Energy Tidbits

Do Two Shorter-Term LNG Deals Mean the Post-July 2021 Buyer Rush to Lock Up Long-Term (>10 yrs) LNG Supply is Ending?

Produced by: Dan Tsubouchi

August 20, 2023

Dan Tsubouchi
Chief Market Strategist
dtsubouchi@safgroup.ca

Ryan Dunfield
CEO
rdunfield@safgroup.ca

Aaron Bunting
COO, CFO
abunting@safgroup.ca

Ryan Haughn
Managing Director
rhaughn@safgroup.ca

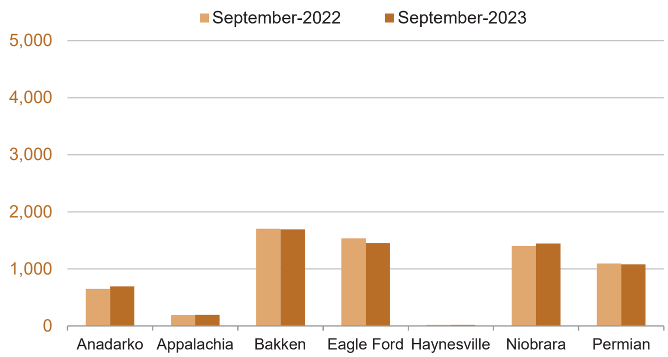
Year-over-year summary

Drilling Productivity Report

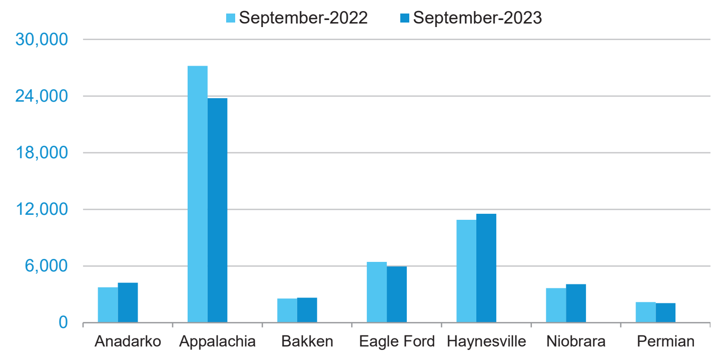
August 2023

drilling data through July
projected production through September

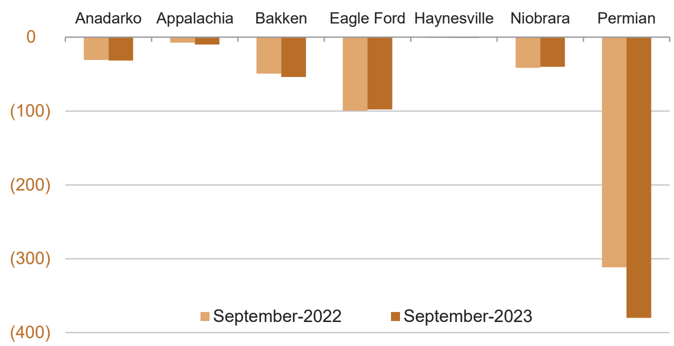
New-well oil production per rig
barrels/day



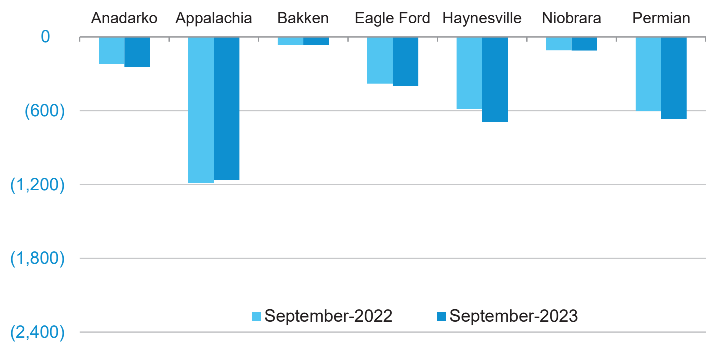
New-well gas production per rig
thousand cubic feet/day



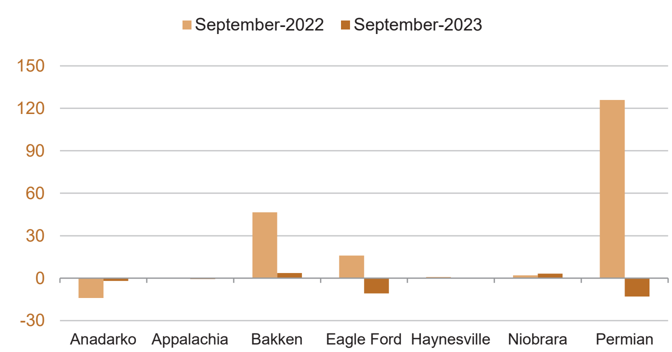
Legacy oil production change
thousand barrels/day



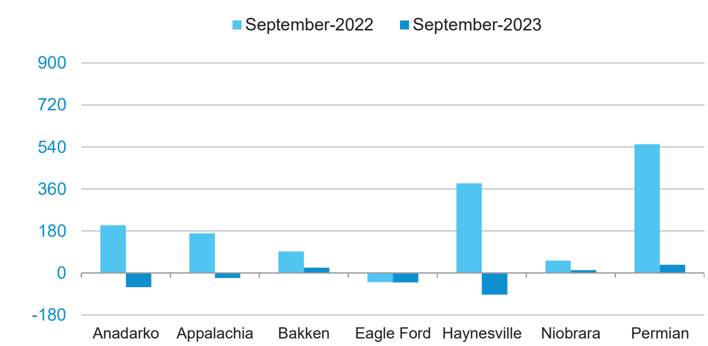
Legacy gas production change
million cubic feet/day



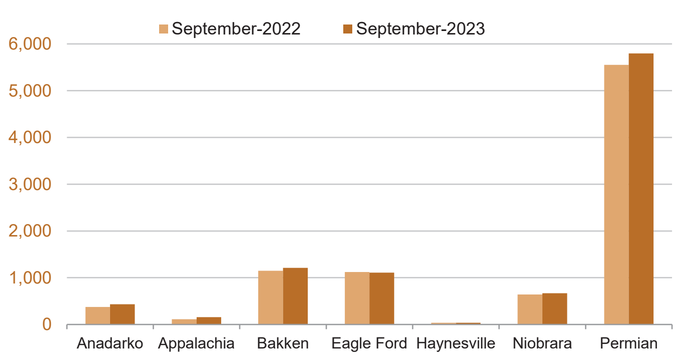
Indicated monthly change in oil production (Sep vs. Aug)
thousand barrels/day



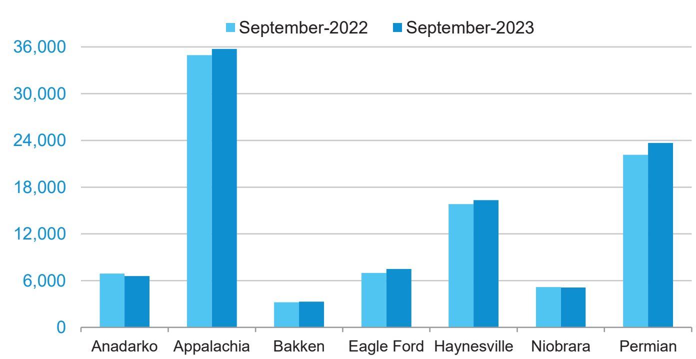
Indicated monthly change in gas production (Sep vs. Aug)
million cubic feet/day



Oil production
thousand barrels/day



Natural gas production
million cubic feet/day



Anadarko Region

Drilling Productivity Report

August 2023
drilling data through July
projected production through September

Oil +7 barrels/day month over month

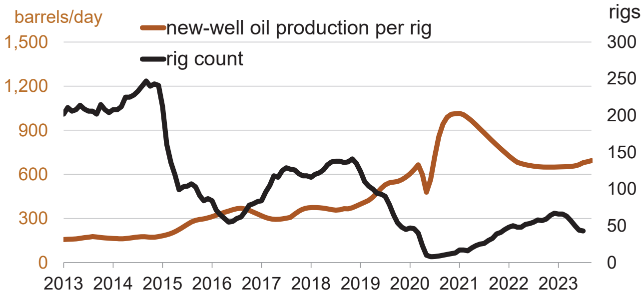
693 *September* **686** *August* barrels/day

Monthly additions from one average rig

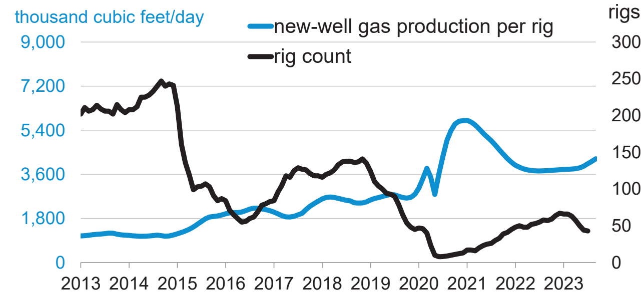
September **4,235** *August* **4,132** thousand cubic feet/day

Gas +103 thousand cubic feet/day month over month

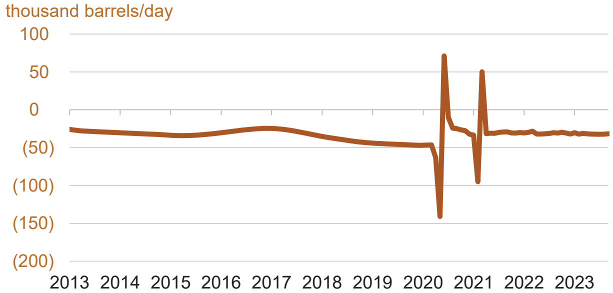
Anadarko Region
New-well oil production per rig **Rig count**



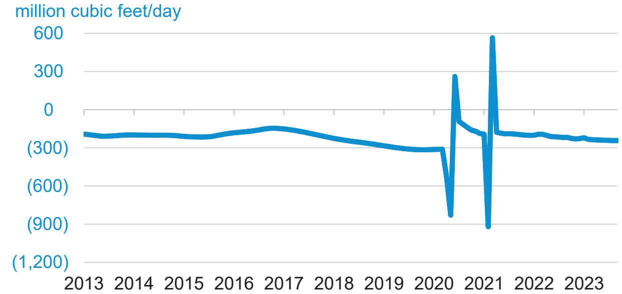
Anadarko Region
New-well gas production per rig **Rig count**



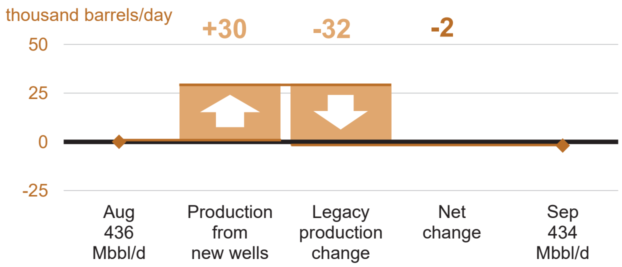
Anadarko Region
Legacy oil production change



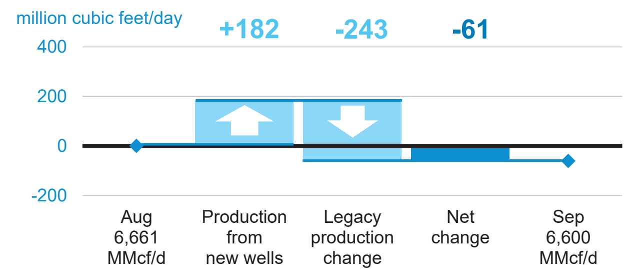
Anadarko Region
Legacy gas production change



Anadarko Region
Indicated change in oil production (Sep vs. Aug)

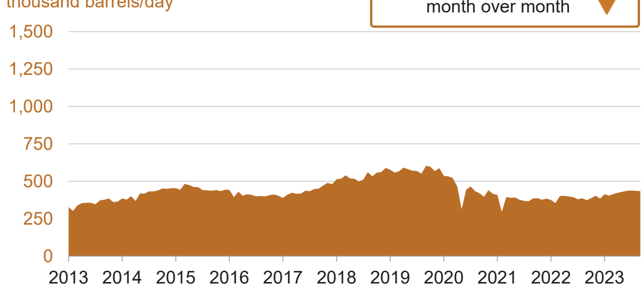


Anadarko Region
Indicated change in natural gas production (Sep vs. Aug)



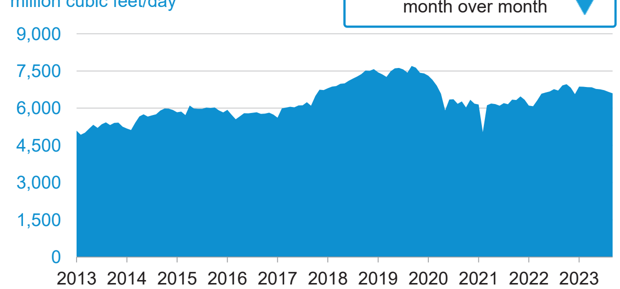
Anadarko Region
Oil production
thousand barrels/day

Oil -2 thousand barrels/day month over month



Anadarko Region
Natural gas production
million cubic feet/day

Gas -61 million cubic feet/day month over month



Appalachia Region

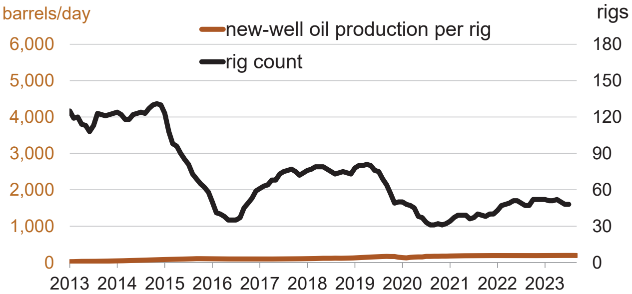
Drilling Productivity Report

August 2023

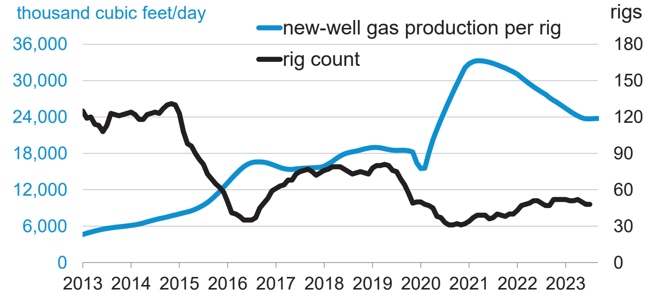
drilling data through July
projected production through September

Oil		Monthly additions from one average rig		Gas
Oil 0 barrels/day month over month	**193** *September* **193** *August* barrels/day		*September* **23,770** *August* **23,734** thousand cubic feet/day	**Gas +36** thousand cubic feet/day month over month

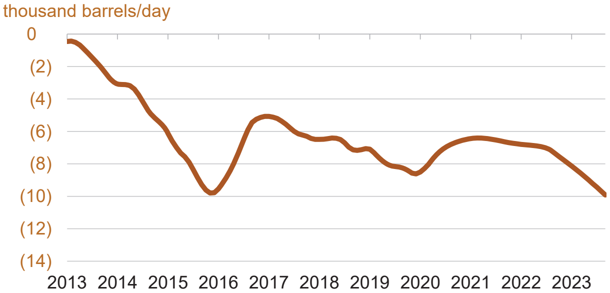
Appalachia Region
New-well oil production per rig



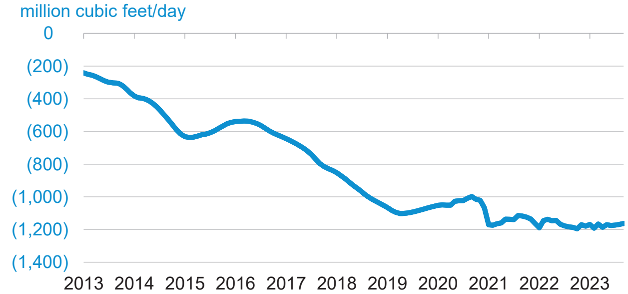
Appalachia Region
New-well gas production per rig



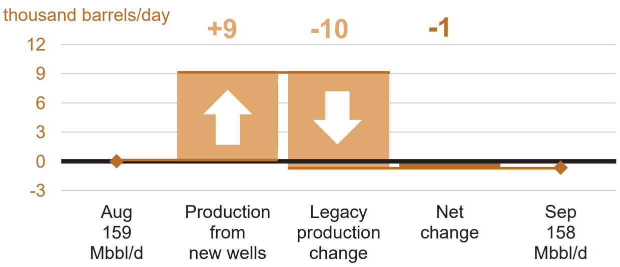
Appalachia Region
Legacy oil production change



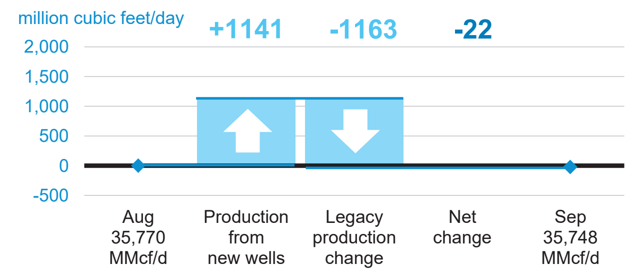
Appalachia Region
Legacy gas production change



Appalachia Region
Indicated change in oil production (Sep vs. Aug)

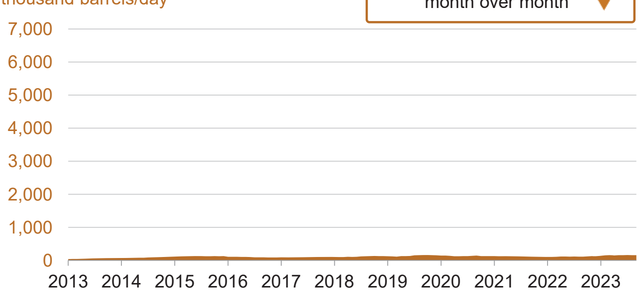


Appalachia Region
Indicated change in natural gas production (Sep vs. Aug)



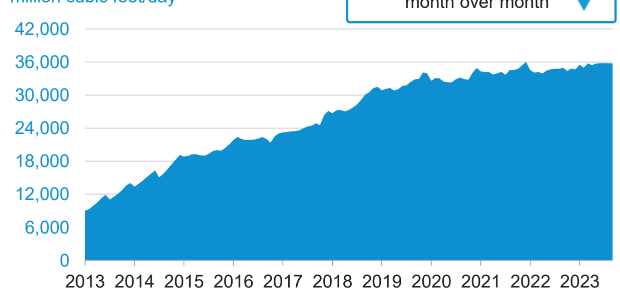
Appalachia Region
Oil production
thousand barrels/day

Oil -1
thousand barrels/day
month over month



Appalachia Region
Natural gas production
million cubic feet/day

Gas -22
million cubic feet/day
month over month



Bakken Region

Drilling Productivity Report

August 2023

drilling data through July
projected production through September

Oil +8 barrels/day month over month

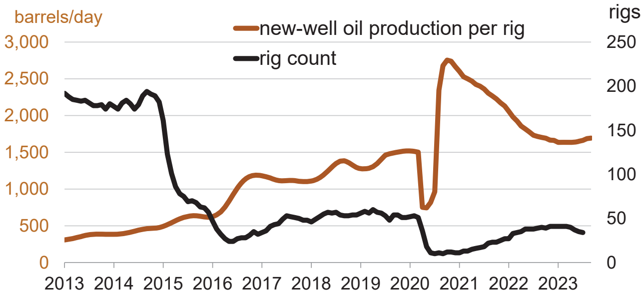
1,694 *September*
1,686 *August*
barrels/day

Monthly additions from one average rig

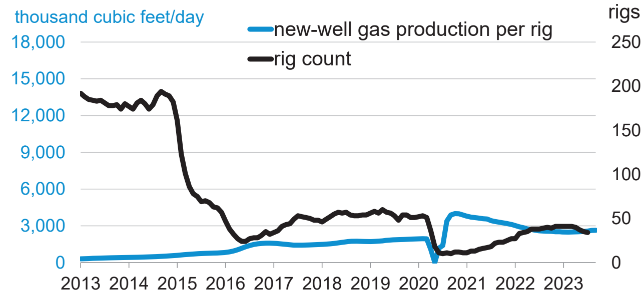
September **2,639**
August **2,618**
thousand cubic feet/day

Gas +21 thousand cubic feet/day month over month

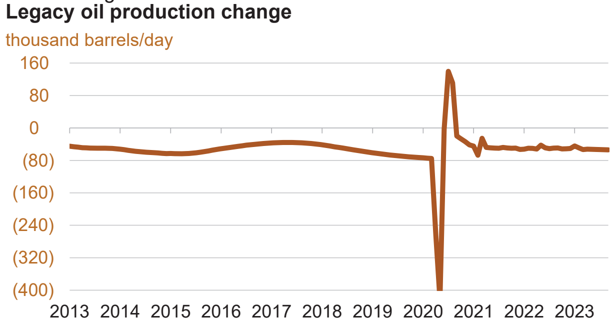
Bakken Region
New-well oil production per rig
Rig count



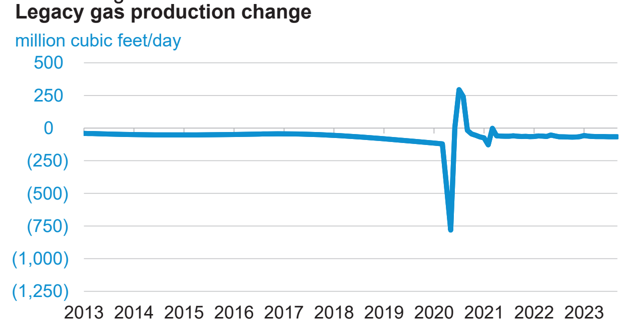
Bakken Region
New-well gas production per rig
Rig count



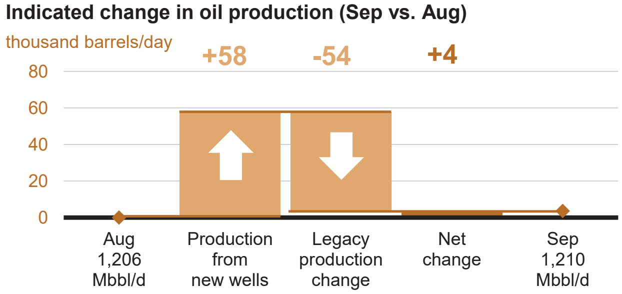
Bakken Region
Legacy oil production change



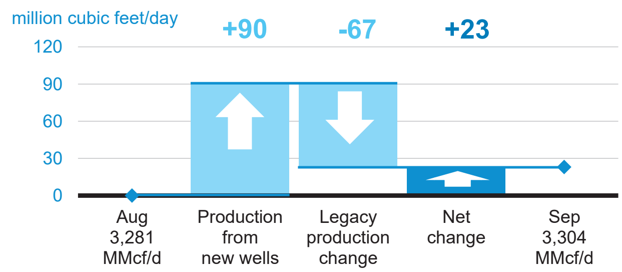
Bakken Region
Legacy gas production change



Bakken Region
Indicated change in oil production (Sep vs. Aug)

