bin Abdulaziz Al Saud, and His Royal Highness Prince Mohammed bin Salman bin Abdulaziz, Crown Prince and Deputy Prime Minister, to discuss areas of bilateral cooperation as well as joint efforts to address regional and global challenges. On the second day of the visit, July 16, 2022, the schedule of the visit will include President Biden attending a joint summit, convened by the Custodian of the Two Holy Mosques with the leaders of the Gulf Cooperation Council, His Majesty the King of Jordan, His Excellency the President of Egypt, and His Excellency the Prime Minister of Iraq.

--SPA
15:13 LOCAL TIME 12:13 GMT
7054

SAF PROOF

Dan Tsubouchi @Energy_Tidbits · Jun 14

...

HH #NatGas down \$1.40 as partial restart is still 90 days away on #FreeportLNG 2.2 bcf/d. #LNG export. #OOTT. FREEPORT LNG PROVIDES UPDATE ON JUNE 8 INCIDENT AT ITS LIQUEFACTION SITE



prnewswire.com

FREEPORT LNG PROVIDES UPDATE ON JUNE 8 INCIDENT AT ITS LIQ...
/PRNewswire/ -- Freeport LNG Development, L.P. ("Freeport LNG") is providing the following update on the June 8 incident at its Quintana ...

Dan Tsubouchi @Energy_Tidbits · Jun 14

...

Buckle up! Summer #Oil demand about to hit. OPEC fcast Q3/22 demand +2.66 mmbd QoQ & Q4/22 +1.92 mmbd QoQ. OPEC quota countries +33,000 b/d MoM in May vs quota +275,000. Also crude + products stocks Apr 30 still -299 mmb below 2015-19 average. Can demand fall fast enough? #OOTT

Excerpts OPEC Monthly Oil Market Report, June 2022

Table 4 - 2: World oil demand in 2022*, mb/d

World oil demand	2021	1Q22	2Q22	3Q22	4Q22	2022	Change 2022/21	
							Growth	%
Americas	24.28	24.78	24.99	25.69	25.76	25.31	1.03	4.26
of which US	19.93	20.30	20.57	21.19	21.21	20.82	0.90	4.50
Europe	13.08	13.10	13.06	14.29	14.15	13.85	0.57	4.35
Asia Pacific	7.41	7.90	7.22	7.25	7.93	7.57	0.17	2.23
Total OECD	44.77	45.77	45.26	47.23	47.84	46.53	1.77	3.95
China	14.94	14.67	15.16	15.42	15.97	15.31	0.37	2.48
India	4.77	5.18	4.85	5.01	5.39	5.11	0.33	7.01
Other Asia	8.63	9.09	9.59	8.93	8.95	9.14	0.51	5.91
Latin America	6.23	6.32	6.25	6.53	6.42	6.38	0.16	2.51
Middle East	7.79	8.06	7.77	8.32	8.09	8.06	0.27	3.43
Africa	4.22	4.51	4.15	4.23	4.55	4.36	0.14	3.23
Russia	3.61	3.67	3.28	3.45	3.54	3.48	-0.13	-3.58
Other Eurasia	1.21	1.22	1.15	1.01	1.24	1.15	-0.06	-4.71
Other Europe	0.75	0.79	0.74	0.73	0.80	0.76	0.01	1.01
Total Non-OECD	52.16	53.50	52.92	53.62	54.94	53.75	1.60	3.06
Total World	96.92	99.28	98.19	100.85	102.77	100.29	3.36	3.47
Previous Estimate	96.92	99.28	98.19	100.74	102.64	100.29	3.36	3.47
Revision	0.00	0.00	-0.25	0.11	0.13	0.00	0.00	0.00