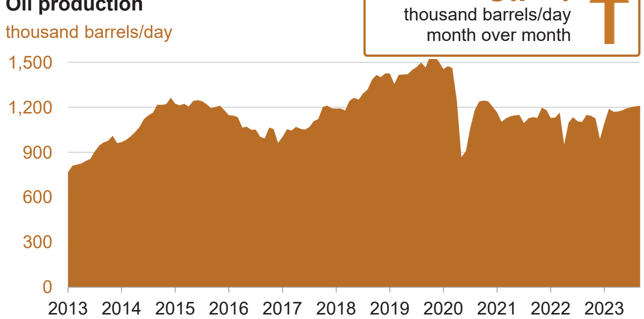


Bakken Region
Indicated change in natural gas production (Sep vs. Aug)



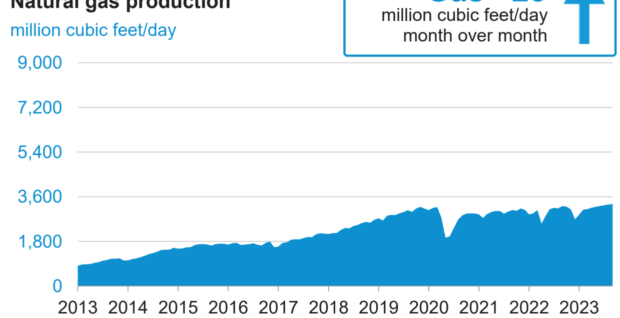
Bakken Region
Oil production

Oil +4 thousand barrels/day month over month



Bakken Region
Natural gas production

Gas +23 million cubic feet/day month over month



Eagle Ford Region
Drilling Productivity Report

August 2023
drilling data through July
projected production through September

Oil +14 barrels/day month over month

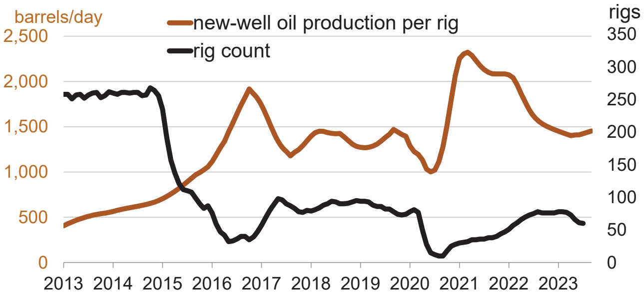
1,453 *September*
1,439 *August*
barrels/day

Monthly additions from one average rig

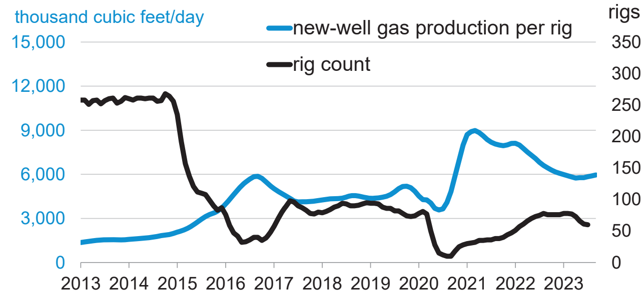
September **5,955**
August **5,896**
thousand cubic feet/day

Gas +59 thousand cubic feet/day month over month

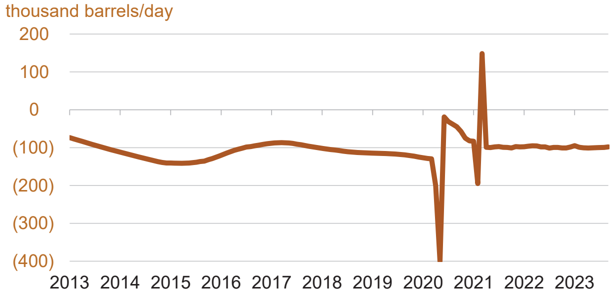
Eagle Ford Region
New-well oil production per rig



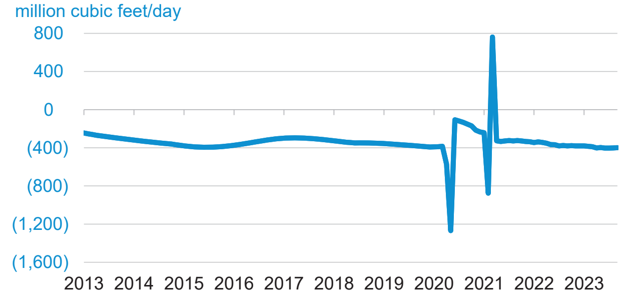
Eagle Ford Region
New-well gas production per rig



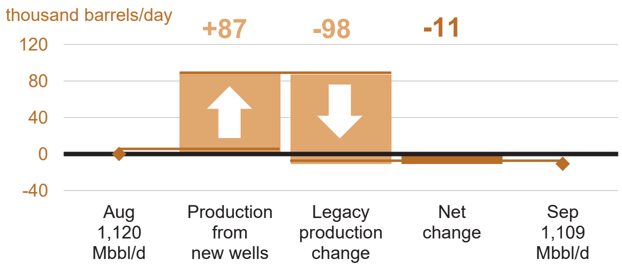
Eagle Ford Region
Legacy oil production change



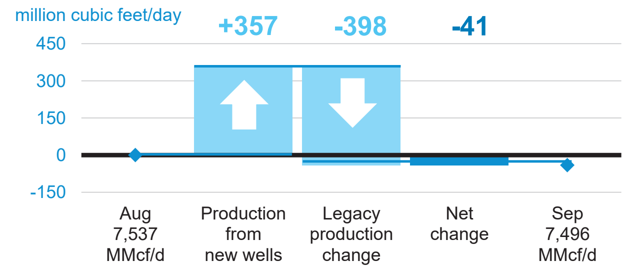
Eagle Ford Region
Legacy gas production change



Eagle Ford Region
Indicated change in oil production (Sep vs. Aug)

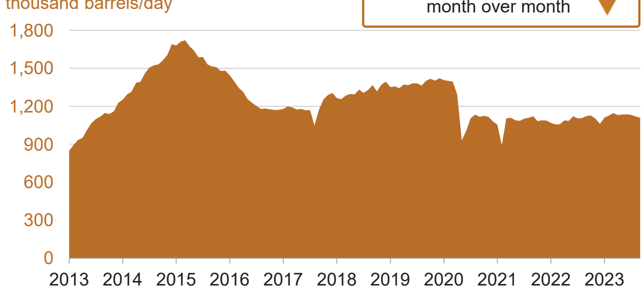


Eagle Ford Region
Indicated change in natural gas production (Sep vs. Aug)



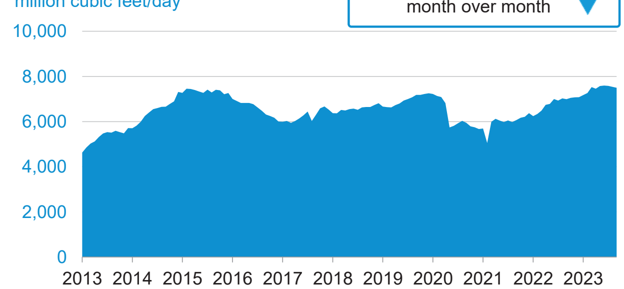
Eagle Ford Region
Oil production

Oil -11 thousand barrels/day month over month



Eagle Ford Region
Natural gas production

Gas -41 million cubic feet/day month over month



Haynesville Region
Drilling Productivity Report

August 2023
drilling data through July
projected production through September

Oil
0
barrels/day
month over month

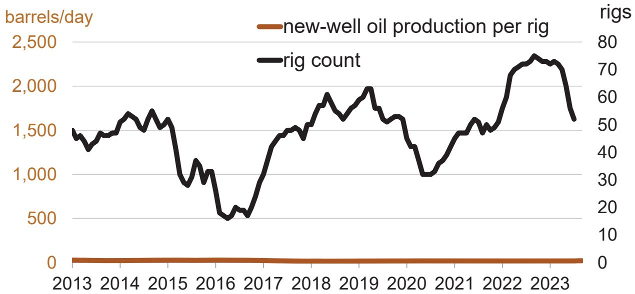
19 *September*
19 *August*
barrels/day

Monthly additions from one average rig

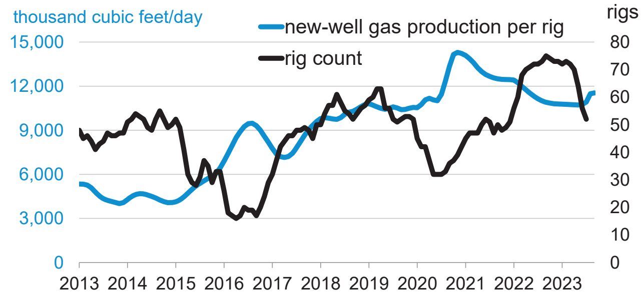
September **11,541**
August **11,484**
thousand cubic feet/day

Gas
+57
thousand cubic feet/day
month over month

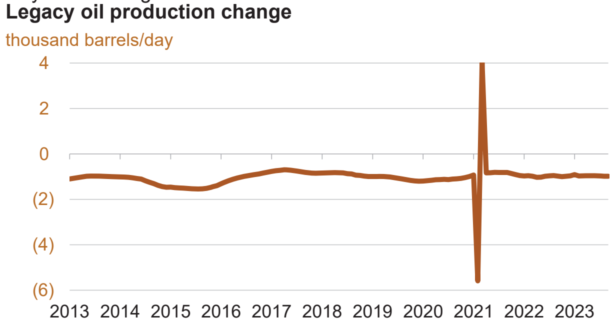
Haynesville Region
New-well oil production per rig **Rig count**



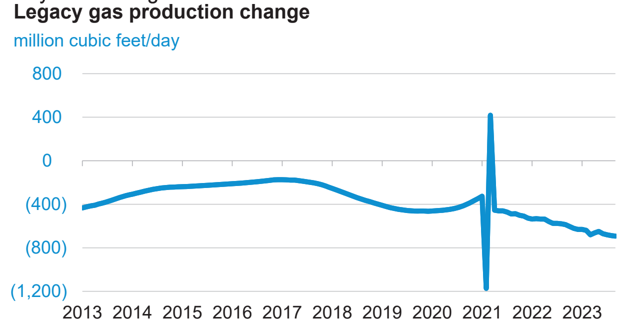
Haynesville Region
New-well gas production per rig **Rig count**



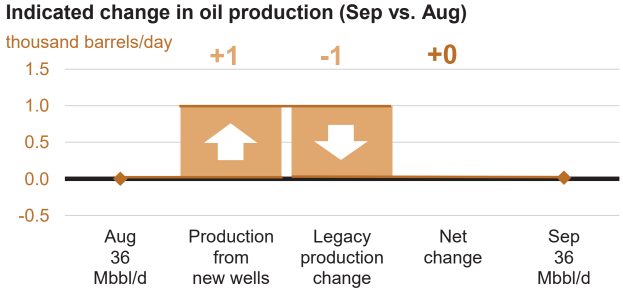
Haynesville Region
Legacy oil production change



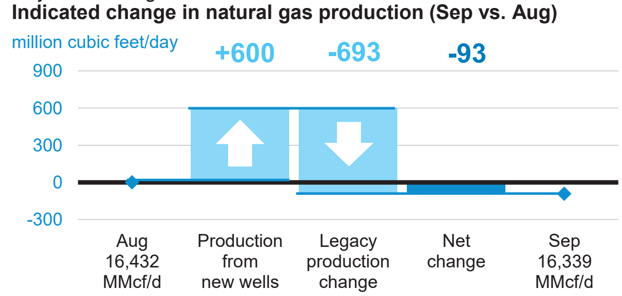
Haynesville Region
Legacy gas production change



Haynesville Region
Indicated change in oil production (Sep vs. Aug)

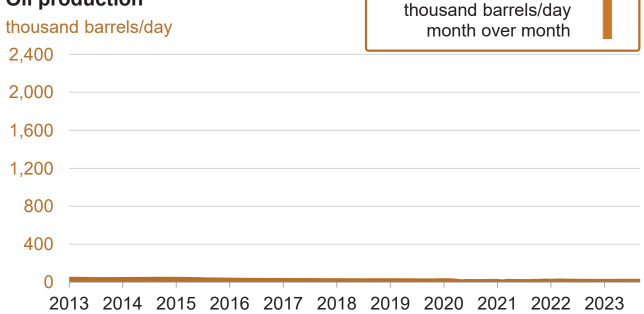


Haynesville Region
Indicated change in natural gas production (Sep vs. Aug)



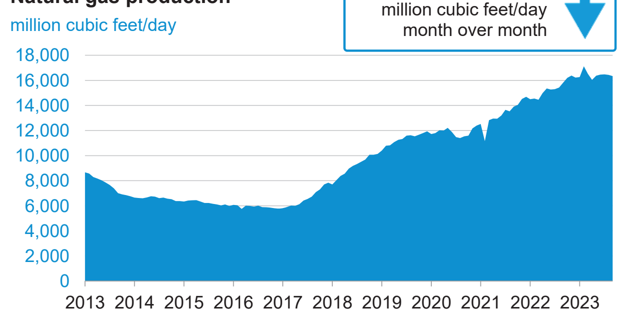
Haynesville Region
Oil production

Oil +0
thousand barrels/day
month over month



Haynesville Region
Natural gas production

Gas -93
million cubic feet/day
month over month



Niobrara Region

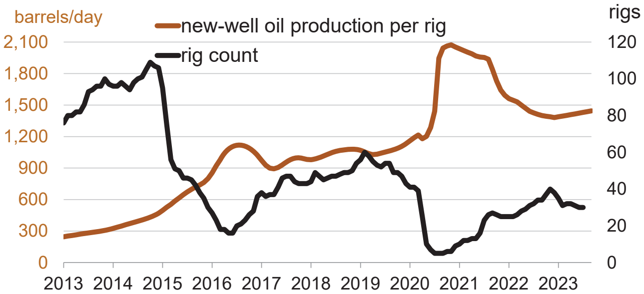
Drilling Productivity Report

August 2023

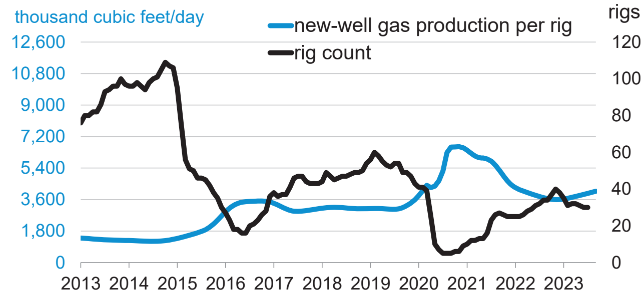
drilling data through July
projected production through September

Oil +7 barrels/day month over month	**1,444** *September* **1,437** *August* barrels/day	**Monthly additions from one average rig**	*September* **4,074** *August* **4,014** thousand cubic feet/day	**Gas +60** thousand cubic feet/day month over month

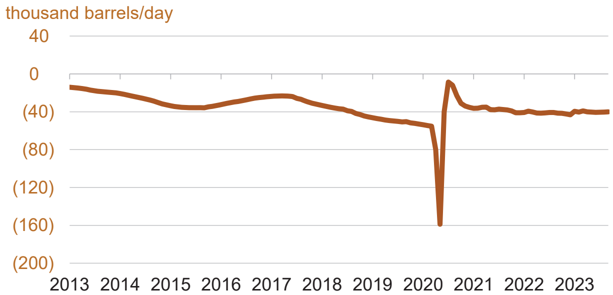
Niobrara Region
New-well oil production per rig **Rig count**



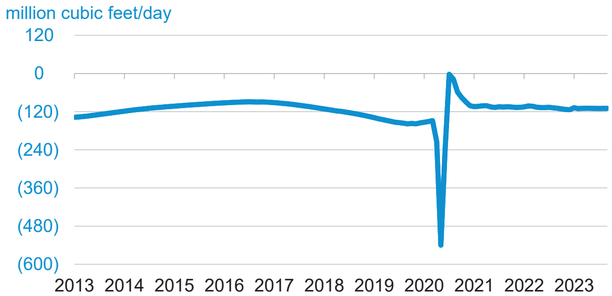
Niobrara Region
New-well gas production per rig **Rig count**



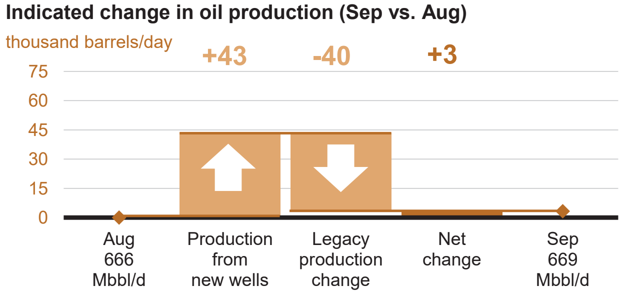
Niobrara Region
Legacy oil production change



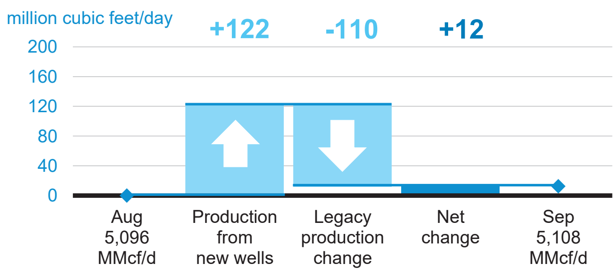
Niobrara Region
Legacy gas production change



Niobrara Region
Indicated change in oil production (Sep vs. Aug)

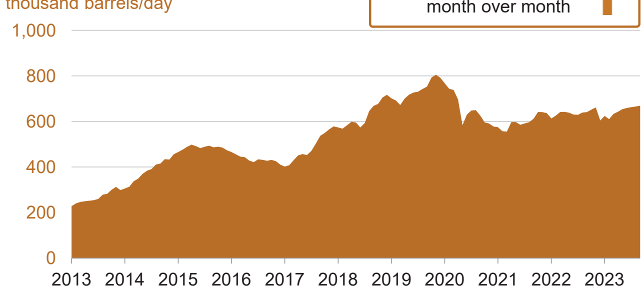


Niobrara Region
Indicated change in natural gas production (Sep vs. Aug)



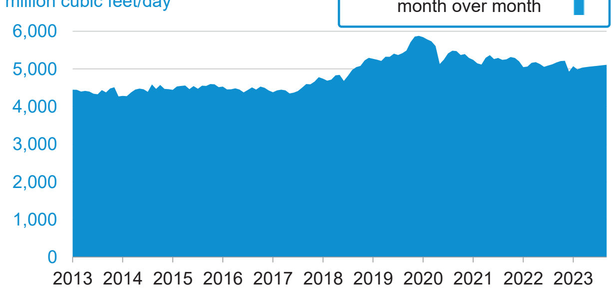
Niobrara Region
Oil production
thousand barrels/day

Oil +3
thousand barrels/day
month over month



Niobrara Region
Natural gas production
million cubic feet/day

Gas +12
million cubic feet/day
month over month



Permian Region

Drilling Productivity Report

August 2023
drilling data through July
projected production through September

Oil +6
barrels/day
month over month

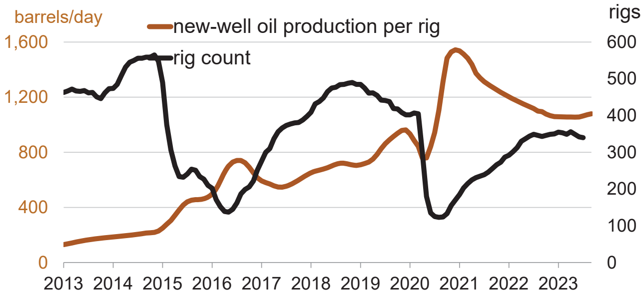
1,079 *September*
1,073 *August*
barrels/day

Monthly additions from one average rig

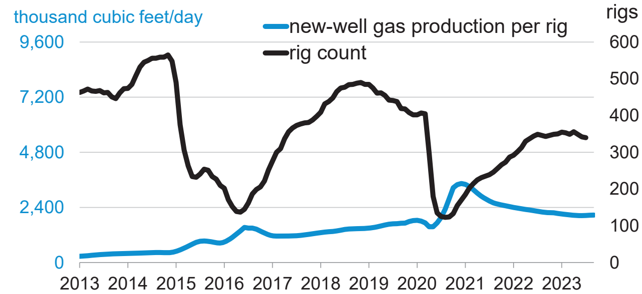
September **2,067**
August **2,059**
thousand cubic feet/day

Gas +8
thousand cubic feet/day
month over month

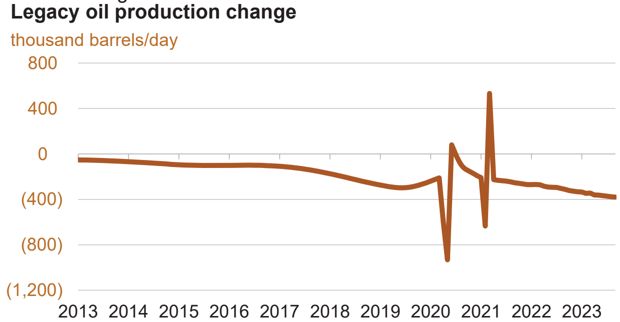
Permian Region
New-well oil production per rig **Rig count**



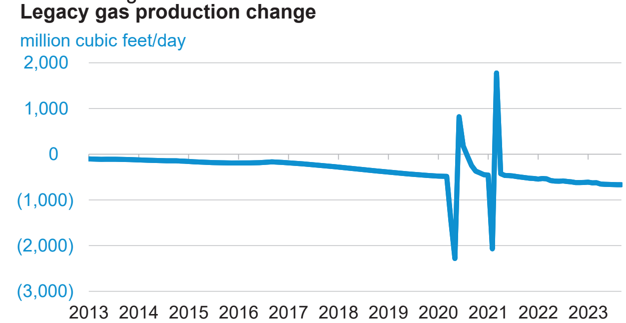
Permian Region
New-well gas production per rig **Rig count**



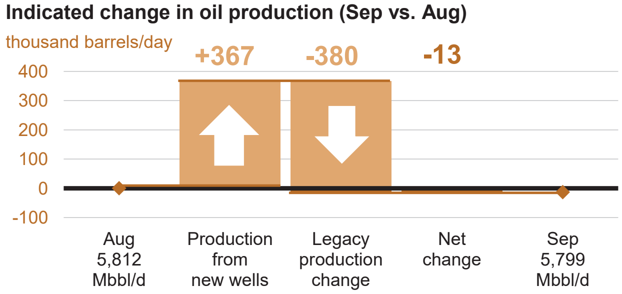
Permian Region
Legacy oil production change



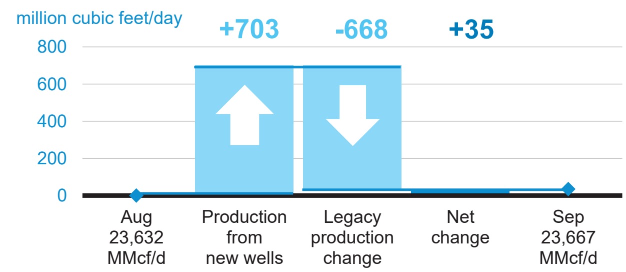
Permian Region
Legacy gas production change



Permian Region
Indicated change in oil production (Sep vs. Aug)

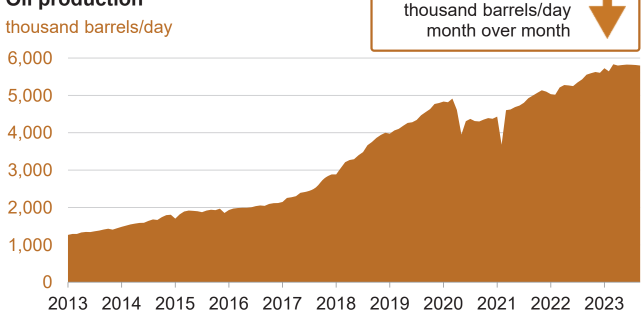


Permian Region
Indicated change in natural gas production (Sep vs. Aug)



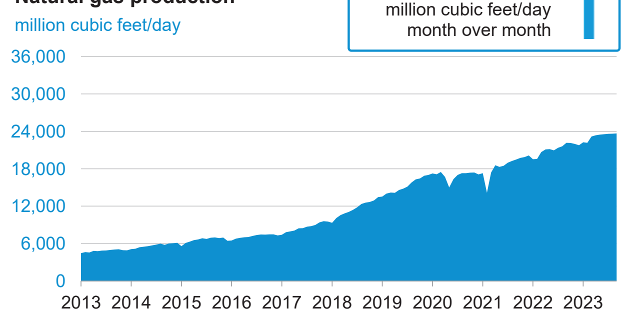
Permian Region
Oil production

Oil -13
thousand barrels/day
month over month



Permian Region
Natural gas production

Gas +35
million cubic feet/day
month over month



Explanatory notes

Drilling Productivity Report

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 oil[1] and natural gas[2] 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's[3] 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

Summary

Overview of Activity for June 2023

- **Top five countries of destination, representing 49.5% of total U.S. LNG exports in June 2023**
  - Netherlands (45.9 Bcf), France (45.6 Bcf), Japan (24.7 Bcf), China (23.6 Bcf) and Argentina (22.7 Bcf)
- **327.8 Bcf of exports in June 2023**
  - 10.6% decrease from May 2023
  - 9.1% more than June 2022
- **108 cargos shipped in June 2023**
  - Cameron (29), Sabine Pass (27), Freeport (21), Corpus Christi (18), Cove Point (7), and Elba (6)
  - 127 cargos in May 2023
  - 96 cargos in June 2022

1a. Table of Exports of Domestically-Produced LNG Delivered by Region (Cumulative from February 2016 through June 2023)

Region	Number of Countries Receiving Per Region	Volume Exported (Bcf)	Percentage Receipts of Total Volume Exported (%)	Number of Cargos*
East Asia and Pacific	8	4,841.8	30.8%	1436
Europe and Central Asia	15	7,268.0	46.3%	2274
Latin America and the Caribbean**	13	2,290.4	14.6%	832
Middle East and North Africa	5	394.8	2.5%	115
South Asia	3	901.5	5.7%	267
Sub-Saharan Africa	0	0.0	0.0%	0
Total LNG Exports	**44**	**15,696.5**	**100.0%**	**4,924**

*Split cargos counted as both individual cargos and countries

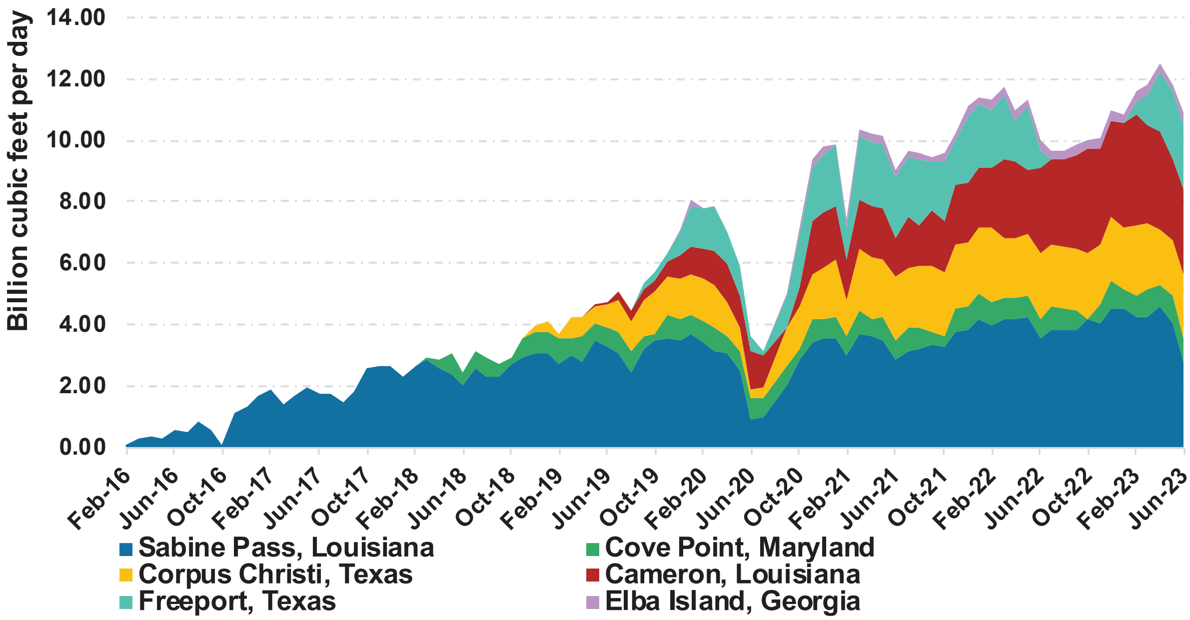
**Number of cargos does not include the shipments by ISO container

1b. Shipments of Domestically-Produced LNG Delivered – by Country
(Cumulative from February 2016 through June 2023)

	Country of Destination	Region	Number of Cargos	Volume (Bcf of Natural Gas)	Percentage of Total U.S LNG Exports (%)
1.	South Korea*	East Asia and Pacific	529	1,832.5	11.7%
2.	Japan*	East Asia and Pacific	401	1,364.1	8.7%
3.	United Kingdom*	Europe and Central Asia	390	1,295.6	8.3%
4.	France*	Europe and Central Asia	377	1,224.3	7.8%
5.	Spain*	Europe and Central Asia	375	1,173.3	7.5%
6.	Netherlands*	Europe and Central Asia	308	1,042.2	6.6%
7.	China*	East Asia and Pacific	307	1,041.5	6.6%
8.	India*	South Asia	205	697.6	4.4%
9.	Turkiye*	Europe and Central Asia	210	670.8	4.3%
10.	Brazil*	Latin America and the Caribbean	226	626.1	4.0%
11.	Mexico*	Latin America and the Caribbean	166	553.1	3.5%
12.	Chile*	Latin America and the Caribbean	139	440.3	2.8%
13.	Italy*	Europe and Central Asia	125	402.6	2.6%
14.	Taiwan*	East Asia and Pacific	117	370.8	2.4%
15.	Poland*	Europe and Central Asia	103	340.6	2.2%
16.	Argentina*	Latin America and the Caribbean	137	330.9	2.1%
17.	Portugal*	Europe and Central Asia	94	298.4	1.9%
18.	Greece*	Europe and Central Asia	87	200.0	1.3%
19.	Dominican Republic*	Latin America and the Caribbean	79	188.0	1.2%
20.	Belgium*	Europe and Central Asia	55	175.9	1.1%
21.	Kuwait	Middle East and North Africa	50	174.5	1.1%
22.	Lithuania	Europe and Central Asia	56	171.7	1.1%
23.	Croatia	Europe and Central Asia	45	135.4	0.9%
24.	Pakistan*	South Asia	40	128.9	0.8%
25.	Jordan*	Middle East and North Africa	36	124.2	0.8%
26.	Singapore*	East Asia and Pacific	36	117.4	0.7%
27.	Germany	Europe and Central Asia	32	101.2	0.6%
28.	Thailand*	East Asia and Pacific	29	101.2	0.6%
29.	Bangladesh*	South Asia	22	75.0	0.5%
30.	Panama*	Latin America and the Caribbean	33	61.2	0.4%
31.	Jamaica*	Latin America and the Caribbean	30	58.2	0.4%
32.	United Arab Emirates	Middle East and North Africa	15	51.1	0.3%
33.	Israel*	Middle East and North Africa	9	28.0	0.2%
34.	Colombia*	Latin America and the Caribbean	22	27.0	0.2%
35.	Malta*	Europe and Central Asia	11	20.1	0.1%
36.	Egypt*	Middle East and North Africa	5	16.9	0.1%
37.	Finland	Europe and Central Asia	6	15.7	0.1%
38.	Indonesia*	East Asia and Pacific	16	10.7	0.1%
39.	Malaysia	East Asia and Pacific	1	3.7	0.0%
	Total Exports by Vessel		**4,924**	**15,690.9**	
	Jamaica	Latin America and the Caribbean	177	2.0	0.0%
40	Bahamas	Latin America and the Caribbean	750	1.8	0.0%
41	Barbados	Latin America and the Caribbean	305	1.3	0.0%
42	Haiti	Latin America and the Caribbean	146	0.5	0.0%
43	Antigua and Barbuda	Latin America and the Caribbean	51	0.0	0.0%
44	Nicaragua	Latin America and the Caribbean	1	0.0	0.0%
	Germany	Europe and Central Asia	1	0.0	0.0%
	Total Exports by ISO		**1431**	**5.6**	
	Total Exports by Vessel and ISO		**6,355**	**15,696.5**	

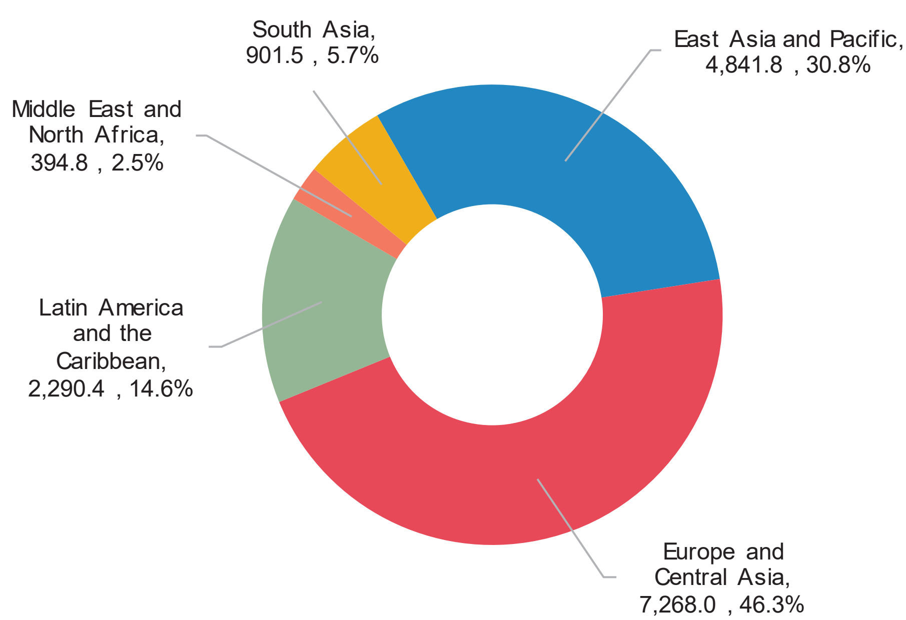
Note:
Volume and Number of Cargos are the cumulative totals of each individual Country of Destination by Region starting from February 2016.
Jamaica has received U.S. LNG exports by both vessel and ISO container. The volumes are totaled separately
* Split cargos counted as both individual cargos and countries.
Vessel = LNG Exports by Vessel and ISO container = LNG Exports by Vessel in ISO Containers.
Does not include re-exports of previously-imported LNG. See table 2c for re-exports data.
Totals may not equal sum of components because of independent rounding.

1c. Domestically-Produced LNG Exported by Point of Exit
(February 2016 through June 2023)



The Cameron, LA point of exit includes exports from Cameron LNG and Venture Global Calcasieu Pass.

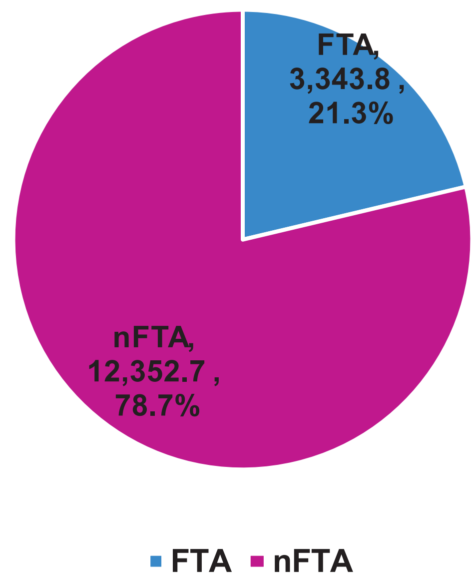
1d. Domestically-Produced LNG Exported by Region
(Cumulative from February 2016 through June 2023)
(Bcf, %)



1e. Volumes and Percentages of FTA and nFTA Shipments of Domestically-Produced LNG Delivered

(Cumulative from February 2016 through June 2023)

	Volume (Bcf)	Percentage of Total Volume	Number of Countries
FTA	3,343.8	21.3%	8
nFTA	12,352.7	78.7%	36
Total LNG Exports	**15,696.5**	**100.0%**	**44**



Spot cargos total 722.9 Bcf - or 4.6 percent - of the 15, 696.5 Bcf total volume of shipments.

These totals are cumulative starting from February 2016 through June 2023 - a cumulative listing of cargos and regions in Table 1b and a cumulative list of FTAs and nFTAs in Table 1h.

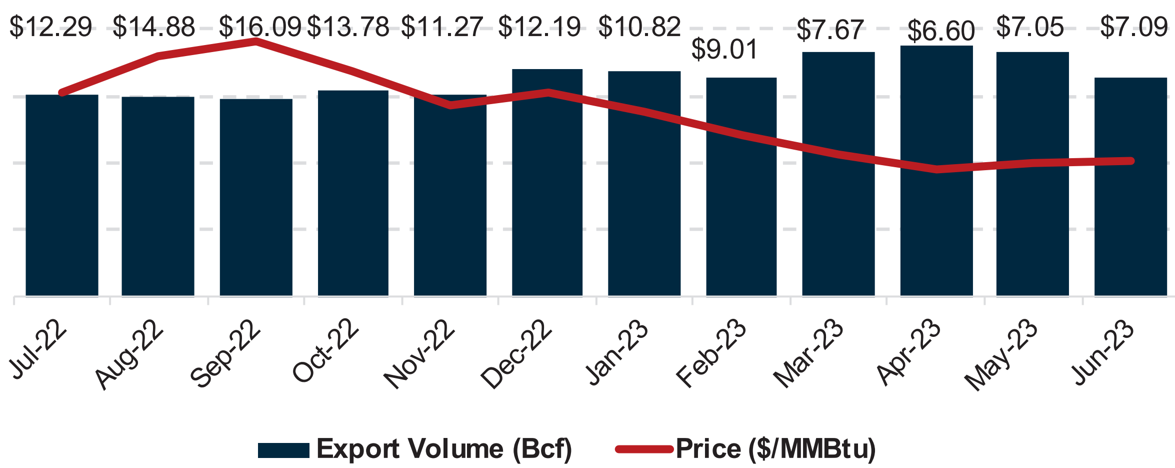
FTA Countries that Require National Treatment for Trade in Natural Gas -As of October 31, 2012, the United States has FTAs that require national treatment for trade in natural gas with Australia, Bahrain, Canada, Chile, Colombia, Dominican Republic, El Salvador, Guatemala, Honduras, Jordan, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, Republic of Korea and Singapore. Panama is the most recent country with which the United States has entered into a FTA that requires national treatment for trade in natural gas, effective October 31, 2012. Not all countries that have a FTA with the United States require national treatment for trade in natural gas (i.e. Costa Rica and Israel). A list of all countries with which the United States has a FTA can be found at: http://www.ustr.gov/trade-agreements/free-trade-agreements.

More information can be found on DOE's website - https://energy.gov/fe/services/natural-gas-regulation/how-obtain-authorization-import-andor-export-natural-gas-and-lng

Totals may not equal sum of components because of independent rounding.

1f. Domestically-Produced LNG Exported – Volume (Bcf) and Weighted Average price ($/MMBtu) by Point of Exit per month

	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Total
Sabine Pass, LA	118.5	118.7	115.6	130.4	120.1	139.2	139.2	119.5	131.0	137.0	126.2	83.7	**1,479.1**
	$10.50	$12.71	$13.71	$10.85	$9.26	$10.43	$8.67	$6.72	$5.86	$5.45	$5.26	$5.35	**$8.76**
Cove Point, MD	24.2	21.4	18.8	0	20.4	29.8	20.8	19.4	27.8	21.2	26.3	23.3	**653.3**
	$11.28	$12.36	$13.61	0	$10.10	$10.98	$8.67	$8.35	$6.96	$6.55	$6.32	$6.48	**$9.15**
Corpus Christi, TX	63.1	63.4	59.8	66.8	57.0	64.1	62.6	64.1	67.1	55.6	57.7	62.4	**743.8**
	$12.17	$14.70	$15.99	$12.42	$10.36	$10.60	$10.74	$7.06	$6.26	$5.51	$5.62	$5.82	**$9.81**
Cameron, LA	85.2	87.2	91.1	104.9	94.1	97.1	104.8	100.8	100.0	94.5	80.7	82.0	**1,122.6**
	$15.15	$18.92	$19.89	$18.38	$14.82	$16.34	$14.33	$12.99	$11.65	$9.86	$12.87	$11.71	**$14.76**
Freeport, TX	0	0	0	0	0	0	0	11.6	29.0	58.9	68.4	63.3	**231.1**
	0	0	0	0	0	0	0	$8.23	$6.14	$5.34	$5.25	$5.38	**$5.57**
Elba Island, GA	9.1	9.2	9.7	7.4	10.6	9.4	9.4	10.6	11.4	7.3	7.4	13.0	**114.6**
	$12.20	$11.58	$14.31	$12.53	$9.62	$10.14	$8.81	$10.72	$7.54	$4.75	$4.55	$4.77	**$9.25**
Total	**300.2**	**299.9**	**295.1**	**309.4**	**302.3**	**339.6**	**336.9**	**326.0**	**366.3**	**374.4**	**366.7**	**327.8**	**3,944.5**
	$12.29	**$14.88**	**$16.09**	**$13.78**	**$11.27**	**$12.19**	**$10.82**	**$9.01**	**$7.67**	**$6.60**	**$7.05**	**$7.09**	**$10.52**



Notes:

Prices are free on board (FOB) and are inclusive of all costs of the LNG up to the point of export, including commodity costs and liquefaction fees.

Does not include re-exports of previously-imported LNG. See table 2c for re-exports data.

Totals may not equal sum of components because of independent rounding.

The Cameron, LA point of exit includes exports from Cameron LNG and Venture Global Calcasieu Pass.

W - Withheld to avoid disclosure of individual company data.

DOE has a confidentiality policy for certain data elements collected on Form FE-746R that allows DOE to publish a monthly volume-weighted average price for each point of LNG import or export, but not a price for each individual imported or exported LNG cargo. For additional information, please see the Federal Register Notice concerning this Information Collection Extension at https://www.federalregister.gov/documents/2018/08/30/2018-18829/information-collection-extension.

https://www.adnocgas.ae/en/News-and-Media/Press-Releases/2023/ADNOC-Gas---JAPEX---AR

- August 17, 2023 Abu Dhabi, UAE

ADNOC Gas Signs 5-Year LNG Supply Agreement with Japan Petroleum Exploration Co. Ltd.

ADNOC Gas Signs 5-Year LNG Supply Agreement with Japan Petroleum Exploration Co. Ltd.

LNG Supply Agreement valued at between $450-550 million reinforces ADNOC Gas' position as a global LNG export partner of choice

Agreement builds on the long-standing energy partnership between the UAE and Japan, and underscores the Company's growing global presence, particularly in the Asian LNG market
Natural gas plays a crucial role as a transitional fuel with lower carbon emissions compared to other fossil fuels

Abu Dhabi, UAE – August 17, 2023: ADNOC Gas plc ("ADNOC Gas" or the "Company"), a world-class integrated gas processing company, today announced a five-year liquefied natural gas (LNG) supply agreement with Japan Petroleum Exploration Co., Ltd. (JAPEX), the Japan-based energy company.

The agreement, valued between $450 million (AED1.65 billion) and $550 million (AED 2 billion), builds on the long-standing bilateral relationship between the UAE and Japan and ADNOC's track record of fostering mutually beneficial strategic partnerships with Japanese energy companies.

Commenting on the agreement, Ahmed Alebri, Chief Executive Officer of ADNOC Gas, said: "Japan is one of the UAE's largest and most important energy partners and we are very pleased to strengthen this relationship through this LNG supply agreement with JAPEX. The agreement reinforces ADNOC Gas' position as a global LNG export partner of choice and highlights the Company's growing global presence, particularly in the Asian LNG market."

Natural gas plays a crucial role as a transitional fuel with lower carbon emissions compared to other fossil fuels. It also serves as an important raw material in industrial value chains.
ADNOC Gas continues to leverage opportunities arising from ADNOC's integrated gas masterplan which links every part of the gas value chain in the UAE, ensuring a sustainable and economic supply of natural gas to meet local and international demand.

# # #

About ADNOC Gas

ADNOC Gas, listed on the ADX (ADX symbol: “ADNOCGAS” / ISIN: “AEE01195A234”), is a world-class, large-scale integrated gas processing company operating across the gas value chain, from receipt of raw gas feedstock from ADNOC through large, long-life operations for gas processing and fractionation to the sale of products to domestic and international customers. ADNOC Gas supplies approximately 60% of the UAE’s sales gas needs and supplies end-customers in over 20 countries. To find out more, visit: www.adnocgas.ae.

For media inquiries please contact:
Mayyasa Saeed Al Yammahi
Manager, External Communications
+971 50 117 1779 – Mayyasa@adnoc.ae

For investor inquiries, please contact:
Zoltan Pandi
Vice President, Investor Relations +971 56 4362067 - zpandi@adnoc.ae

https://timesofoman.com/article/134802-oman-lng-signs-a-binding-term-sheet-agreement-with-german-company

Oman LNG signs a binding term-sheet agreement with German company

Oman Monday 14/August/2023 15:43 PM

By: ONA

AAAA

The agreement signing ceremony was held under the auspices of Eng. Salim Nasser al Aufi, Minister of Energy and Minerals (ONA)

Muscat: Oman LNG announced the signing of a binding term-sheet agreement with SEFE Secure Energy for Europe (SEFE) to supply 0.4 million metric tonnes per annum (mtpa) of LNG starting from 2026.

The agreement aims to enhance the ever-growing partnership between Oman LNG and international energy firms, where SEFE has become the latest beneficiary of Omani LNG marking the first LNG term deal with a German firm. The move is considered a remarkable milestone for both countries, thus opening doors for new opportunities in the European markets.

The signed term-sheet agreement encapsulates supplying a total volume of 0.4 million metric tonne per annum of LNG from Oman LNG to SEFE. The agreement is based on a 4-year contract, starting in 2026. Signing term-sheet agreements beyond 2024 emphasises Oman LNG's role in sustaining the Sultanate of Oman's reputation as a reliable and trusted LNG supplier, coupled with the effective management of business processes to produce reliable energy, and deliver it to customers around the world safely.