Note: * 2022 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

Table 5 - 7: OPEC crude oil production based on secondary sources, t/bid

Secondary sources	2020	2021	3Q21	4Q21	1Q22	Mar 22	Apr 22	May 22	Change May/Apr
Algeria	904	913	926	959	984	996	1,004	1,011	7
Angola	1,247	1,117	1,108	1,124	1,151	1,142	1,175	1,176	1
Congo	294	266	261	266	264	259	262	270	7
Equatorial Guinea	114	98	98	87	92	91	96	94	-2
Gabon	194	186	184	188	199	204	198	169	-32
IR Iran	1,991	2,392	2,472	2,472	2,528	2,548	2,565	2,541	-20
Iraq	4,076	4,049	4,078	4,240	4,296	4,302	4,426	4,403	-21
Kuwait	2,439	2,419	2,448	2,531	2,612	2,640	2,660	2,897	27
Libya	366	1,143	1,146	1,111	1,063	1,069	893	707	-186
Nigeria	1,575	1,372	1,335	1,321	1,376	1,339	1,306	1,262	-45
Saudi Arabia	9,204	9,113	9,557	9,879	10,164	10,215	10,364	10,424	60
UAE	2,804	2,727	2,770	2,861	2,954	2,974	3,015	3,046	31
Venezuela	512	555	540	662	684	696	719	717	-2
Total OPEC	25,721	26,351	26,922	27,700	28,358	28,475	28,684	28,508	-176

Notes: Totals may not add up due to independent rounding, given available secondary sources to date. Source: OPEC.

Dan Tsubouchi @Energy_Tidbits · Jun 13

...

Finally, @PressSec admits #Biden to talk #Oil in Saudi. "Of course, he will be - they will discuss energy with the Saudi government. I think what I'm trying to say is to look at this trip as it being only about oil is not — it would be simply wrong to do that." #OOTT

Press Briefing by Press Secretary Karine Jean-Pierre, June 13, 2022

Q: One other question. Over the weekend before the President left Los Angeles, he was asked whether he had decided to go to Saudi Arabia. And his answer was, "No, not yet." And then was a follow-up question, and then he said, "That's the reason he goes. So, are you still in the game? Is he not going?"

MS. JEAN-PIERRE: Well, I don't have anything to announce for you today.

Q: When will you?

MS. JEAN-PIERRE: Well, let me just say this. When the President is ready to make that announcement, that's when we will.

But we continue to plan for a trip to Israel and Saudi Arabia. This would be an opportunity for the President to engage with leaders from across the Middle East region. Again, I don't have anything to announce for you today.

Q: Thanks, Karine. On Saudi Arabia itself, just to circle back on Carlson's question. The President seemed to say over the weekend that he had decided to go. You said just now that any trip to the region will focus on delivering results for the American people. If that's the case, why not make energy a major topic? If not of the trip, considering gas prices are such a big part of what Americans care about?

MS. JEAN-PIERRE: Well, let me -- let me just say, there -- there's no trip to announce at this point.

Q: But he's talking about (inaudible).

MS. JEAN-PIERRE: The just saying that there's nothing to preview for you (inaudible).

Q: Are you not at a rock and a hard place position here? If the President were to go to Saudi Arabia, would you not see a benefit to making the idea that will go forward at several levels, of course you would speak to the Kingdom and discuss OPEC. But in terms of domestic support? Do you not understand that?

Because if you're going to go to Saudi Arabia, wouldn't that be a benefit for the President to be able to say that, even though there are some political divisions to being that domestically as well?

MS. JEAN-PIERRE: Yes.

Q: Just on the surface, understanding no trip has been announced yet --

MS. JEAN-PIERRE: Yes.

Q: If you could just say that the President would announce that he will go to Saudi Arabia, would you not see a benefit to making the idea that will go forward at several levels, of course you would speak to the Kingdom and discuss OPEC. But in terms of domestic support? Do you not understand that?

MS. JEAN-PIERRE: Yes.

Q: But you're not making anything's going to be dealing with --

MS. JEAN-PIERRE: Yes.

Go ahead.

SAF GROUP

Dan Tsubouchi @Energy_Tidbits · Jun 13

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pouring rain and looks like we are on our way to the 4-5 inches of rain expected over the next few days in [#Calgary](#). of course the timing is perfect to remind us of the June 19, 2013 big flood.



SAF GROUP

Dan Tsubouchi @Energy_Tidbits · Jun 13

...