The agreement signing ceremony was held under the auspices of Eng. Salim Nasser al Aufi, Minister of Energy and Minerals. The agreement was signed by Hamed Al Naamany, CEO of Oman LNG, and Frederic Barnaud, Chief Commercial Officer of SEFE.

Mahmoud Abdulsatar Al Balushi, Chief Commercial Officer of Oman LNG, said "The term-sheet signing with SEFE marks another milestone. Going further, the agreement leverages our constant efforts to add value to Oman's economy through growth and collaborations.

On his turn, Egbert Laege, CEO of SEFE said, "We are delighted to announce the historic contract signing between SEFE and Oman LNG, marking a significant milestone for both entities. As pioneers among German companies to embark on this partnership, SEFE is proud to lead the way towards enhanced collaboration."

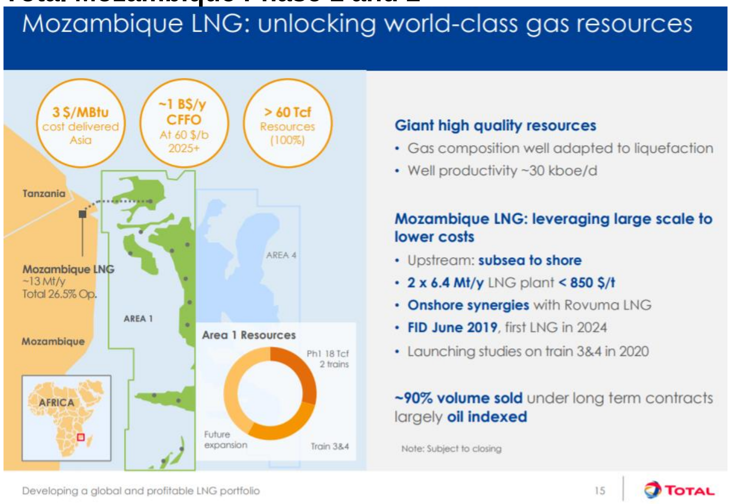
Multiple Brownfield LNG FIDs Now Needed To Fill New LNG Supply Gap From Mozambique Chaos? How About LNG Canada Phase 2?

Posted Wednesday April 28, 2021. 9:00 MT

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

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

Total Mozambique Phase 1 and 2



Source: Total Investor Day September 24, 2019

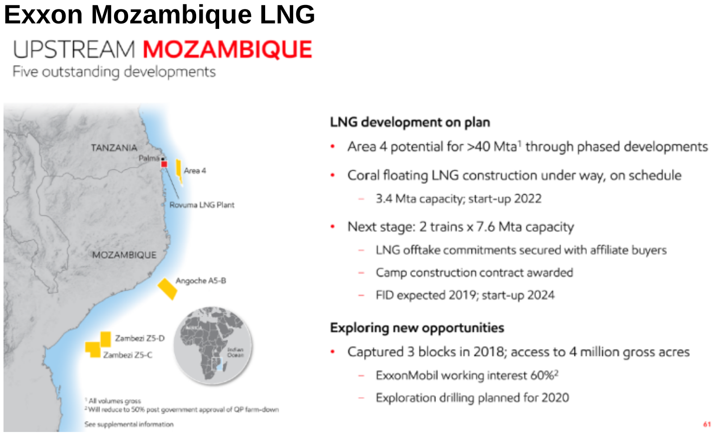
<u>Total's Mozambique force majeure is no surprise, especially the need to the restoration of security and stability "in a sustained manner"</u>. Yesterday, Total announced [LINK] "*Considering the evolution of the security".* No one should be surprised by the force majeure or the sustained manner caveat.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

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

<u>Mozambique's security issues pushes back 5.0 bcf/d of new LNG supply at least a couple years.</u> The global LNG issue is that 5 bcf/d of new Mozambique LNG supply (apart from the Eni Coral FLNG of 0.45 bcf/d) won't start up in 2024 and

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

Exxon Mozambique LNG



Source: Exxon Investor Day March 6, 2019

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

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

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

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

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

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

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

Source: IEA

🟢 On Track 🟡 More Efforts Needed 🔴 Not on Track

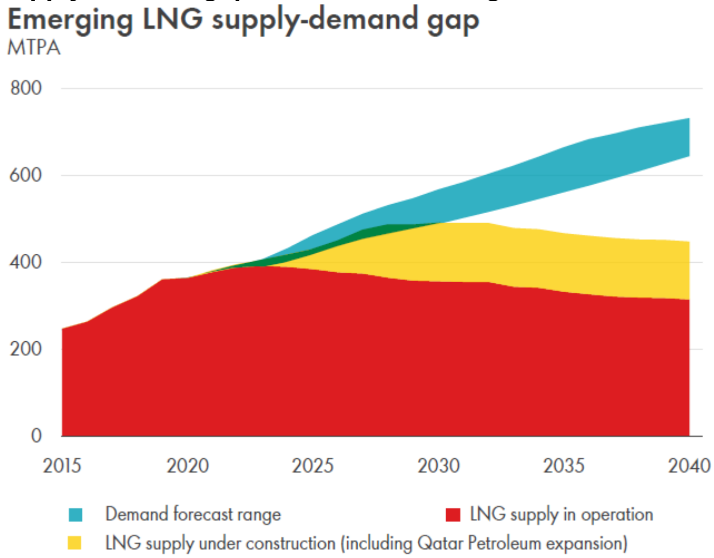
Source: IEA Tracking Clean Energy Progress, June 2020

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

<u>Shell's March 2021 long term outlook for LNG demand was basically unchanged vs 2020 and leads to a LNG supply gap in mid 2020s</u> Shell does not provide the detailed numbers in their Feb 25, 2021 LNG forecast. We would assume they

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

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



Source: Shell LNG Outlook 2021, Feb 25, 2021

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

And does this bigger, nearer supply gap force LNG players to look at what brownfield LNG projects they could advance? A greenfield LNG project would likely take at least until 2027 to be in operations. Its why we believe the Mozambique delays will effectively force major LNG players to look to see if there are brownfield LNG projects they should look to advance. Prior to the just passed winter, no one would think Shell or other major LNG players would be considering any new LNG FIDs in 2021. All the big companies are in capital reduction mode and debt reduction mode. But Brent oil is now solidly over $60 and LNG prices hit record levels in Jan and the world's economic and oil and gas demand outlook are increasing with vaccinations. And we are starting to see companies move to increasing capex with the higher cash flows. We would not expect any major LNG players to move to FID right away. But we see them watching to see if 2021 plays out to still support this increasing LNG supply gap. And unless new mutations prevent vaccinations from returning the world to normal, we suspect that major LNG players, like other oil and gas companies, will be looking to increase capex as they approve 2022 budgets. The outlook for the future has changed dramatically in the last 5 months. The question facing Shell and others, should they look to FID new LNG brownfield projects in the face of an increasing LNG supply gap that is going to hit faster and harder than expected a few months ago. We expect these decisions to be looked at before the end of 2021. LNG prices will be stronger, but we expect the limiting cap in Asia will be that thermal coal will be used to mitigate some LNG price pressure.

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

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

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

Posted 11am on July 14, 2021

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

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

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

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

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

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

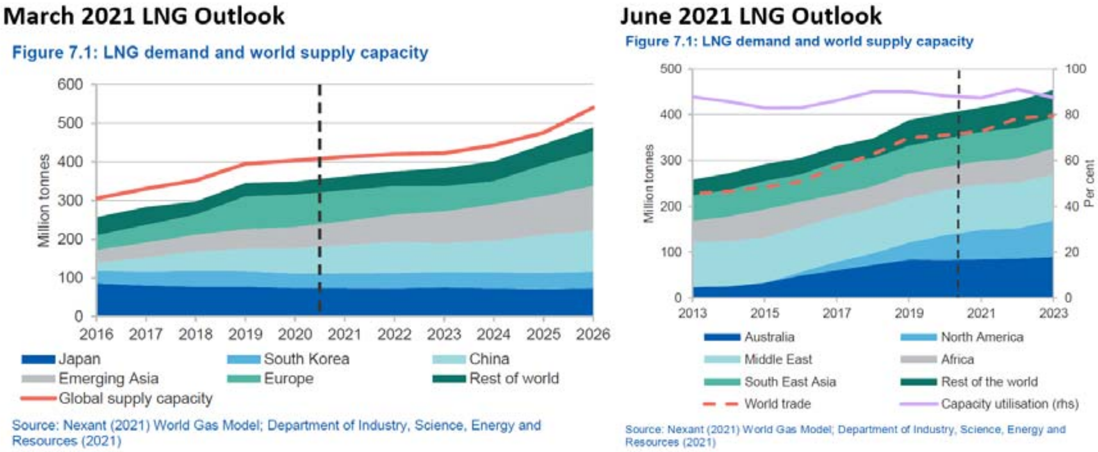
Common theme - new LNG supply is being delayed ie. [Total] Mozambique. Don't forget need capacity>demand due to normal maintenance, etc. Positive for LNG." (ii) Chevron's Gorgon. A big LNG story in H2/20 was the emergence of weld quality issues in the propane heat exchangers at Train 2, which required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

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

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

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

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

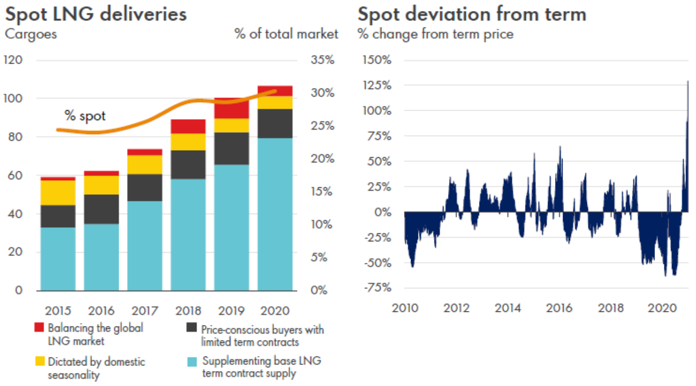


Source: Australia Resources and Energy Quarterly

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

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

Spot LNG deliveries and Spot deviation from term price



Source: Shell LNG Outlook 2021 on Feb 25, 2021

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

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

Petronas/CNOOC is 10 yr supply deal for 0.3 bcf/d. On July 7, we tweeted [LINK] on the confirmation of a big positive to Cdn natural gas with the Petronas announcement [LINK] of a new 10 year LNG supply deal for 0.3 bcf/d with China's CNOOC. The deal also has special significance to Canada. (i) Petronas said "*This long-term supply agreement also includes supply from LNG Canada when the facility commences its operations by middle of the decade*". This is a reminder of the big positive to Cdn natural gas in the next 3 to 4 years – the start up of LNG Canada Phase 1 is ~1.8 bcf/d capacity. This is natural gas that will no longer be moving south to the US or east to eastern Canada, instead it will be going to Asia. This will provide a benefit for all Western Canada natural gas. (ii) First ever AECO linked LNG deal. It's a pretty significant event for a long term Asia LNG deal to now have an AECO link. Petronas wrote "*The deal is for 2.2 million tonnes per annum (MTPA) for a 10-year period, indexed to a combination of the Brent and Alberta Energy Company (AECO) indices. The term deal between PETRONAS and CNOOC is valued at approximately USD 7 billion over ten years.*" 2.2 MTPA is 0.3 bcf/d. (iii) Reminds of LNG Canada's competitive advantage for low greenhouse gas emissions. Petronas said "*Once ready for operations, the LNG Canada project paves the way for PETRONAS to supply low greenhouse gas (GHG) emission LNG to the key demand markets in Asia.*"

Qatar Petroleum/CPC (Taiwan) is 15 yr supply deal for 0.16 bcf/d. Pre Covid, Qatar was getting pressured to renegotiate lower its long term LNG contract prices. Now, it's signing a 15 year deal. On July 9, they entered in a new small long term LNG sales deal [LINK], a 15-yr LNG Sale and Purchase Agreement with CPC Corporation in Taiwan to supply it ~0.60 bcf/d of LNG. LNG deliveries are set to begin in January 2022. H.E. Minister for Energy Affairs & CEO of Qatar Petroleum Al-Kaabi said *"We are pleased to enter into this long term LNG SPA, which is another milestone in our relationship with CPC, which dates back to almost three decades. We look forward to commencing deliveries under this SPA and to continuing our supplies as a trusted and reliable global LNG provider."* The pricing was reported to be vs a basket of crudes.

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

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

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

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

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

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

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

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

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

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

LNG Turmoil Endures as Unions Begin Australia Strike Votes (1)
2023-08-18 05:45:23.855 GMT
By David Stringer
(Bloomberg) -- Unions have set dates for members to vote on potential industrial action at Chevron Corp. and Woodside Energy Group Ltd. liquefied natural gas facilities in Australia. Any outages would threaten about 10% of global supply and a local export sector that generated an estimated A$92 billion ($59 billion) in earnings in the year to June 30.
Here are the key dates so far:
* July 26: Australia's Fair Work Commission, a labor regulator, authorizes the Australian Workers' Union and the Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union of Australia to hold ballots of members at Woodside's North West Shelf operations on industrial action
* Aug. 9: Almost 150 Woodside workers vote in favor of potential action, including stoppages of between 30 minutes and four hours, and activities such as refusing to unload cargo other than food, water or medical supplies, to restart process gas compressors or generators, or to facilitate helicopter landings
** Industrial action must start within 30 days of a completed ballot, unless the commission grants an extension
** A union needs to give up to seven days' notice before any industrial action commences
* Aug. 10: The commission approves requests by the AWU and CEPU to hold ballots on action among members at Chevron's Gorgon LNG facility. Separately, the regulator approves both unions to hold votes among workers at the Wheatstone downstream LNG facility
** Voting needs to be completed no later than 10 days after a ballot order is made
* Aug. 14: Requests by the AWU and CEPU to hold ballots of workers at Chevron's Wheatstone platform on industrial action are also approved
* Aug. 15: Talks take place between Woodside and unions on disputes at the North West Shelf operations. The sides remain apart on job security and remuneration, according to the Offshore Alliance, a group that includes the AWU. The sides have "an in-principle agreement on a number of issues," Woodside says
* Aug. 18: A ballot of workers at Chevron's Gorgon and Wheatstone downstream facilities will begin, according to the alliance
* Aug. 21: Voting among workers at Chevron's Wheatstone offshore platform is scheduled to open
* Aug. 23: New discussions are expected to take place between Woodside and labor union officials
* Aug. 24: Ballot of workers at Gorgon and Wheatstone downstream expected to be finalized by 3 p.m. local time in Perth
** Vote must be completed by Aug. 28 at the latest
* Aug. 28: Voting of workers at the Wheatstone platform expected to be finalized
** Ballot must be completed by Aug. 31 at the latest
To contact the reporter on this story:
David Stringer in Melbourne at dstringer3@bloomberg.net

Note the times are as of 3:15am MT on Aug 20

https://www.facebook.com/people/Offshore-Alliance/100063786371409/

Offshore Alliance

10h ·

Offshore Alliance members have unanimously endorsed giving Woodside 7 'Working Days' notice of Protected Industrial Action if our EBA bargaining claims for the Woodside Platforms are not resolved by COB Wednesday 23rd August.

Woodside spent $2 million on lawyers to try and prevent our members from exercising their lawful right to bargain for an EBA – and lost.

They will lose $Billions of LNG export revenue if they take us on, as our members are up for the fight. This is an impending dispute which will ultimately stop Woodside's LNG exports whilst maintaining domestic gas supply.

Woodside can give Shell a call to see how well this approach of testing our resolve worked out for them.

Shell lost $1.5 Billion of export earnings and the Prelude OA crew ended up with a Union EBA.

Any employer who thinks we are bluffing about our preparedness to take PIA and go one day longer and one day stronger than the oil and gas bosses, has found out the hard way that we don't bluff.

Over the last 4 years, the Offshore Alliance has taken more Protected Industrial Action (per capita) in fighting for fair industrial outcomes, than any other sector of the Australian economy.

The WA AWU & MUA State leadership of Brad Gandy and Will Tracey and the National AWU & MUA Leadership of Paul Farrow and Paddy Crumlin, are giving 100% backing to the OA rank and file.

We will never back down in our fight for fair industrial outcomes. Never.

Offshore Alliance

23h ·

Chevron's Director of Operations Danny Woodall must be getting bullshitted to if he thinks that Chevron have agreed in bargaining to "lock in employee's rosters permanently" and provide job security.

Danny hasn't turned up to any of the 70 bargaining meetings the Offshore Alliance has had with Chevron so we forgive him if he doesn't know what Chevron have put forward in their bargaining claims.

Chevron are demanding the right to unilaterally change rosters for undefined periods on a 'temporary basis'. This could be weeks, months or years.

The Union are not going to cop members rosters being unilaterally changed and would appreciate Danny turning up to our next bargaining meeting to tell us that our claim in this respect is now agreed.

Chevron's so-called job security provisions are a joke.

Chevron are by far the worst of the Tier 1 Oil and Gas Companies in allowing dodgy contractors using equally dodgy Baseline Agreements to game the IR system to rip off contractor employees and undermine the permanent jobs of Chevrons' operations workforce.
Some of the Baseline Agreements being used by Chevron contractors involve corrupt, unethical and immoral conduct and the Chevron workforce jobs will only be genuinely secure when we have agreed minimum manning and an agreed contractors clause.
Danny would have been better checking with the Offshore Alliance before sending out Bulletins to our members which simply don't stack up with what we are dealing with in the bargaining meetings.

Offshore Alliance

1d ·

Despite the Fair Work Commission Ordering Chevron to ensure that all Union members have unrestricted access on the Chevron internet at the Wheatstone Downstream and Gorgon Facilities to vote on majority support for Protected Industrial Action, Chevron have breached the Orders and broken workplace laws.
The Union intends banging Chevron into Court for these unlawful activities.
The Protected Industrial Action Ballot Orders issued by the FWC state the following:
"The employer shall allow employee access to the voting website from all employees' places of work and accommodation (if applicable) by whitelisting the site accross the employers internet network".
Instead, Chevron have unlawfully blocked the independent ballot company CIVS and threatened to discipline or sack workers who continue to try and access the CIVS site from their work computers so they can vote for PIA.
This is an outrageous breach of the Fair Work Commission Orders and reeks of Adverse Action.
Chevron are not a law unto themselves but appear to have absolute contempt for Australian workplace laws, independent ballots and the employment rights of their Australian workforce.
The Offshore Alliance will be holding Chevron to account for their unlawful actions.
All OA members on the Chevron facilities are encouraged to push back against the unlawful intimidation and threats of Chevron and to vote 'YES' in our PIA Ballots.
The Union is aiming for a 100% PIA 'YES' vote on all 3 Chevron facilities.

Offshore Alliance

1d ·

It is 2 years to the day that the Offshore Alliance Inspectors working for Applus on the Woodside Facilities reached an 'in-principle' Agreement for a union EBA after 78 days of Protected Industrial Action.
Our members dared to struggle and dared to win.
It was 78 days of industrial struggle to replace the dirty stinking common law contracts with union-bargained EBA rates and conditions, but it was a struggle worth having.
The common law contracts had seen an erosion of pay, conditions and employment standards for the Applus crew.
Since reaching agreement with Applus 2 years ago, our members have received pay rises of 27% for the onshore crew and 33% for the Offshore crew.
We salute our Applus members on the Woodside facilities in exercising their industrial rights - and winning.
It has set a great template for our bargaining campaign for the Woodside Platform crew.
https://offshorealliance.org.au/members/join

Offshore Alliance

2d ·

WA Today Business Journalist Peter Milne has shone a massive spotlight on Woodside's safety performance and the decision of Woodside to award management bonusses based on profit rather than safety. Woodside stand condemned for putting profit before the health and safety of oil and gas workers. The following article is a compelling read.

Energy heavyweight Woodside has reversed a deci…
See more
This content isn't available in Canada
In response to Canadian government legislation, news content can't be viewed on Facebook. **Learn more**

Offshore Alliance

2d ·
For the last decade, Chevron have run their West Coast oil and gas facilities like feudal fiefdoms with little or no regard for the interests of their key stakeholders – their operations workforce.
The Offshore Alliance and our members smashed Chevron's dodgy non-union EA proposal 98% - 2% on the Wheatstone Platform, and are set to vote 100% 'YES' for Protected Industrial Action across all 3 Chevron facilities.
The Chevron Wheatstone Downstream and Gorgon Facility Protected Industrial Action Ballots open today and the Wheatstone Platform Protected Industrial Action Ballot opens on Monday.
It's game on in pushing back against Chevron's sub-standard employment standards.
The Offshore Alliance is encouraging all members to vote 'YES' to all PIA Ballot questions accross all 3 Chevron facilities.

Offshore Alliance

3d ·
Just 11 weeks ago, oil and gas workers were in mourning after the tragic death of Michael Jurman on Woodside's North Rankin Platform. Woodside have clearly learnt nothing from this in light of their disgraceful health and safety management of their Angel Platform.
Woodside's fixation on cost cutting at the expense of acceptable occupational health and safety standards is totally unacceptable.
The Offshore Alliance has filed the following complaint with NOPSEMA and want the Regulator to take immediate action:
• The Angel Platform has traditionally been an unmanned platform with intermittent work on the Platform carried out from time to time;
• The Angel Platform is currently manned with 24 personnel (maximum POB);
• There is no properly trained or qualified Medic employed on the Angel Platform at any time;
• The designated (but non-qualified and un-trained) 'Medic' has no authority to issue medicines (including non-prescription medicines such as Panadol), without authorisation from the trained and qualified Medics engaged by Woodside on the North Rankin Platform;
• There is no 'hospital' on the Angel Platform – simply a sub-standard 'triage area';
• It takes approximately 1 ½ hours for a Medivac Helicopter to arrive on the Angel Platform in the event of a medical emergency;

• The lack of a trained and qualified Medic on the Angel Platform is endangering the life and safety of Angel Platform Personnel;
• This is of particular concern to the Offshore Alliance in light of the fatality on the North Rankin facility less than 11 weeks ago (02 June 2023)
• The Angel Platform accommodation is also sub-standard;
• The Offshore Alliance believes that the accommodation arrangements on the Angel Platform is non-compliant with the minimum standards required by legislation, the Woodside Safety Case and the standards set out in the relevant Codes of Practice;
• The union believes that noise on the Angel Platform exceeds that allowed under the National Standard for Occupational Noise [NOHSC: 1007(2000)] as addressed in Safety Regulation 3.6;
• The noise levels for living quarters on the Angel Platform do not appear to comply with Australian Standard AS/NZS 2107-2000: Acoustics—recommended design sound levels and reverberation times for building interiors;
• The Union is seeking Woodside undertake noise testing on the Angel Platform and to provide each employee exposed to noise levels exceeding those set out in the standard, a copy of the test results;
• The Union believes that the exposure of workers to high noise levels on the Angel Platform is adversely impacting fatigue levels of workers on the Angel Platform and exposing them to increased risk of serious injury or fatality;
• Employees are having to reheat meals in microwaves on night shift due to Woodside's sub-standard living quarters arrangements (which includes 3 employees sharing cabins and 6 employees sharing a single shower);
• Accommodation cabins do not have power points, proper insulation from noise and are unsuitable for the working arrangements currently on the Angel Platform;
• The facility is generally covered in guano which is exposing workers to an unacceptable risk of developing gastrointestinal illness;

Woodside need to be held to account for running their facilities and their workforce into the ground. Clean your act up Woodside as the health and safety of our members and your 'Licence to Operate' depends on it.

Offshore Alliance

4d ·

The Australian Financial Review is spot on its report that "critical talks between Woodside Energy and unions on Tuesday appear to have sunk into acrimony at least for the unions, increasing the chances of industrial action that could disrupt Australian LNG production and send European gas prices surging".

The AFR Report continues:

Critical talks between Woodside Energy and unions on Tuesday appear to have sunk into acrimony at least for the unions, increasing the chances of industrial action that could disrupt Australian LNG production and send European gas prices surging.

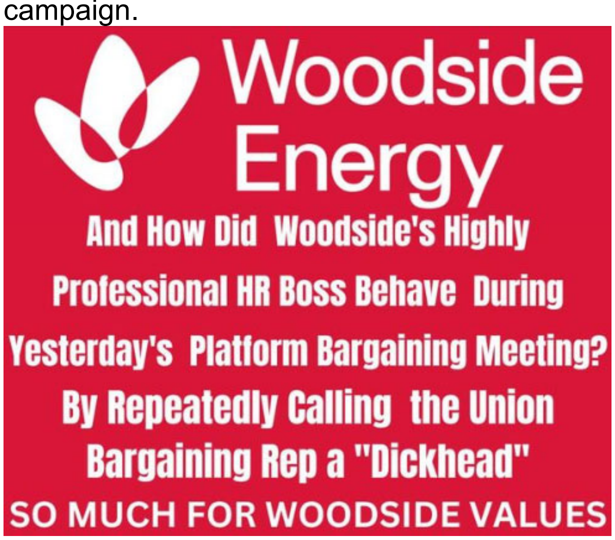
The Dutch TTF futures contract, a benchmark for European gas, rebounded 12.7 per cent on Tuesday European time.

The contract spiked after three days of declines following an extraordinary surge last Wednesday that was triggered by fears of stoppages at three West Australian LNG plants.
The North West Shelf LNG plant near Karratha is the country's biggest LNG exporter.
The Offshore Alliance – comprising the Maritime Union of Australia and the Australian Workers' Union – accused a Woodside human resources boss of calling a union bargaining representative a "dickhead" during Tuesday's talks, saying the behaviour showed the oil and gas producers' values "are a sham".
"If OA members on the platforms carried on like Woodside's HR management did yesterday, they'd be on the first chopper out," the Offshore Alliance posted on social media on Wednesday morning.
"It's no wonder that bargaining on the Woodside platforms has gone pear-shaped and members have voted 99 per cent 'YES' in the protected industrial action ballot."
But a Woodside spokeswoman was more positive on the talks, saying "positive progress" had been made, while declining to comment on the alleged comment.
"We continue to engage actively and constructively in the bargaining process," she said.
"Positive progress is being made and the parties have reached an in-principle agreement on a number of issues that are key to the workforce."
The talks on Tuesday were aimed at reaching a deal on the Woodside-managed North West Shelf offshore platforms before 150 workers decide within the next two days on industrial action.
The next meeting is scheduled for next Wednesday, allowing time for the two sides to consider the content covered in Tuesday's talks.
Still, the two sides are understood to be well apart on several issues.
The unions are seeking to lock in tier-one wages and conditions, ensure more control over rosters for work-life balance and restrict the use of labour hire.
Energy analyst Saul Kavonic suggested progress could be being made behind closed doors, but did not rule out some industrial action.
He has said that full-scale shutdowns across all three plants – the North West Shelf LNG venture, and Chevron's Gorgon and Wheatstone LNG projects – is very unlikely.
"It is in both the unions' and companies' interests to maintain tough positions publicly, even if they make compromises privately," Mr Kavonic said.
"The negotiation process can take weeks, and more public rhetorical sparring and some lower-level industrial action is all part of that."
The Offshore Alliance said Woodside was "well off the pace on key bargaining issues, including job security and remuneration".
Between them, the three LNG projects provide about 11 per cent of global supply of gas traded by seaborne tankers, a market that experienced extreme price spikes last year after Russia's invasion of Ukraine, which prompted European gas importers to shun Russian supplies.
The North West Shelf, Gorgon and Wheatstone also supply more than half of WA's domestic gas, and a shutdown of the plants would cause major disruptions to mining and industrial operations.

AFR.COM
WA gas talks sour as European gas prices jump again
Talks between Woodside and unions appear to have sunk into acri...

Offshore Alliance
4d ·
"Woodside is committed to a safe, inclusive and respectful working environment". Or so they say.

The conduct of a Woodside's HR boss in repeatedly calling a union bargaining rep a "dickhead" during yesterday's EBA meeting surely can't be part of the Woodside values. Or is it?
So much for the professionalism of Woodside HR. Perhaps the Compass isn't true after all. 🤔
If OA members on the Platforms carried on like Woodside's HR management did yesterday, they'd be on the first chopper out.
Woodside's values are a sham and yesterday's bargaining meeting shows that the Woodside bosses pick and choose when these values apply.
It's no wonder that bargaining on the Woodside Platforms has gone pearshaped and members have voted 99% 'YES' in the Protected Industrial Action Ballot.
Woodside are well off the pace on key bargaining issues including job security and remuneration.
Woodside's actions and bargaining postion at yesterday's meeting will determine the destiny of our bargaining campaign.



Offshore Alliance

5d ·

Yesterday, the Fair Work Commission approved the Wheatstone Platform OA & ETU crew participating in a Ballot to determine majority support for Protected Industrial Action.
OA members on the Wheatstone Platform will now join the Gorgon and Wheatstone Downstream workforce in 3 separate PIA Ballots over the next week.
All OA members are encouraged to lock in behind a 100% 'YES' vote for PIA.
Meanwhile, Chevron HR have indicated their intent to roll out another underdone half baked EA proposal.
Nothing short of benchmark industry standards is going to voted up and Chevron will go through another process of self-humiliation if they think they can successfully roll out an EA without the endorsement of the Offshore Alliance.
The last time they pulled this stunt they had the support of just 2% of the Wheatstone Platform workforce - and burnt 2 weeks of bargaining opportunities along the way.
OA members on the Chevron facilities are encouraged to vote 'YES' for PIA and 'NO' for any EA which doesn't lock in all key employment standards.

Offshore Alliance

6d ·

It hasn’t taken long for Peter Dutton to come out squealing like a stuck pig in support of Woodside. It wasn’t that long ago that Mr Potato Head was all for stopping the boats, but clearly this doesn’t apply to the Woodside gas buggies.

Mr Potato Head should explain why it’s ok for Woodside to cut the Real Wages of highly skilled oil and gas workers during record prices for LNG, despite the CEO of Woodside securing herself a 50% pay rise.

Instead, Mr Potato Head has attacked the very workers who are largely responsible for Woodside;s record earnings.

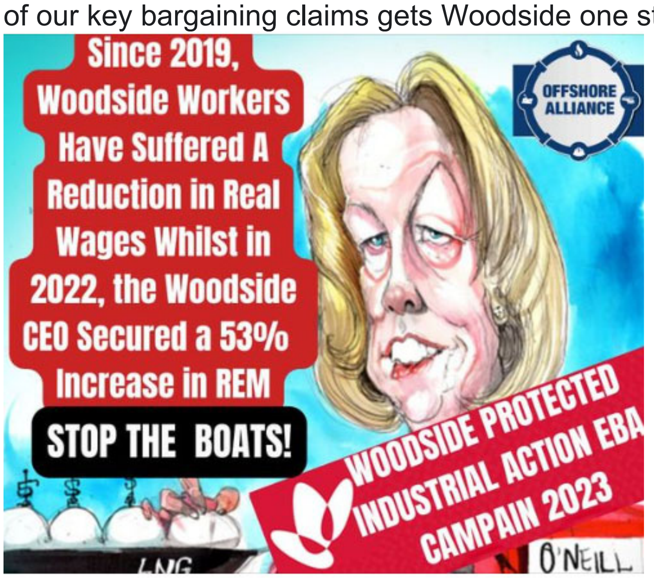
Less than 12 months ago, Meg O’Neil’s fixed and non-fixed salary remuneration jumped from $6.6 million to over $10 million.

Meg and her mate Mr Potato Head, should explain why 40% of the fixed remuneration of Woodside Platform workers has been frozen for the best part of the past decade – despite CPI being the highest its been in over 20 years.

Not to mention record LNG prices and record profits.

If workers can’t get a decent pay rise during a resources boom, they’ll never get one.

The Offshore Alliance have a further bargaining meeting with Woodside tomorrow and the continued frustration of our key bargaining claims gets Woodside one step closer to Protected Industrial Action.



For Immediate Release
August 15, 2023
Lynn Helms, Ph.D., Director ND Department of Mineral Resources

NORTH Dakota | Mineral Resources
Be Legendary.™

North Dakota Department of Mineral Resources August Director's Cut and June 2023 Production Numbers

Oil Production Numbers

May	35,185,280 barrels	= 1,135,009 barrels/day (final) **RF +14%**
New Mexico	52,955,714 barrels	= 1,708,249 barrels/day **-3%**
June	35,019,022 barrels	= 1,167,301 barrels/day **+3%** **RF +17%**
	1,519,037	all-time high Nov 2019
	1,125,891 barrels/day	= 96% from Bakken and Three Forks
	41,410 barrels/day	= 4% from Legacy Pools

Revised Revenue Forecast **1,000,000 barrels/day**

Crude Price ($barrel)	ND Light Sweet	WTI	ND Market	
May	65.82	71.62	67.41	**RF-10%**
June	64.18	70.27	67.23	**RF-10%**
Today	78.25	82.51	80.38	**RF+7%**
All-time high (6/2008)	125.62	134.02	126.75	
Revised Revenue Forecast			**75.00**	

Gas Production and Capture

May	97,863,358 MCF	=	3,156,883 MCF/Day	
95% Capture	93,117,795 MCF	=	3,003,800 MCF/Day	
June	97,503,151 MCF	=	3,250,105 MCF/Day	**+3%**
94% Capture	92,004,306 MCF	=	3,066,810 MCF/Day	
			3,179,517 all-time high 9/2022	
			3,066,810 **NEW** all-time high capture 6/2023	

For Immediate Release
August 15, 2023
Lynn Helms, Ph.D., Director ND Department of Mineral Resources

Wells Permitted

May	63	
June	85	
July	70	All-time high 370 in 10/2012

Rig Count

May	38	
June	37	
July	37	
Today	41	All-time high 218 on 5/29/2012
Federal Surface	0	
New Mexico	113	

Waiting on Completions

May	459
June	433

Inactive

May	1,779
June	1,693

Completed

May	138 (Preliminary)
June	85 (Preliminary)
July	83 (Preliminary)
Revised Rev Forecast	30-40-50-60

Producing

May	17,929	
June	18,085 (Preliminary)	**NEW** All-time high 18,085 in 6/2023
	15,814 wells	87% are now unconventional Bakken/Three Forks Wells
	2,271 wells	13% produced from legacy conventional pools

IIJA Initial Grant	**Wells PA**	**Sites Reclaimed**
January	1	0
February	4	0

March	1	0
April	8	0
May	18	0
June	9	0
July	13	0

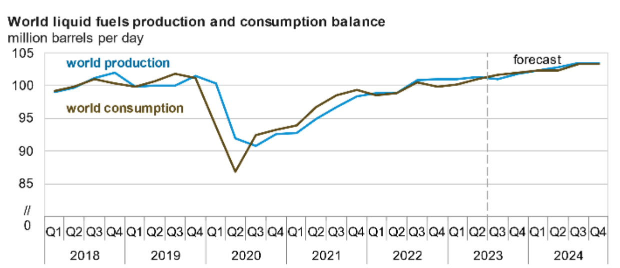
Weekly updates are available at [Initial Grant Information - Plugging and Reclamation | Department of Mineral Resources, North Dakota]

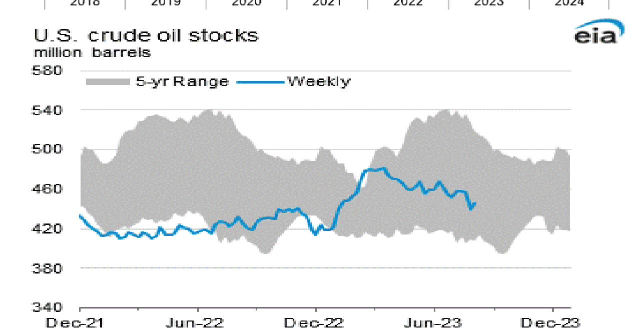
Fort Berthold Reservation Activity

	Total	Fee Land	Trust Land
Oil Production (barrels/day)	136,829	49,365	87,464
Drilling Rigs	4	1	3
Active Wells	2,652	650	2,002
Waiting on Completion	26		
Approved Drilling Permits	172	14	158
Potential Future Wells	3,900	1,114	2,786

Comments:

The drilling rig count remains low due to workforce, mergers, and acquisitions but is expected to return to the mid-forties with a gradual increase expected over the next 2 years.





There are 22 frac crews currently active.

Saudi Arabia announced unilateral oil production cuts amounting to 1 million barrels per day making the OPEC+ total cut 4.7 million bpd until the end of the year. Russia sanctions, China economic activity, looming recessions, and shifting crude oil supply chains continue to create significant price volatility.

Crude oil transportation capacity including rail deliveries to coastal refineries is adequate, but could be disrupted due to:

US Appeals Court for the ninth circuit upholding of a lower court ruling protecting the Swinomish Indian Tribal Community's right to sue to enforce an agreement that restricts the number of trains that can cross its reservation in northwest Washington state.

DAPL Civil Action No. 16-1534 continues, but the courts have now ruled that DAPL can continue normal operations until the USACOE EIS is completed.

Drilling - activity is expected to slowly increase with operators expected to maintain a permit inventory of approximately 12 months.

Seismic - 0 active, 1 recording, 0 NDIC reclamation projects, 0 remediating, 0 permitted, and 4 suspended surveys.

US natural gas storage is 11% above the five-year average. Both US and world crude oil inventories are average while the US strategic petroleum reserve remains at the lowest level since 1983.

The price of natural gas delivered to Northern Border at Watford City has increased to $2.33/MCF today. There is continues to be oversupply in the Midwest US. Current oil to gas price ratio is 35:1. The state-wide gas flared volume from May to June increased 30 MMCFD to 183 MMCF per day, the statewide percent flared increased slightly to 6% and Bakken gas capture percentage decreased slightly to 95%. The historical high flared percent was 36% in 09/2011.

Gas capture details are as follows:

Statewide	94%
Statewide Bakken	95%
Non-FBIR Bakken	94%
FBIR Bakken	98%
Trust FBIR Bakken	98%
Fee FBIR	96%
Deep Water Creek Bay	73%
Twin Buttes	56%
Charlson	91%

The Commission established the following gas capture goals:

74% October 1, 2014 - December 31, 2014
77% January 1, 2015 - March 31, 2016
80% April 1, 2016 - October 31, 2016
85% November 1, 2016 - October 31, 2018
88% November 1, 2018 - October 31, 2020
91% November 1, 2020

BLM On 1/27/21 President Biden issued an executive order that mandates a "pause" on new oil and gas leasing on federal lands, onshore and offshore, "to the extent consistent with applicable law," while a comprehensive review of oil and gas permitting and leasing is conducted by the Interior Department. There is no time limit on the review, which means the president's moratorium on new leasing is indefinite. The order does not restrict energy activities on lands the government holds in trust for Native American tribes.

On 7/7/21 North Dakota sued the Department of Interior (DOI), Secretary of Interior Debra Haaland, Bureau of Land Management (BLM), Director of the BLM Nada Culver, and Director of the Montana-Dakotas BLM John Mehlhoff in US District Court for the District of North Dakota. The lawsuit requested the court:

Compel the Federal Defendants to hold quarterly lease sales. Oral arguments are scheduled for 1/12/22 in Bismarck.

MONTHLY UPDATE

AUGUST 2023 PRODUCTION & TRANSPORTATION

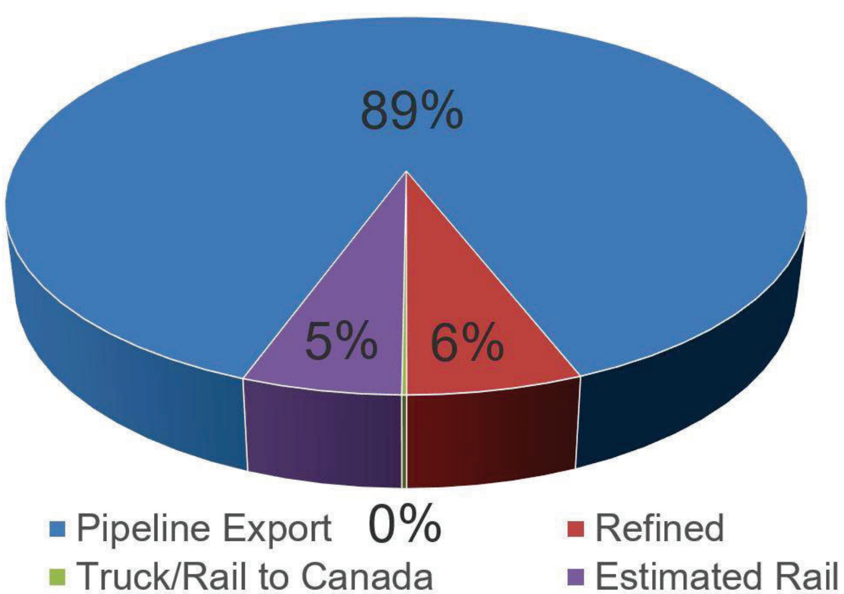
North Dakota Oil Production

Month	Monthly Total, BBL	Average, BOPD
May 2023 - Final	35,185,280	1,135,009
June 2023 - Prelim.	35,019,022	1,167,301

North Dakota Natural Gas Production

Month	Monthly Total, MCF	Average, MCFD
May 2023 - Final	97,863,648	3,156,892
June 2023 - Prelim.	97,503,151	3,250,105

Estimated Williston Basin Oil Transportation, June 2023



CURRENT DRILLING ACTIVITY:

NORTH DAKOTA[1]

41 Rigs

EASTERN MONTANA[2]

0 Rigs

SOUTH DAKOTA[2]

0 Rigs

SOURCE (AUG 15, 2023):

1. ND Oil & Gas Division
2. Baker Hughes

PRICES:

Crude (WTI): $80.69

Crude (Brent): $84.57

NYMEX Gas: $2.67

SOURCE: BLOOMBERG (AUG 15, 2023 1PM EST)

GAS STATS*

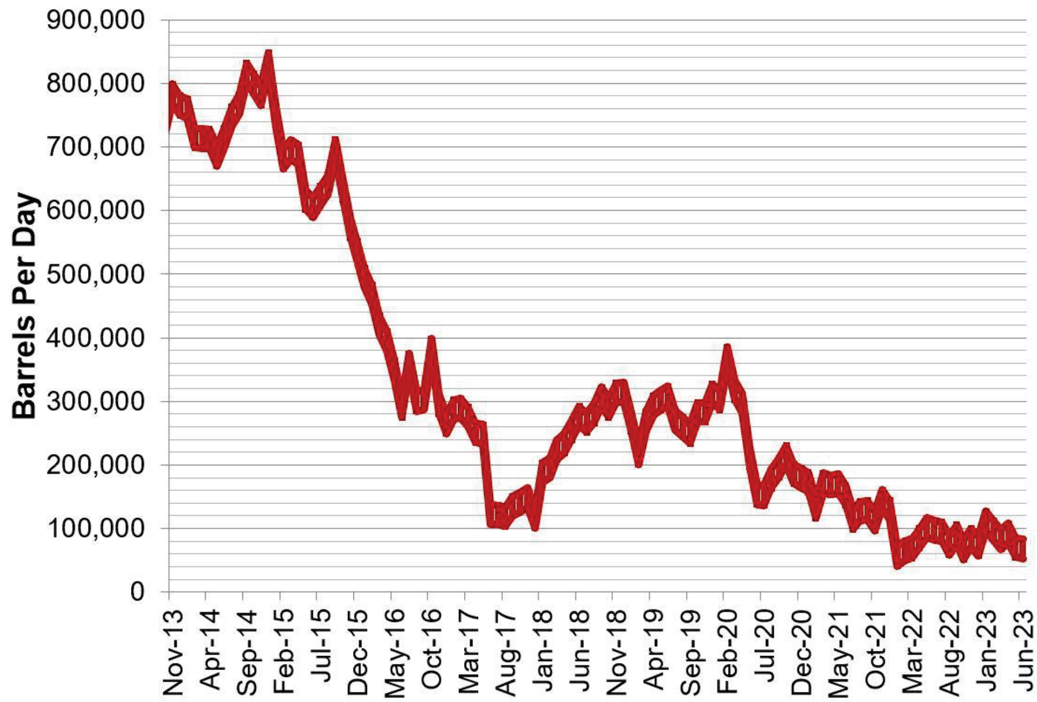
94% CAPTURED & SOLD

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

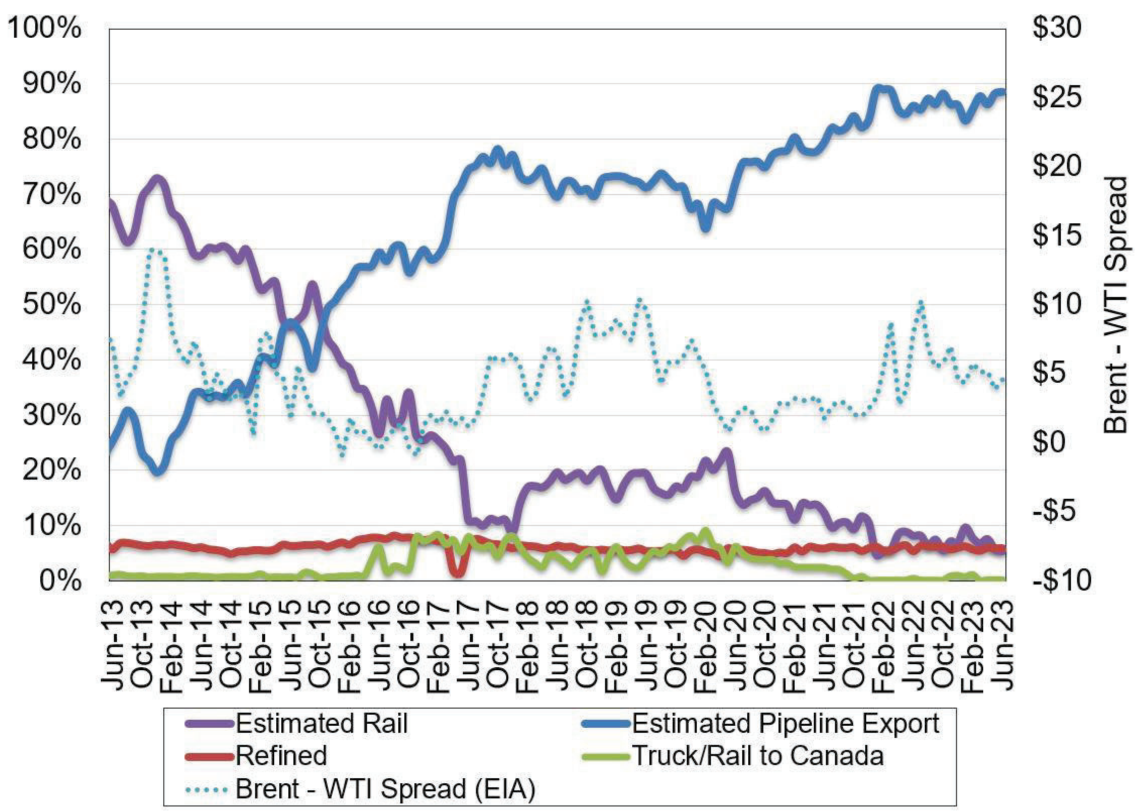
1% FLARED FROM WELL WITH ZERO SALES

JUNE 2023 NON-CONF DATA

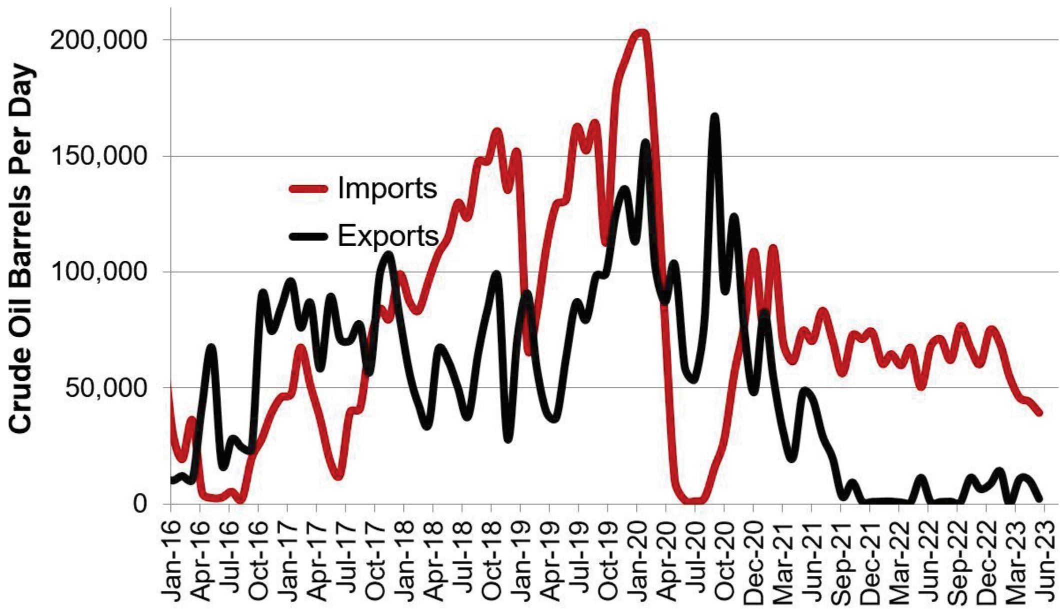
Estimated North Dakota Rail Export Volumes