Wake up call from [@ericnuttall](#) - the only [#Oil](#) bank in the world, OPEC+ is quickly running out of oil. Also remember production surprises are almost always to the negative. This can't be solved with [#Renewables](#). Look for big push on conservation. [#OOT](#)



financialpost.com

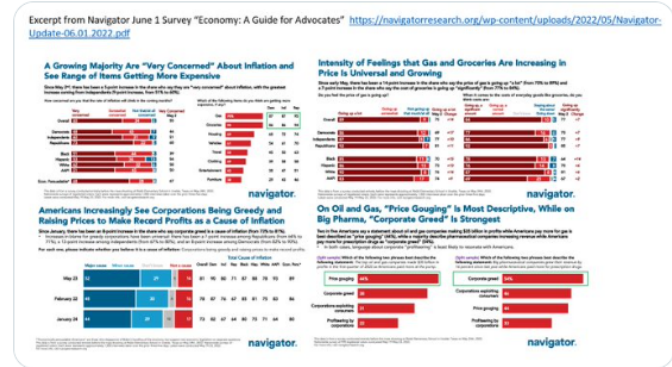
Eric Nuttall: OPEC running out of spare capacity confirms our multi-year bull case for oil

SAF GROUP

Dan Tsubouchi @Energy_Tidbits · Jun 13

...

Here's why #Biden has to double down #Exxon #Oil #NatGas profits - it's working but nowhere near enough. So need to make them an even bigger villain in run up to midterms. Good @NavigatorSurvey, but remember, their focus is to "shape the debate for progressives". #OOT



SAF -- Dan Tsubouchi @Energy_Tidbits · Jun 10

"#Exxon, start investing, start paying your taxes" and "the reason they're [\$XOM] not drilling is they're buying back their own stock — which should be taxed, quite frankly" says #Biden. #Oil #NatGas sector to be THE prominently featured villain in Dems mid-terms ...

SAF GROUP

Dan Tsubouchi @Energy_Tidbits · Jun 13

...

another example of how huge cash flows from \$120 Oil \$20 LNG gives financial strength to accelerate #EnergyTransition. Not just for investing in lower return #RenewableEnergy, but can sell cash generating #OilSands to build more "resilient" (read lower emissions) business. #OOT

<https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bp-reshapes-canada-portfolio-for-strong-future-growth.html>

bp reshapes Canada portfolio for strong future growth

Release date: 13 June 2022

- bp has agreed to sell its 50% interest in the Sunrise oil sands project in Alberta, Canada, to Calgary-based Cenovus Energy.
- As part of the deal, bp is acquiring Cenovus's interest in the Bay du Nord project in Eastern Canada, adding to its sizeable acreage position offshore Newfoundland and Labrador.

Press release PDF / 122.5 kB [Add item](#)

CALGARY – bp is reshaping its Canadian portfolio to focus on strong future growth. The company has agreed to sell its 50% interest in the Sunrise oil sands project in Alberta, Canada, to Calgary-based Cenovus Energy. As part of the deal, bp is acquiring Cenovus's interest in the Bay du Nord project in Eastern Canada, adding to its sizeable acreage position offshore Newfoundland and Labrador.

"This is an important step in our plans to create a more focused, resilient and competitive business in Canada. Bay du Nord will add sizeable acreage and a discovered resource to our existing portfolio offshore Newfoundland and Labrador. Along with bp's active Canadian marketing and trading business, this will position bp Canada for strong future growth."

Starlee Sykes, bp senior vice president, Gulf of Mexico & Canada

Starlee Sykes, bp senior vice president, Gulf of Mexico & Canada, said: "This is an important step in our plans to create a more focused, resilient and competitive business in Canada. Bay du Nord will add sizeable acreage and a discovered resource to our existing portfolio offshore Newfoundland and Labrador. Along with bp's active Canadian marketing and trading business, this will position bp Canada for strong future growth."

In Canada, bp will no longer have interests in oil sands production and will shift its focus to future potential offshore growth. bp currently holds an interest in six exploration licenses in the offshore Eastern Newfoundland Region. The non-operated stake in the Bay du Nord project will expand bp's position offshore Eastern Canada.

Subject to regulatory approvals, the transaction is expected to close in 2022.

[About bp](#)

SAF GROUP **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 Dyalal 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

SAF GROUP **Dan Tsubouchi @Energy_Tidbits · Jun 12** ...

Brent -\$2.35 to \$119.66. Beijing "Prevention and control of this bar-related outbreak in Beijing is more difficult than the previous wave of outbreak in the Xinfadi market in June 2020" & "Beijing's epidemic prevention experts warned that it may spill over to more cities". #OOTT

Beijing's Latest COVID-19 Outbreak More Difficult to Control Than Last Year's

Beijing's latest outbreak is more difficult to control than last year's, according to experts. The city saw a sharp spike in cases, with a total of 1,087 cases reported in the first week of the outbreak. The outbreak is more difficult to control because of the city's experience and rapid response time.