Estimated Williston Basin Oil Transportation

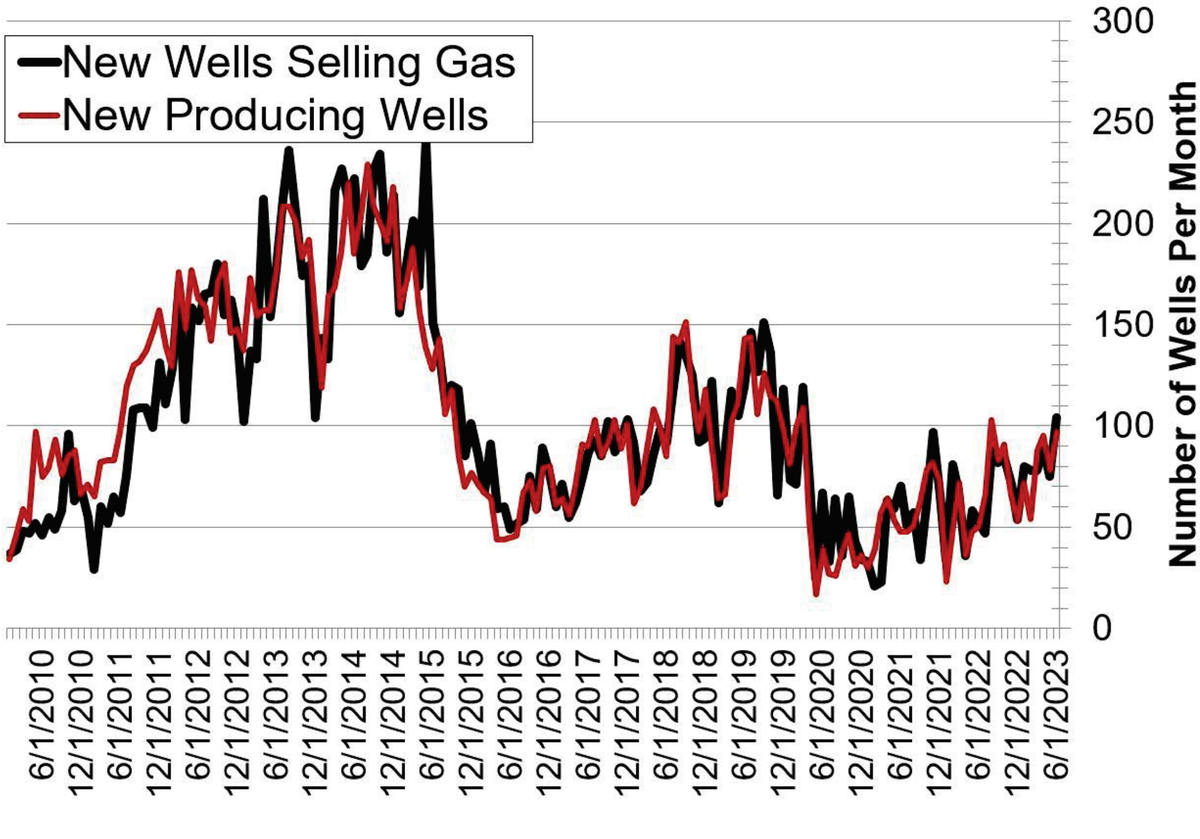


Williston Basin Truck/Rail Imports and Exports with Canada



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

2022

MONTH	ND	EASTERN MT*	SD	TOTAL
January	1,091,931	51,895	2,709	1,146,535
February	1,095,503	51,175	2,742	1,149,420
March	1,129,936	54,768	2,709	1,187,413
April	908,697	54,121	2,338	965,156
May	1,062,228	53,276	2,648	1,118,152
June	1,099,366	63,256	2,764	1,165,386
July	1,073,624	60,614	2,774	1,137,012
August	1,075,801	60,587	2,756	1,139,144
September	1,126,138	58,103	2,679	1,186,920
October	1,122,122	54,284	2,621	1,179,027
November	1,098,415	57,734	2,682	1,158,831
December	957,864	56,738	2,199	1,016,801

2023

MONTH	ND	EASTERN MT*	SD	TOTAL
January	1,062,857	62,039	2,610	1,127,506
February	1,158,983	63,483	2,475	1,224,941
March	1,124,904	64,465	2,652	1,192,021
April	1,135,827	61,066	2,557	1,199,450
May	1,135,009		2,560	
June	1,167,301		2,274	
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://www.api.org/news-policy-and-issues/news/2023/08/16/api-highlights-significant-concerns-with-phmsa-leak-detection-rule

API Highlights Significant Concerns with PHMSA Leak Detection Rule

202.682.8114 | press@api.org

Urges PHMSA to Consider Safety Mandate

WASHINGTON, August 16, 2023 – The American Petroleum Institute (API) today filed **comments** outlining significant concerns with the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposed gas pipeline leak detection and repair rulemaking. API supports the intent of PHMSA's goal of addressing methane emissions and our industry remains committed to reducing emissions associated with operations. However, PHMSA's proposed rule goes well beyond its mandate from Congress to ensure pipeline safety under the Pipelines and Enhancing Safety (PIPES) Act of 2020, failing to propose risk-based safety measures

"Pipeline operators are working every day to improve safety and environmental performance, but this proposed rule would do little to accomplish PHMSA's stated goals," API VP of Midstream Policy Robin Rorick said. "We look forward to working with PHMSA to improve this rulemaking as our industry uses the latest technology and safety management systems to reduce methane emissions while advancing a zero-incident safety culture."

Joining the American Gas Association (AGA), American Public Gas Association (APGA), Interstate Natural Gas Association of America (INGAA), GPA Midstream, American Fuel & Petrochemical Manufacturers (AFPM), and Northeast Gas Association (NGA) in submitting comprehensive comments based on the technical expertise of their combined membership, API and the pipeline industry provide alternatives, recommendations and modifications to improve pipeline safety and reduce emissions. By balancing public safety and environmental protection, these modifications would ensure natural gas can be delivered safely, reliably and affordably to the consumers at home and abroad who depend on it to power modern life.

The natural gas and oil industry is working to further reduce emissions and keep methane in the pipe throughout its operations. Through individual company actions and collective, industry-led initiatives like **The Environmental Partnership**, our industry is working to better understand, detect and mitigate emissions by developing new technologies and practices.

Click **here** to view the pipeline industry's joint comments on PHMSA's proposed rule.

Click **here** to view API and GPA Midstream comments on PHMSA's proposed gathering lines rule.

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 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.eia.gov/petroleum/gasdiesel/?utm_source=Twitter&utm_medium=EIASocial&utm_id=Amplification

Gasoline and Diesel Fuel Update

Gasoline Release Date: August 14, 2023 | **Next Release Date:** August 21, 2023
Diesel Fuel Release Date: August 14, 2023 | **Next Release Date:** August 21, 2023

U.S. Regular Gasoline Prices*(dollars per gallon)

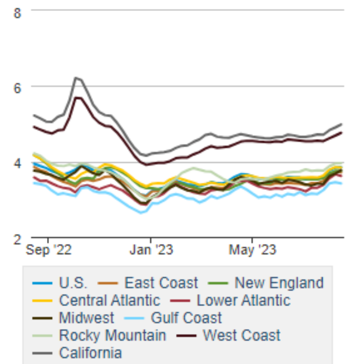
full history XLS

	07/31/23	08/07/23	08/14/23	Change from week ago	Change from year ago
U.S.	3.757	3.828	3.850	0.022	-0.088
East Coast (PADD1)	3.646	3.737	3.711	-0.026	-0.145
New England (PADD1A)	3.681	3.746	3.749	0.003	-0.422
Central Atlantic (PADD1B)	3.779	3.848	3.841	-0.007	-0.329
Lower Atlantic (PADD1C)	3.553	3.662	3.617	-0.045	0.040
Midwest (PADD2)	3.612	3.678	3.768	0.090	0.013
Gulf Coast (PADD3)	3.416	3.453	3.415	-0.038	-0.013
Rocky Mountain (PADD4)	3.873	3.944	3.954	0.010	-0.259
West Coast (PADD5)	4.616	4.685	4.759	0.074	-0.155
West Coast less California	4.381	4.450	4.517	0.067	-0.055

+ See more

Regular Gasoline Prices

(dollars per gallon)



Data source: U.S. Energy Information Administration

U.S. On-Highway Diesel Fuel Prices*(dollars per gallon)

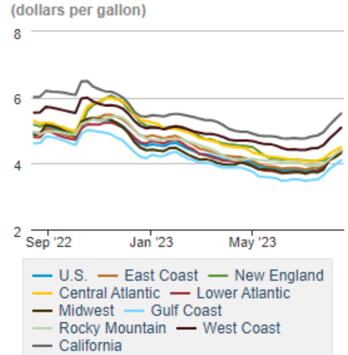
full history XLS

	07/31/23	08/07/23	08/14/23	Change from week ago	Change from year ago
U.S.	4.127	4.239	4.378	0.139	-0.533
East Coast (PADD1)	4.153	4.248	4.402	0.154	-0.548
New England (PADD1A)	4.161	4.235	4.370	0.135	-0.805
Central Atlantic (PADD1B)	4.291	4.395	4.499	0.104	-0.792
Lower Atlantic (PADD1C)	4.101	4.196	4.371	0.175	-0.431
Midwest (PADD2)	4.105	4.195	4.317	0.122	-0.555
Gulf Coast (PADD3)	3.831	3.960	4.095	0.135	-0.519
Rocky Mountain (PADD4)	4.127	4.288	4.394	0.106	-0.569
West Coast (PADD5)	4.753	4.911	5.086	0.175	-0.455
West Coast less California	4.401	4.538	4.710	0.172	-0.414
California	5.158	5.339	5.518	0.179	-0.501

prices include all taxes

On-Highway Diesel Fuel Prices

(dollars per gallon)



Data source: U.S. Energy Information Administration https://www.presstv.ir/Detail/2023/08/09/708652/Iran-oil-output-increase-plan-NIOC-CEO

Iran’s oil output to reach 3.5 mln bpd by late September: NIOC chief

Wednesday, 09 August 2023 6:24 PM **[Last Update: Wednesday, 09 August 2023 6:24 PM]**

CEO of Iran’s state-run NIOC says oil output in the country will reach 3.5 million bpd in late September.

Iran will reach a milestone oil production figure of 3.5 million barrels per day (bpd) in late September, according to the CEO of state oil company NIOC, despite sanctions imposed on the country by the US.

Mohsen Khojasteh Mehr said on Wednesday that Iran’s oil output will increase by 150,000 bpd within the next week and by another 100,000 bpd by the end of the month to September 22 to reach a total of 3.5 million bpd.

The figure would be a major increase from 2.2 million bpd of oil production reported in August 2021 when the current administrative government led by President Raeisi took office, said Khojasteh Mehr.

He said the growth in oil output will entirely serve Iran’s plans to increase its oil exports.

The comments, which came in a meeting with reporters at the headquarters of the National Iranian Oil Company, is the latest sign that Iran is pumping increased amounts of oil to the international markets despite continued pressure of the US sanctions.

Reports earlier this year had indicated that Iran’s nominal oil production capacity had been restored to levels above 3.8 million bpd for a first time since 2018 when Washington imposed its sanctions on the country.

However, reaching an actual output of 3.5 million bpd shows Iran is effectively nearing export levels seen before the sanctions when the country used to sell 2.2 million bpd of oil to international customers.

Central Bank of Iran Governor Mohammad Reza Farzin also said on Wednesday that Iran’s oil exports had risen by 41% year on year in the calendar month to late July to reach a record high in five years.

---

https://www.aljazeera.com/news/2023/8/17/why-did-clashes-break-out-in-libyas-tripoli?taid=64defe5af243fd000147b054&utm_campaign=trueAnthem%3A+Trending+Content&utm_medium=trueAnthem&utm_source=twitter

Why did clashes break out in Libya’s Tripoli?

Fighting between the influential 444 Brigade and the Special Deterrence Force has raged this week after months of relative peace.

The escalation follows months of relative peace in Libya's capital, Tripoli [File: Hazem Ahmed/Reuters]

Published On 17 Aug 202317 Aug 2023

The worst armed clashes in a year have killed 55 people in Libya’s capital, Tripoli, authorities have said.

The death toll from the fighting was announced on Wednesday by Tripoli’s health authorities, which also said 146 people had been injured.

Major warfare in Libya has been paused since a 2020 truce between the main eastern and western sides.

But rival factions still hold the most territory and a lasting solution to the conflict that has raged since a 2011 NATO-backed uprising looks distant.

Here is what you need to know about the latest unrest:

Who is fighting?

Fighting raged from Monday night into Tuesday between the influential 444 Brigade and the Special Deterrence Force, or al-Radaa Force.

The 444 Brigade is affiliated with Libya’s defence ministry and is reputed to be the North African country’s most disciplined armed group.

The Special Deterrence Force is a powerful ultraconservative militia that acts as the capital’s police force.

They are two of myriad militias vying for power since the 2011 overthrow of longtime dictator Muammar Gaddafi, growing in wealth and power, particularly in Tripoli and the west of the country.

The 444 Brigade and the Special Deterrence Force are among the largest militias in Tripoli and have been backed by the Tripoli-based government in the west of the country, led by Prime Minister Abdul Hamid Dbeibah.

Since 2014, Libya has been divided between rival administrations in the east and the west, each supported by an array of well-armed militias and different foreign governments.

Worst fighting in months as clashes hit Libyan capital Tripoli

What triggered the fighting?

The clashes with rocket launchers and machine guns followed the detention of the 444 Brigade head, Colonel Mahmoud Hamza, on Monday as he tried to travel from Tripoli's Mitiga airport, which the Special Deterrence Force controls.

A total of 234 families were evacuated from front-line areas in the capital's southern suburbs, along with dozens of doctors and paramedics trapped by the fighting while caring for the wounded, the Emergency Medical Centre said.

Late Tuesday, the social council in the southeastern suburb of Souq el-Jumaa, a stronghold of the Special Deterrence Force, announced that an agreement had been reached with Dbeibah for Hamza to be handed over to a "neutral party".

In a televised announcement, the council said a ceasefire would follow the transfer of the commander and, late on Tuesday, the fighting abated.

Hamza was returned to his unit on Wednesday, officials in the commander's organisation said.

Anas el-Gomati, director of the Sadeq Institute, a think tank focusing on Libya, said clashes have re-emerged because Hamza has "enormous standing amongst his brigade, the 444".

"Also, I think he blurs the lines between the political factions that have been largely at peace for the last year in Tripoli and their allegiances towards the [Tripoli] government of national unity as it stands … And those that favour a unity government with renegade General Khalifa Haftar," el-Gomati told Al Jazeera, referring to the ruler of Libya's east.

"Those that are on the ground and know Hamza quite well would suggest that he is in the anti-Haftar faction," el-Gomati said.

Have there been previous clashes?

The escalation follows months of relative peace.

In May, the same armed groups had clashed for hours in Tripoli, also after the arrest of a 444 Brigade member. Minor injuries resulted.

Tripoli has seen similar episodes of violence in recent years, although most have only lasted a couple of hours.

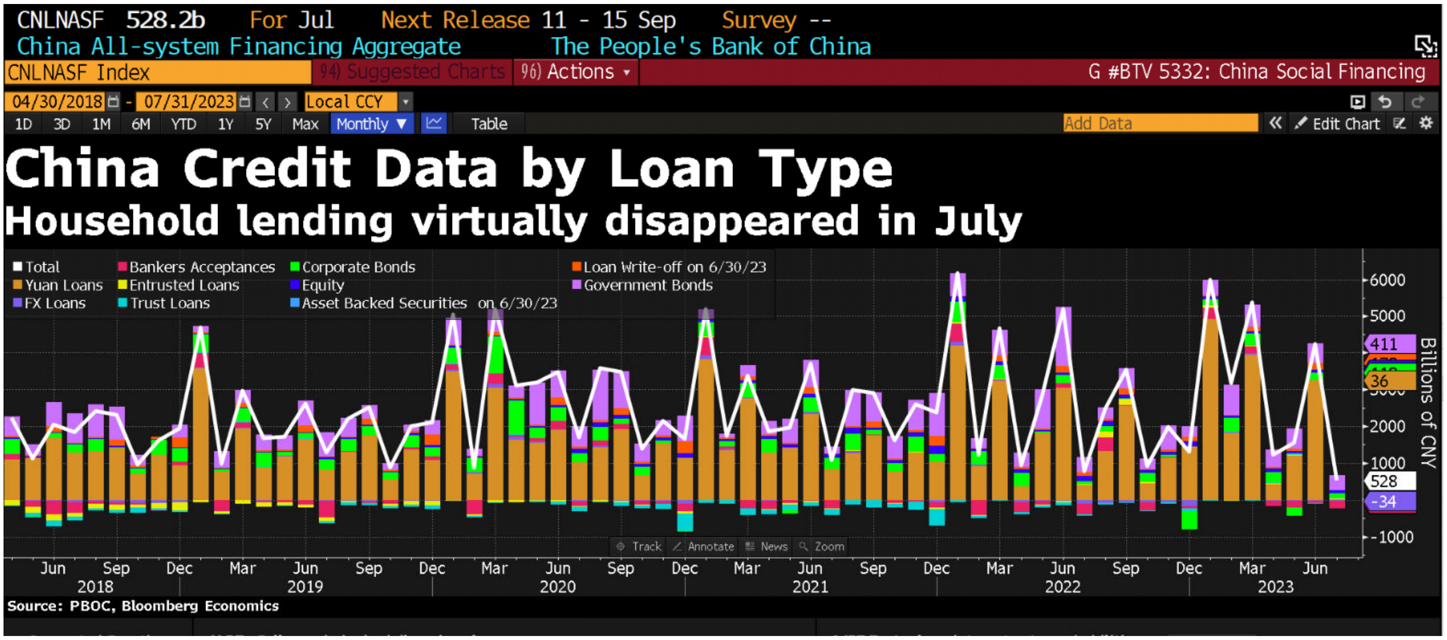
Last August, clashes between two other militias active in the capital killed at least 23 people.

What has the world reaction been?

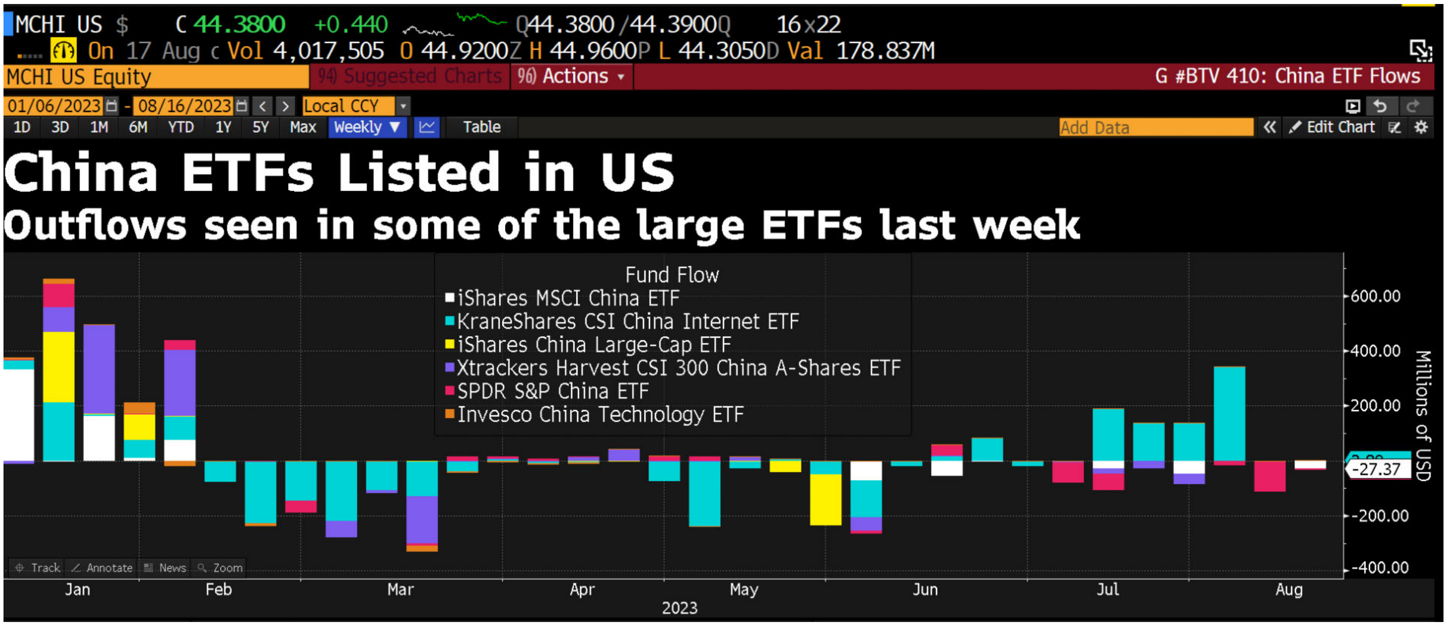
The African Union expressed its concers and calls for an end to hostilities and a start to reconciliation on Thursday. Moussa Faki Mahamat, AU Commission head, “is following with great concern the developments of the security situation in Tripoli” the statement said.