Beijing has seen a great job this time in doing an epidemiological survey for each infected patient, and this is the key to bringing control under control and preventing the virus from spreading." Wang said.

Currently, Beijing is fast-tracking the closed screening. Bars, KTVs, internet cafes and other establishments have been suspended and subjected to risk screening. Back-to-school sales for elementary school and most middle school students have also been postponed.

Multiple rounds of nucleic acid testing remain the most effective way to screen for hidden transmission risks at the community level." Wang said, adding more of Chaoyang district, but at the conference on Sunday.

Beijing will carry on with dynamic and accurate epidemic coping measures instead of shutting down all public venues as it did in previous state management in recent deaths." Wang said.

Other, especially neighboring cities, is unworkable," Wang said. "But it is not very worrisome because of the city's experience and rapid response time."

A case identified in this outbreak has already been linked to the outbreak in the Xinfadi market in June 2020, which will be the result of the three rounds of closed screening, and testing from Saturday to Monday are all regular.

Beijing has seen a great job this time in doing an epidemiological survey for each infected patient, and this is the key to bringing control under control and preventing the virus from spreading." Wang said.

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Beijing will carry on with dynamic and accurate epidemic coping measures instead of shutting down all public venues as it did in previous state management in recent deaths." Wang said.

SAF ^(920P) Dan Tsubouchi @Energy_Tidbits · Jun 12 ...
 . @bsurveillance watchers will know the next East Pacific Tropical Storm will be good test for @tomkeene @isaabramowicz1 @FerroTV to see how well they retained @mariatad's pronunciation guide on @JavierBlas name.



SAF ^(920P) Dan Tsubouchi @Energy_Tidbits · Jun 12 ...
 Unfortunately no big surprise, Libya says currently losing >1.1 million b/d of #Oil production due to closures imposed on major export fields & ports. Been ~6 mts since election cancelled with no confidence in East/West cooperation. #OOTT



libyaobserver.ly
Libya loses more than one million bpd due to oil closures
The Minister of Oil and Gas in the Government of National Unity, Mohammed Aoun, said that Libya is currently losing more than ...

SAF **Dan Tsubouchi** @Energy_Tidbits · Jun 12 ...
so annoying can't see @BrookeHenderson live. but what an approach to putt for eagle

LPGA @LPGA · Jun 12

WHAT. A. SHOT! 🙌

@BrookeHenderson with a great eagle opportunity at the @ShopRiteLPGA

Watch on CNBC and cbssports.com!



SAF **Dan Tsubouchi** @Energy_Tidbits · Jun 12 ...
looks like #Calgary is doing their best to avoid another flood. june 19 is the anniversary of the big flood. letting water out of the reservoir ahead of a lot of rain this week. Elbow River is almost up to the concrete on our lowest level and up to the tree across the river.



Our weekly SAF June 12, 2022 Energy Tidbits memo is posted on our SAF Group website. This 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 12, 2022

Produced by: Dan Tsubouchi

Trafigura Sees “a Tight Market for Commodities and Heightened Prices for Some Time to Come”

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. Trafigura's very bullish long-term outlook for oil, natural gas and metals [\[LINK\]](#)
2. Qatar names 1st partner, TotalEnergies, in its massive +6.5 bcf/d LNG expansion [\[LINK\]](#)
3. Rush to lock up long term LNG supply continues, now up to 9.09 bcf/d of long-term LNG supply locked up since July 1, 2021 [\[LINK\]](#)
4. Does Biden's expected visit to see MBS in Saudi Arabia mean JCPOA revival is dead? [\[LINK\]](#)
5. Biden's telling Exxon to "start paying your taxes" reminds oil and gas shouldn't be expecting any breaks even as US gasoline prices hit \$5 [\[LINK\]](#)
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 [\[LINK\]](#)

Dan Tsubouchi
Principal, Chief Market Strategist
dtsubouchi@safgroup.ca

Ryan Dunfield
Principal, CEO
rdunfield@safgroup.ca

Aaron Burling
Principal, CDO, CFO
aburling@safgroup.ca

Ryan Naught
Principal, Energy
rnaught@safgroup.ca

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