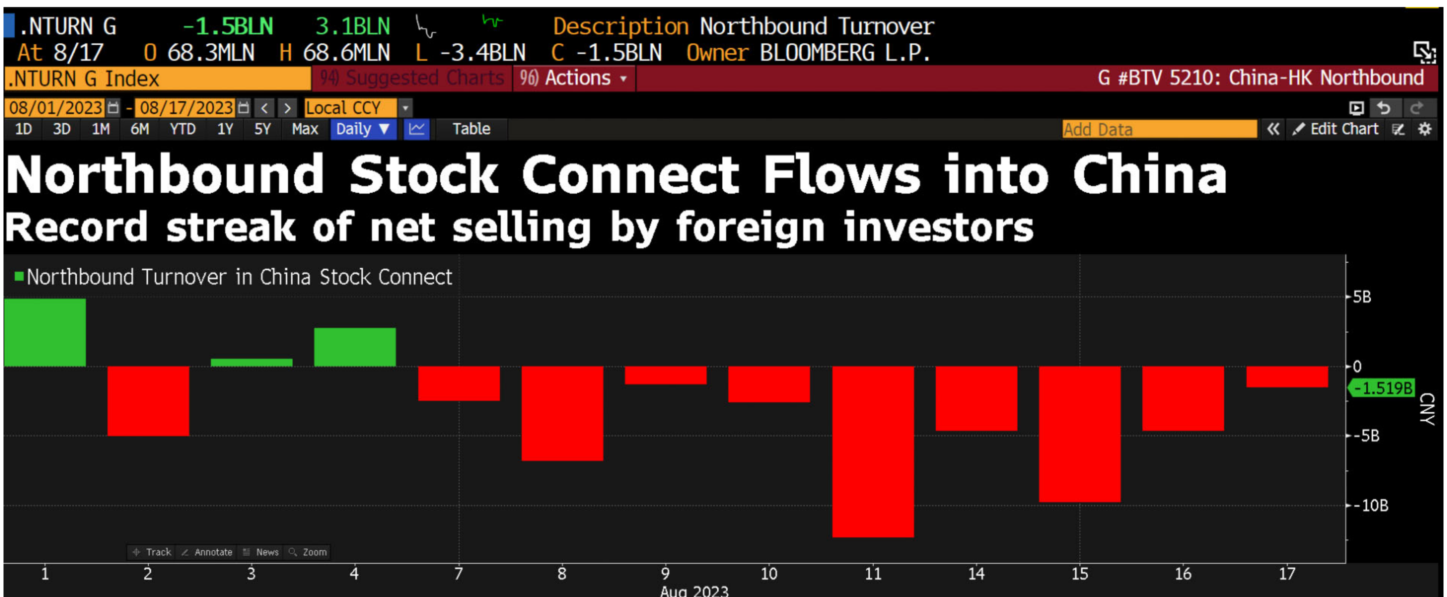
The embassies of the United Kingdom and the United States in Libya both issued statements expressing their concerns about the escalating violence.

The US urged “immediate de-escalation in order to sustain recent Libyan gains toward stability and elections”.


CNLNASF 528.2b For Jul Next Release 11 - 15 Sep Survey --
China All-system Financing Aggregate The People's Bank of China
CNLNASF Index
96) Actions
G #BTV 5332: China Social Financing
04/30/2018 - 07/31/2023
Local CCY
Monthly
Table
Add Data
Edit Chart
China Credit Data by Loan Type
Household lending virtually disappeared in July
Total
Yuan Loans
FX Loans
Bankers Acceptances
Entrusted Loans
Trust Loans
Corporate Bonds
Equity
Asset Backed Securities on 6/30/23
Loan Write-off on 6/30/23
Government Bonds
Billions of CNY
Source: PBOC, Bloomberg Economics


CNLNRMBL 36.40 As Of 07/31/23 Billion
China All-system Financing Aggregate - ... The People's Bank of China
CNLNRMBL Index
96) Actions
G #BTV 7512: China home mortgage
08/11/2018 - 07/31/2023
Local CCY
Study ROC
Period 12
Monthly
Table
Add Data
Edit Chart
China Bank Lending Plummets 90%
July's yuan bank loans drop to 17-year low
Last Price 36.40
High on 01/31/23 4931.40
Average 1650.52
Low on 07/31/23 36.40
ROC (12) (CNLNRMBL) -91.0959
Billions of CNY





Source: Bloomberg

https://www.globaltimes.cn/page/202308/1296273.shtml

CHINA / SOCIETY

'No need to panic' over third COVID-19 infections, overall situation stable

By GT staff reporters Published: Aug 14, 2023 11:10 PM

Along with EG.5, a sublineage of the Omicron variant, being classified as a "variant of interest" by the World Health Organization (WHO), the topic of a third COVID-19 wave has triggered discussions among Chinese netizens in recent days with many sharing their infection experiences. Experts noted that the COVID-19 situation in China is still stable and that there is no need to panic.

Some netizens on Monday who said on social media that they had been reinfected a third time noted that their symptoms were lighter than previous infections. However, some shared different experiences.

The current COVID-19 infections are more hidden, but generally still at a relatively stable level. There isn't an obvious seasonal pattern for COVID-19 transmission, but usually it will show a small infection peak every five to six months. Generally, "the infection peak is decreasing, with no impact on the country's overall prevention work," Lu Hongzhou, head of the Third People's Hospital of Shenzhen, told the Global Times on Monday.

Generally speaking, fewer people have been infected for a third or more time in Shenzhen, South China's Guangdong Province, according to Lu.

Peng Jie, director of the Difficult Infectious Disease Center at Nanfang Hospital in Guangzhou, also in Guangdong, said since the peak reinfection wave in May, some patients who thought they had ordinary fevers only found out they had COVID-19 after nucleic acid testing. Among them, only a few were infected for the third time, and their symptoms are relatively light, said Peng, according to a report issued on the Guangdong authorities' WeChat account on Saturday.

National fever outpatient treatment and the number of severe COVID-19 cases have shown a fluctuating downward trend, according to the Chinese Center for Disease Control and Prevention (China CDC).

In July alone, the Chinese mainland reported 455 new serious cases of COVID-19, with 65 deaths. The patients had underlying health issues, and no one died of respiratory failure due to COVID-19, the China CDC said in its latest report issued on August 3. In June, the country reported 1,968 new serious cases, with 239 deaths, said the China CDC.

Based on the July data, the genome sequences of 9,591 local COVID-19 samples were all Omicron variant strains, covering 116 evolutionary branches, and the XBB variant strains were the main circulating ones, said the report released by the China CDC.

Due to the highly infectious nature of COVID-19 and the natural decrease in antibodies in individuals over time, basically most people can expect to be infected one to three times in a year. However, "for people with normal immune function, it will not have a significant impact on them," Lu explained.

As long as the COVID-19 mutation doesn't completely break away from the Omicron subbranch, an individual will have a cross-immune memory, so when an individual encounters the EG.5 COVID-19 strain, it will respond fast and produce antibodies, according to Lu.

EG.5 was first reported in February, and designated as a variant under monitoring in July, according to a report released by the WHO on August 9. There has been a steady increase in the proportion of EG.5 reported globally. From July 17 to 23, the global prevalence of EG.5 was 17.4 percent, a notable rise from the data reported in the week from June 19 to 25, when the global prevalence of EG.5 was 7.6 percent, according to the WHO.

Lu suggested people with underlying health issues receive COVID-19 vaccinations regularly, including nasal spray vaccines or other multivalent vaccine strategies.

08/18/2023 05:49:57 [BN] Bloomberg News

OIL DEMAND MONITOR: Flying Set for Seasonal Dip; China Stresses

- **End of US, European holiday seasons set to trim jet fuel use**
- **China unnerves market, but agencies see record global demand**

By John Deane

(Bloomberg) -- Summer holidays in North America and Europe are nearing an end, heralding a seasonal decline in flying and demand for jet fuel. China's economy continues to stutter, underscoring predictions of subdued fuels usage for the rest of the year.

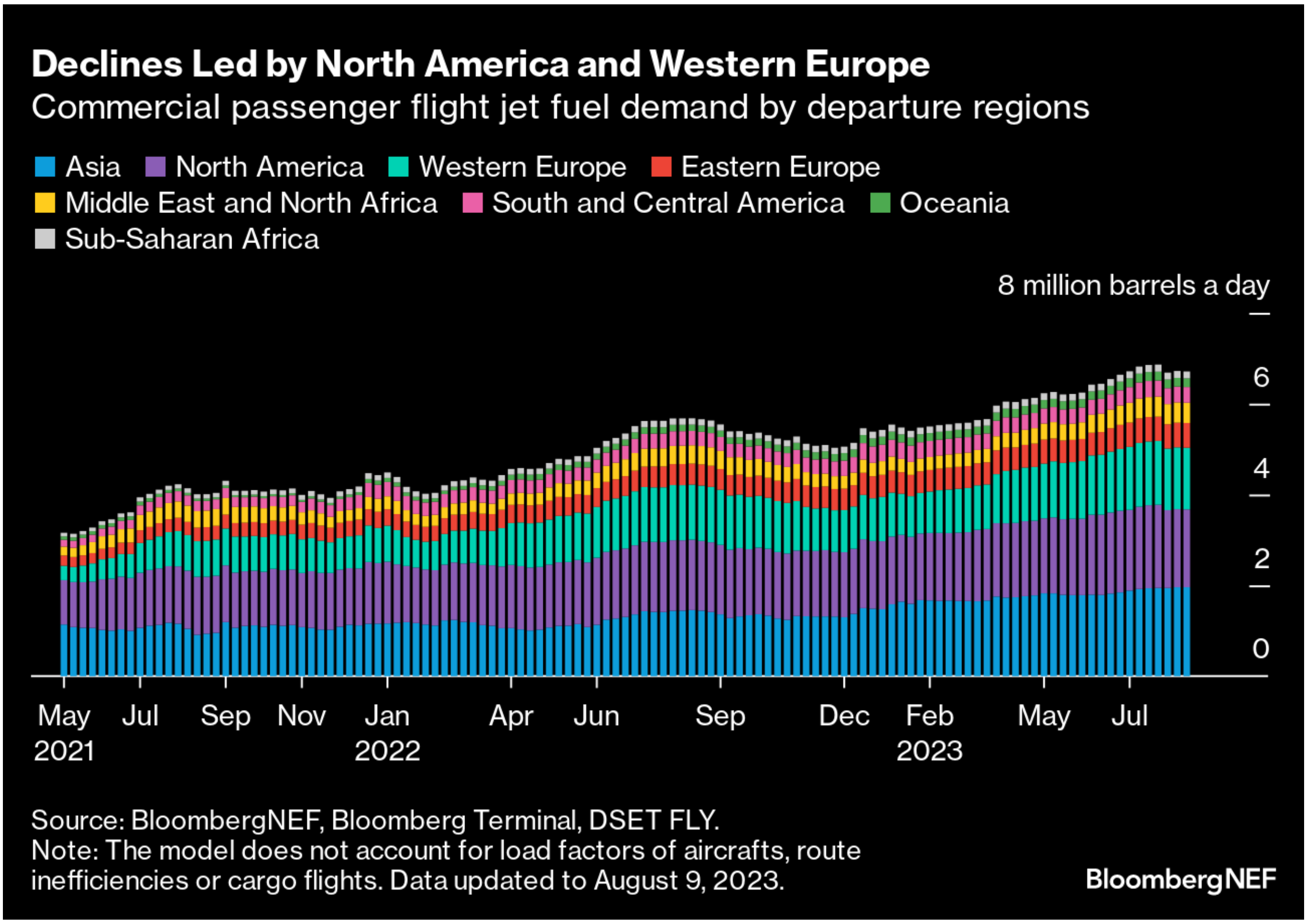
The market is struggling to shake off fears about China, the world's biggest oil importer, as unemployment picks up, industrial output disappoints and turmoil hits the shadow banking and property sectors.

While the Asian nation's refiners lifted throughput to the highest in three months in July, crude imports sank to a six-month low as a lackluster post-Covid economic recovery weighs on energy demand. For now, that's helped to put a lid on the oil futures price rally seen since the end of June.

Chinese demand growth has been exaggerated substantially, and shorting crude oil this coming winter and into 2024 " makes sense" given the likelihood of soft demand and robust supply, according to a report from Citigroup Inc. analysts including Ed Morse. Oil prices probably won't see a sustained rally into 2024 from current levels without more demand, Bank of America Corp. analysts including Francisco Blanch said in a note.

Gains in jet fuel usage have been a key driver of overall oil demand growth this year, but a summer surge in flying reinforced by a pent-up appetite for travel after Covid is set to peter out. Global capacity has fallen this week by half a million seats to just over 116 million, data provider OAG Aviation said. Capacity will continue to decline in line with seasonal trends in the coming weeks, averaging almost 114 million a week over the next three months. Globally, seat capacity was 1.5% behind the same week in 2019, OAG said.

According to a BloombergNEF analysis of scheduled passenger flights, implied jet fuel demand in the Aug. 15-21 period is set for a weekly drop of 0.2% to 6.71 million barrels a day, as the summer season nears its end, with the decline driven primarily by North America and western Europe.



In the US, implied jet fuel demand dipped to the lowest in a month in the latest weekly figures. It also declined on a four-week average basis, while remaining at the highest since 2019 for the time of year. A seven-day average of passengers passing through security turnstiles at airports slipped week-on-week and month-on-month, according to data from the US Transportation Security Administration.

On the roads, the US summer driving season wraps up on Labor Day on Sept. 4. Already, a measure of US gasoline demand, which peaked at the end of June, slipped in the latest weekly figures. And implied demand measured on a four-week rolling basis fell below year-ago levels for the first time since March.

Looking further afield, traffic congestion in several major European cities — including London, Rome, Madrid, Paris and Berlin — fell away in recent weeks, coinciding with the height of the summer holiday season. Of 13 major global cities covered by this monitor only one, Taipei, topped pre-Covid traffic levels on Monday, according to BNEF seven-day moving-average calculations based on TomTom data. Traffic levels in the major Chinese cities were mostly stable or a little higher in the latest figures from Baidu.

Read More: Road Traffic Indicators: Europe Traffic Falls to 2023 Low

Still, the outlook for global oil demand remains a puzzle, as major forecasting agencies continue to see overall consumption hitting an all-time high this year.

Demand is scaling record highs, boosted by strong summer air travel, increased oil use in power generation and surging Chinese petrochemical activity, the International Energy Agency said in its latest monthly report. Global usage is set to expand by 2.2 million barrels a day to 102.2 million in 2023, with China accounting for more than 70% of demand growth, the agency said.

In its equivalent monthly report, the Organization of Petroleum Exporting Countries forecast that daily global consumption will increase by 2.4 million barrels a day this year to average 102 million. It predicted a further increase of 2.2 million barrels a day in 2024.

The Bloomberg oil–demand monitor uses a range of high–frequency data to help identify emerging trends. Following are the latest indicators. The first two tables shows fuel demand and road congestion, the next shows air travel globally and the last is refinery activity.

To get Bloomberg's Energy Daily newsletter direct into your inbox, click here.

Demand Measure	Location	%vs 2022	% vs 2021	% vs 2020	% vs 2019	% m/m	Freq	Latest Date	Latest Value	Source
Gasoline product supplied	US	−5.3	−5.2	+2.6	−11	unch.	w	Aug. 11	8.85m b/d	EIA
Distillates product supplied	US	−7.1	−16	+12	−5.5	−0.6	w	Aug. 11	3.65m b/d	EIA
Jet fuel product supplied	US	−3.4	−7.4	+58	−23	−1.4	w	Aug. 11	1.55m b/d	EIA
Total oil products supplied	US	+2.1	+0.9	+26	−1.8	+4.3	w	Aug. 11	21.7m b/d	EIA
Car use	UK	+1.1	+2.1	+6.7	−4	−2	m	Aug. 7	96	DfT
Heavy goods vehicle use	UK	+1	−1	+3	+3	−3.7	m	Aug. 7	103	DfT
All motor vehicle use index	UK	+1	+2	+7.5	unch.	−2.9	m	Aug. 7	100	DfT
Gasoline (petrol) avg sales per filling station	UK	+4.5	+3.1	+14	−4.6	−4.4	m	Week to July 30	6,854 liters/d	BEIS
Diesel avg sales per station	UK	−1.2	−7.7	−2.8	−16	−3.2	m	Week to July 30	8,744 liters/d	BEIS
Total road fuels sales per station	UK	+1.2	−3.3	+3.8	−11	−3.7	m	Week to July 30	15,598 liters/d	BEIS
Diesel sales	India	−5.7				−9.5	m	Aug. 1−15	2.7m tons	Blbg
Gasoline sales	India	−8				−5.2	m	Aug. 1−15	1.2m tons	Blbg
Jet fuel sales	India	+8.1				−2.1	m	Aug. 1−15	290k tons	Blbg
LPG sales	India	+3.7				−2	m	Aug. 1−15	1.2m tons	Blbg
Gasoline deliveries	Spain	+12				+11	m	July	628.3k m3	Exolum
Diesel (and heating oil) deliveries	Spain	+0.6				+0.6	m	July	2,284k m3	Exolum
Jet fuel deliveries	Spain	+9				+12	m	July	707k m3	Exolum
Total oil products deliveries	Spain	+4.3				+4.3	m	July	3,619k m3	Exolum
Road fuel sales	France	+1.8				+7.4	m	June	4.36m m3	UFIP
Gasoline sales	France	+8.3					m	June	n/a	UFIP
Road diesel sales	France	−0.6					m	June	n/a	UFIP
Jet fuel sales	France	+14				+6.2	m	June	699k m3	UFIP
All petroleum products sales	France	+4.9				+7	m	June	4.86m tons	UFIP
All vehicles traffic	Italy	+2				+6	m	July	n/a	Anas
Heavy vehicle traffic	Italy	+3				−2	m	July	n/a	Anas
Gasoline sales	Italy	+4.4			+10	+2.7	m	June	729k tons	Energy Ministry
Transport diesel sales	Italy	+0.2			+2.5	−1	m	June	2.04m tons	Energy Ministry
Diesel/gasoil sales	Italy	+0.6			unch.	+0.4	m	June	2.29m tons	Energy Ministry
LPG sales	Italy	+3.6			+5.5	−4.5	m	June	232k tons	Energy Ministry
Jet fuel sales	Italy	+13			−10	+10	m	June	419k tons	Energy Ministry
Total oil product sales	Italy	+1.8			−4.1	−1.8	m	June	4.45m tons	Energy Ministry
% change in toll roads kms traveled	France	+4.1			−0.1		m	June	n/a	Mundys
% change in toll roads kms traveled	Italy	+1.3			+1.8		m	June	n/a	Mundys
% change in toll roads kms traveled	Spain	+0.6			−3.2		m	June	n/a	Mundys
% change in toll roads kms traveled	Brazil	+5.7			+9.3		m	June	n/a	Mundys
% change in toll roads kms traveled	Chile	−3.7			+4.4		m	June	n/a	Mundys
% change in toll roads kms traveled	Mexico	+4.6			+15.3		m	June	n/a	Mundys

Notes: Click here for a PDF with more information on sources, methods. The frequency column shows w for data updated weekly, 2/m for twice a month and m for monthly.

City congestion:

Measure	Location	Aug. 14	Aug. 7	July 31	July 24	July 19	July 10	July 3	June 26	June 19	June 12	June 5	May 29	May 22	May 15	May 8
Congestion	Tokyo	85	99	100	95	92	89	88	86	91	89	88	90	85	85	67
Congestion	Taipei	104	88	87	93	88	86	93	77	94	90	94	87	86	86	89
Congestion	Jakarta	68	68	70	58	67	74	47	66	69	67	57	69	60	69	69
Congestion	Mumbai	56	62	64	63	56	64	58	53	49	47	44	44	42	43	45
Congestion	New York	83	84	88	88	87	72	80	97	99	92	104	86	109	111	98
Congestion	Los Angeles	89	90	85	86	87	69	81	87	86	86	88	77	93	98	90

Congestion	London	89	99	90	86	103	109	114	118	121	120	103	115	115	122	100
Congestion	Rome	29	56	76	85	96	107	76	105	121	114	99	124	121	122	123
Congestion	Madrid	17	26	42	52	60	65	72	79	83	90	88	90	84	81	77
Congestion	Paris	39	53	76	82	78	103	109	121	122	121	126	98	85	113	74
Congestion	Berlin	75	77	78	81	104	111	108	114	108	106	110	96	99	118	111
Congestion	Mexico City	66	65	64	60	67	67	69	67	70	75	75	76	81	74	73
Congestion	Sao Paulo	85	79	66	63	63	65	73	76	93	67	84	80	80	87	79

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

NOTE: TomTom changed its methodology for calculating traffic delays with data for Feb. 20 and no longer publishes comparisons with pre−Covid levels. We have therefore switched to using figures calculated by BNEF, which show 7−day moving average congestion indexed to average 2019 levels. See the linked PDF for more details.

Air Travel:

Measure	Location	vs 2022	vs 2021	vs 2020	vs 2019	m/m	w/w	Freq.	Latest Date	Latest Value	Source
		changes shown as %									
All flights	Worldwide	+7.3	+23	+56	+16	−0.5	+3.1	d	Aug. 14	239,727	Flightradar24
Commercial flights	Worldwide	+23	+48	+94	+7.1	+0.7	−0.3	d	Aug. 14	132,132	Flightradar24
Seat capacity per week	Worldwide	+13	+52	+95	−1.5		−0.4	w	Aug. 14 week	116.2m seats	OAG
Air traffic (flights)	Europe				−5.7	−3.8	−2.4	d	Aug. 14	32,267	Eurocontrol
Airline passenger throughput (7−day avg)	US	+12	+30	+256	+1	−1	−2	w	Aug. 13	2.52m	TSA
Air passenger traffic per month	China	+141	+29	+73	−0.6	+2.7		m	June	53.1m	CAAC
Heathrow airport passengers	UK	+21	+407	+784	−1.2	+8.8		m	July	7.66m	Heathrow
Rome % change in passengers carried	Italy	+26			−11			m	June	n/a	Mundys

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

FlightRadar24 data shown above, and comparisons thereof, all use 7−day moving averages, except for w/w which uses single day data.

Refineries:

Measure	Location	vs 2022	vs 2021	vs 2019	m/m chg	Latest as of Date	Latest Value	Source
			Changes are in ppt unless noted					
Crude intake	US	+2%	+4.6%	−3.2%	+1%	Aug. 11	16.75m b/d	EIA
Utilization	US	+1.2	+2.5	−0.1	+0.4	Aug. 11	94.7%	EIA
Utilization	US Gulf	−2.6	+1.2	−1.7	−0.5	Aug. 11	94.3%	EIA
Utilization	US East	−6.5	+2.3	+21	+13	Aug. 11	91.9%	EIA
Utilization	US Midwest	+5.2	+4.1	−1.2	−0.8	Aug. 11	98%	EIA
Utilization (indep. refs)	Shandong, China	+0.9	−4.2	+2.3	+3	Aug. 18	62.77%	Oilchem

NOTE: US refinery data is weekly. Changes are shown in percentages for the row on crude intake, while refinery utilization changes are shown in percentage points.

Previous versions:

Click here for prior versions of the OIL DEMAND MONITOR or run NI OILDEMON

−−With assistance from Prejula Prem, Julian Lee, Grant Smith, Rachel Graham, Sheela Tobben and Alex Longley.

To contact the reporter on this story:
John Deane in London at jdeane3@bloomberg.net

To contact the editors responsible for this story:
Alaric Nightingale at anightingal1@bloomberg.net
John Deane, Nicholas Larkin

This story was produced with the assistance of Bloomberg Automation.

Global Summary
Airlines

Global

LATAM Airlines (LA) switched positions with **Avianca (AV)** this month with an OTP of 85.30% and 84.67% respectively. **Saudia (SV)** took the third position among the top performing global airlines with an OTP of 83.76%.

APAC

JAL (JL) jumped to the top spot amongst APAC airlines with an OTP of 83.39%. **Indigo (6E)** followed with 82.04% and **ANA (NH)** with 81.80% of their flights arriving on-time.

North America

Alaska Airlines (AS) for the second month in a row led North American carriers with an OTP of 82.03% over **Delta Air Lines (DL)** with an OTP of 78.55%. **American Airlines (AA)** took the third position with an OTP of 73.01%.

Europe

Iberia (IB) led with an OTP of 80.75%. **Finnair (AY)** followed closely behind with 79.82% of their flights arriving on-time. **Norwegian Air Shuttle (DY)** was in the 3rd position with an OTP of 76.97%.

Latin America

Copa Airlines (CM), a consistent top performer, leads the region with an OTP of 89.74%. **Azul (AD)** and **LATAM Airlines (LA)** followed respectively with 86.48% and 85.30% OTP percentages.

Middle East and Africa

The top airlines matched June rankings with **Oman Air (WY)** continuing to lead the region with an OTP of 90.73% followed by **Royal Jordanian (RJ)** with an OTP of 88.58% then **Safair (FA)** with an OTP of 88.32%.

Low-Cost Carrier

Solaseed Air (6J) leads the category with an OTP of 89.87%. **Safair (FA)** was close behind with an OTP of 88.32% followed by **Iberia Express (I2)** with an OTP of 87.14%.

The most on-time

Global Airlines

	On-Time Ranking	Total Flights	On-Time Arrival	Completion Factor	Tracked Flights
LATAM Airlines (LA)	1	44,925	85.30%	99.38%	98.66%
SA AVIANCA (AV)	2	18,188	84.67%	99.02%	99.32%
Saudia (SV)	3	14,867	83.76%	99.67%	98.86%
JAL (JL)	4	26,581	83.39%	99.06%	99.81%
Qatar Airways (QR)	5	16,911	82.67%	99.92%	98.20%
ANA (NH)	6	26,368	81.80%	99.14%	99.99%
Iberia (IB)	7	15,409	80.75%	99.18%	99.67%
Aeromexico (AM)	8	18,152	79.91%	99.97%	99.93%
Delta Air Lines (DL)	9	146,241	78.55%	97.74%	99.98%
Emirates (EK)	10	14,516	74.49%	99.94%	98.92%

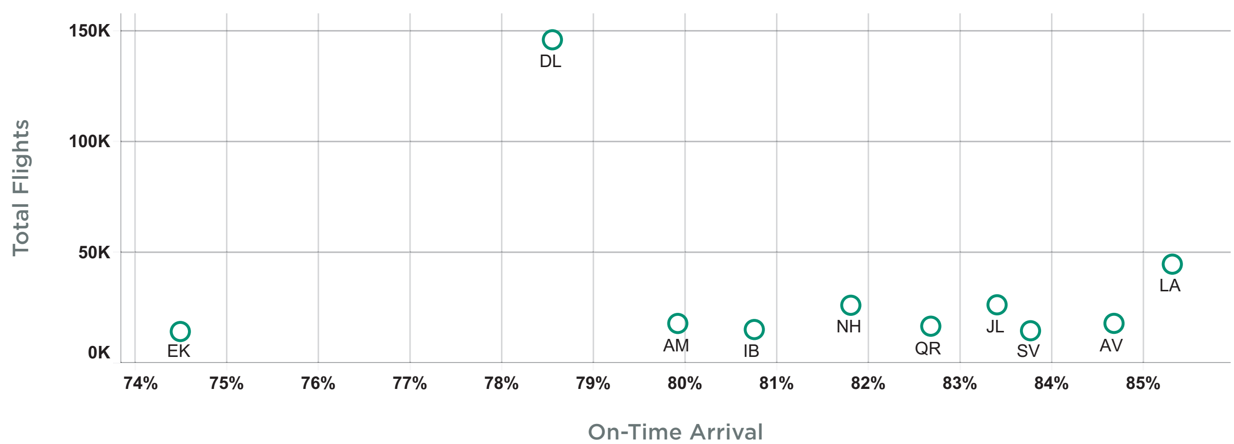
Summary of Top Performers

Total Flights
342,158

Total Tracked Flights
99.33%

Total On-Time Arrivals
81.53%

Relative Performance



Operational Highlights

	Completion Factor	Within Block Time	On-Time Arrivals	On-Time Departures
LATAM Airlines (LA)	99.38%	68.47%	85.30%	85.97%
SA AVIANCA (AV)	99.02%	76.69%	84.67%	84.10%
Saudia (SV)	99.67%	62.93%	83.76%	85.89%
JAL (JL)	99.06%	64.84%	83.39%	84.33%
Qatar Airways (QR)	99.92%	78.04%	82.67%	77.49%

The most on-time
Asia Pacific Airlines

	On-Time Ranking	Total Flights	On-Time Arrival	Completion Factor	Tracked Flights
JAL (JL)	1	26,581	83.39%	99.06%	99.81%
IndiGo (6E)	2	57,842	82.04%	99.61%	99.88%
ANA (NH)	3	26,368	81.80%	99.14%	99.99%
Air New Zealand (NZ)	4	15,177	81.62%	97.23%	98.85%
Thai AirAsia (FD)	5	9,398	78.64%	99.98%	99.22%
Singapore Airlines (SQ)	6	8,631	77.86%	99.95%	99.99%
Garuda Indonesia (GA)	7	5,099	75.38%	99.63%	98.86%
Cathay Pacific (CX)	8	6,612	72.49%	99.91%	99.85%
Malaysia Airlines (MH)	9	9,662	71.88%	98.99%	99.47%
Qantas (QF)	10	23,828	70.39%	98.06%	98.65%

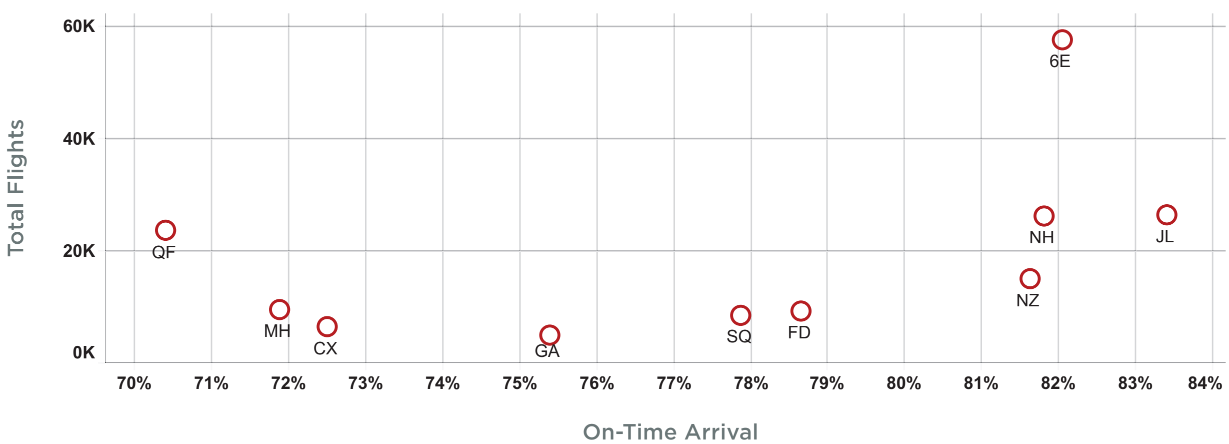
Summary of Top Performers

Total Flights
189,198

Total Tracked Flights
99.46%

Total On-Time Arrivals
77.55%

Relative Performance



Operational Highlights

	Completion Factor	Within Block Time	On-Time Arrivals	On-Time Departures
JAL (JL)	99.06%	64.84%	83.39%	84.33%
IndiGo (6E)	99.61%	58.60%	82.04%	85.58%
ANA (NH)	99.14%	59.31%	81.80%	83.22%
Air New Zealand (NZ)	97.23%	75.82%	81.62%	78.66%
Thai AirAsia (FD)	99.98%	70.87%	78.64%	77.31%

The most on-time
North America Airlines

	On-Time Ranking	Total Flights	On-Time Arrival	Completion Factor	Tracked Flights
Alaska Airlines (AS)	1	36,960	82.03%	99.71%	99.93%
Delta Air Lines (DL)	2	146,241	78.55%	97.74%	99.98%
American Airlines (AA)	3	178,457	73.01%	98.10%	99.96%
United Airlines (UA)	4	134,227	70.85%	95.85%	99.94%
Southwest Airlines (WN)	5	129,851	66.63%	99.13%	99.26%
Spirit Airlines (NK)	6	24,614	63.70%	99.26%	96.35%
WestJet (WS)	7	17,405	61.88%	98.05%	99.92%
Frontier Airlines (F9)	8	16,614	57.23%	96.70%	98.65%
JetBlue Airways (B6)	9	30,569	53.01%	94.41%	99.71%
Air Canada (AC)	9	36,017	51.25%	93.06%	99.80%

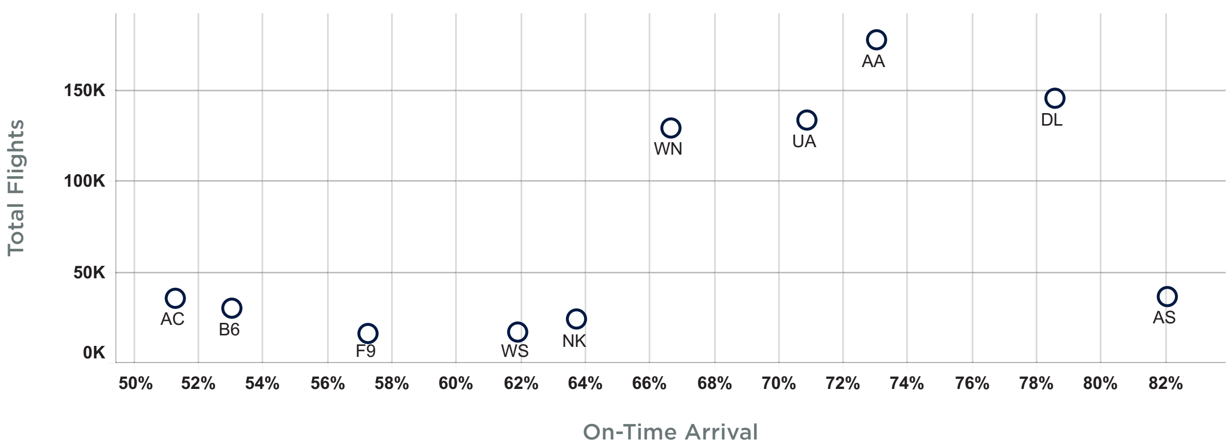
Summary of Top Performers

Total Flights
750,955

Total Tracked Flights
99.35%

Total On-Time Arrivals
65.82%

Relative Performance



Operational Highlights

	Completion Factor	Within Block Time	On-Time Arrivals	On-Time Departures
Alaska Airlines (AS)	99.71%	69.16%	82.03%	82.86%
Delta Air Lines (DL)	97.74%	80.87%	78.55%	77.04%
American Airlines (AA)	98.10%	71.90%	73.01%	74.50%
United Airlines (UA)	95.85%	74.00%	70.85%	70.80%
Southwest Airlines (WN)	99.13%	71.69%	66.63%	65.99%

The most on-time
Europe Airlines

	On-Time Ranking	Total Flights	On-Time Arrival	Completion Factor	Tracked Flights
Iberia (IB)	1	15,409	80.75%	99.18%	99.67%
Finnair (AY)	2	8,546	79.82%	99.74%	97.79%
Norwegian Air Shuttle (DY)	3	7,635	76.97%	99.82%	98.77%
LOT - Polish Airlines (LO)	4	8,762	75.86%	99.34%	98.48%
Vueling (VY)	5	21,756	74.03%	99.58%	99.75%
KLM (KL)	6	21,982	73.97%	96.75%	96.43%
Austrian (OS)	7	11,316	73.78%	99.00%	99.96%
Air Europa (UX)	8	5,783	71.69%	99.93%	99.76%
Norwegian Air Sweden (D8)	9	5,962	69.23%	99.23%	98.29%
Brussels Airlines (SN)	10	6,240	67.37%	98.53%	98.36%

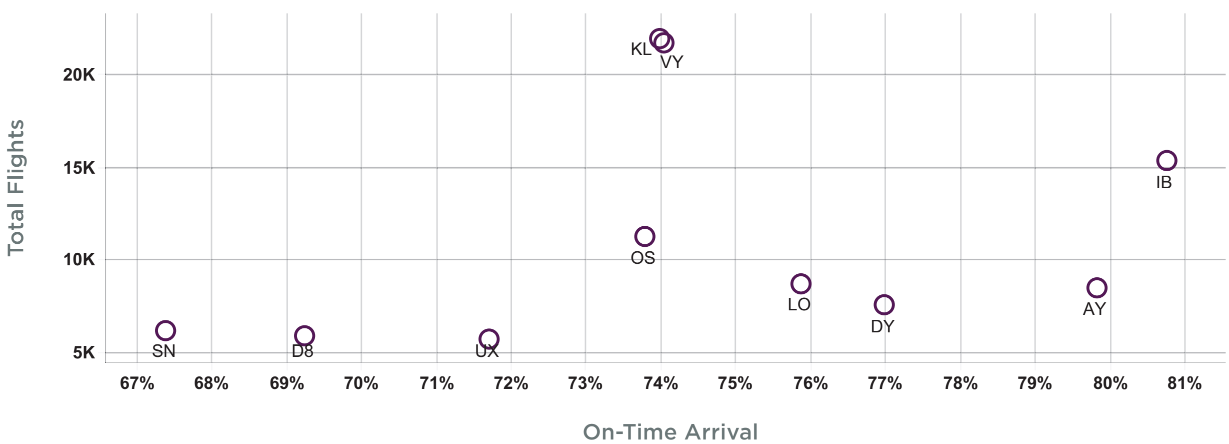
Summary of Top Performers

Total Flights
113,391

Total Tracked Flights
98.73%

Total On-Time Arrivals
74.35%

Relative Performance



Operational Highlights

	Completion Factor	Within Block Time	On-Time Arrivals	On-Time Departures
Iberia (IB)	99.18%	71.66%	80.75%	79.56%
Finnair (AY)	99.74%	75.34%	79.82%	76.59%
Norwegian Air Shuttle (DY)	99.82%	76.31%	76.97%	77.37%
LOT - Polish Airlines (LO)	99.34%	89.36%	75.86%	65.18%
Vueling (VY)	99.58%	77.47%	74.03%	70.41%

The most on-time
Latin America Airlines

	On-Time Ranking	Total Flights	On-Time Arrival	Completion Factor	Tracked Flights
Copa Airlines (CM)	1	10,123	89.74%	99.79%	99.69%
Azul (AD)	2	27,543	86.48%	97.54%	97.73%
LATAM Airlines (LA)	3	44,925	85.30%	99.38%	98.66%
SA AVIANCA (AV)	4	18,188	84.67%	99.02%	99.32%
Aeromexico (AM)	5	18,152	79.91%	99.97%	99.93%
Gol (G3)	6	20,387	79.81%	98.48%	97.42%
Sky Airline (H2)	7	4,658	73.83%	99.42%	98.60%
Aerolineas Argentinas (AR)	8	10,133	66.85%	98.89%	99.20%

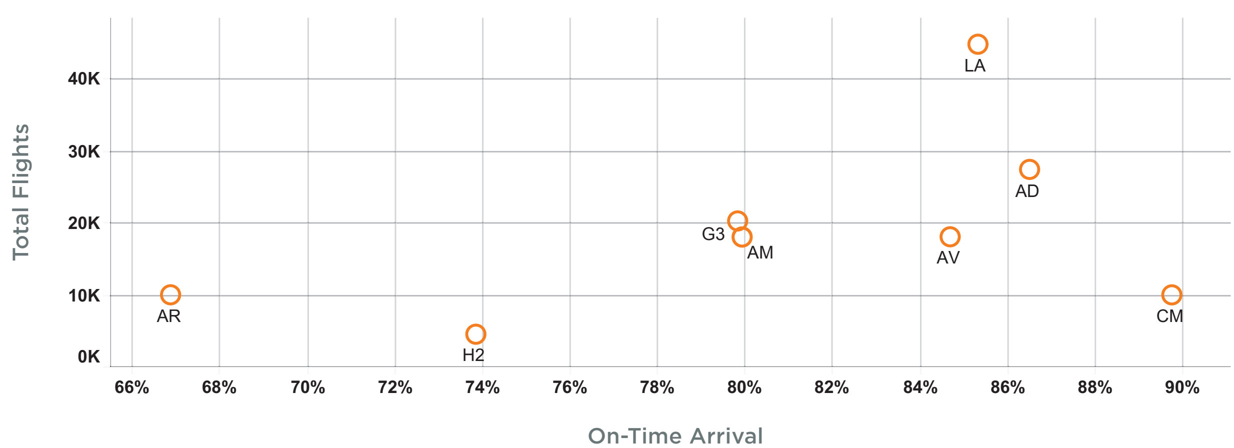
Summary of Top Performers

Total Flights
154,109

Total Tracked Flights
98.82%

Total On-Time Arrivals
80.82%

Relative Performance



Operational Highlights

	Completion Factor	Within Block Time	On-Time Arrivals	On-Time Departures
Copa Airlines (CM)	99.79%	72.00%	89.74%	91.35%
Azul (AD)	97.54%	67.24%	86.48%	87.74%
LATAM Airlines (LA)	99.38%	68.47%	85.30%	85.97%
SA AVIANCA (AV)	99.02%	76.69%	84.67%	84.10%
Aeromexico (AM)	99.97%	64.76%	79.91%	84.21%

The most on-time
Middle East & Africa Airlines

	On-Time Ranking	Total Flights	On-Time Arrival	Completion Factor	Tracked Flights
Oman Air (WY)	1	4,639	90.73%	99.33%	94.81%
Royal Jordanian (RJ)	2	3,375	88.58%	99.47%	99.58%
Safair (FA)	3	4,724	88.32%	99.96%	82.49%
Etihad Airways (EY)	4	5,765	86.84%	99.97%	99.65%
Saudia (SV)	5	14,867	83.76%	99.67%	98.86%
Qatar Airways (QR)	6	16,911	82.67%	99.92%	98.20%
Gulf Air (GF)	7	4,404	80.90%	98.37%	83.63%
Middle East Airlines (ME)	8	2,467	75.93%	100.00%	88.41%
Emirates (EK)	9	14,516	74.49%	99.94%	98.92%
Kenya Airways (KQ)	10	3,687	74.31%	98.10%	86.45%

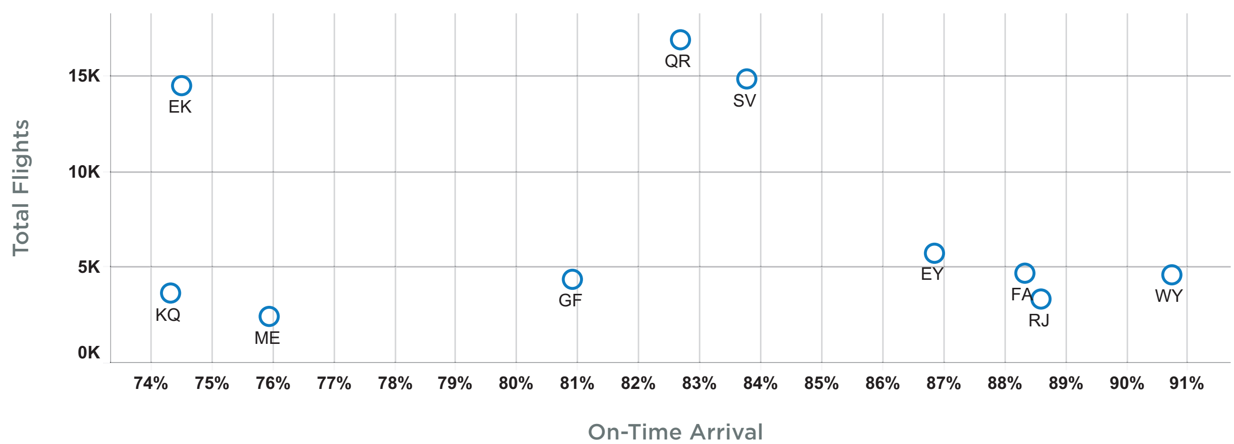
Summary of Top Performers

Total Flights
75,355

Total Tracked Flights
93.10%

Total On-Time Arrivals
82.65%

Relative Performance



Operational Highlights

	Completion Factor	Within Block Time	On-Time Arrivals	On-Time Departures
Oman Air (WY)	99.33%	77.68%	90.73%	95.71%
Royal Jordanian (RJ)	99.47%	72.11%	88.58%	89.76%
Safair (FA)	99.96%	72.63%	88.32%	87.97%
Etihad Airways (EY)	99.97%	77.52%	86.84%	83.63%
Saudia (SV)	99.67%	62.93%	83.76%	85.89%

The most on-time
Low-Cost Carriers

	On-Time Ranking	Total Flights	On-Time Arrival	Completion Factor	Tracked Flights
Solaseed Air (6J)	1	2,476	89.87%	98.91%	100.00%
Safair (FA)	2	4,724	88.32%	99.96%	82.49%
Iberia Express (I2)	3	3,726	87.14%	99.89%	99.87%
Hong Kong Express (UO)	4	1,982	86.60%	100.00%	97.93%
Azul (AD)	5	27,543	86.48%	97.54%	97.73%
StarFlyer (7G)	6	2,091	86.01%	99.33%	92.92%
Jetstar Japan (GK)	7	2,944	85.64%	99.12%	98.39%
IndiGo (6E)	8	57,842	82.04%	99.61%	99.88%
AirAsia India (I5)	9	6,124	80.88%	99.84%	99.08%
Gol (G3)	10	20,387	79.81%	98.48%	97.42%

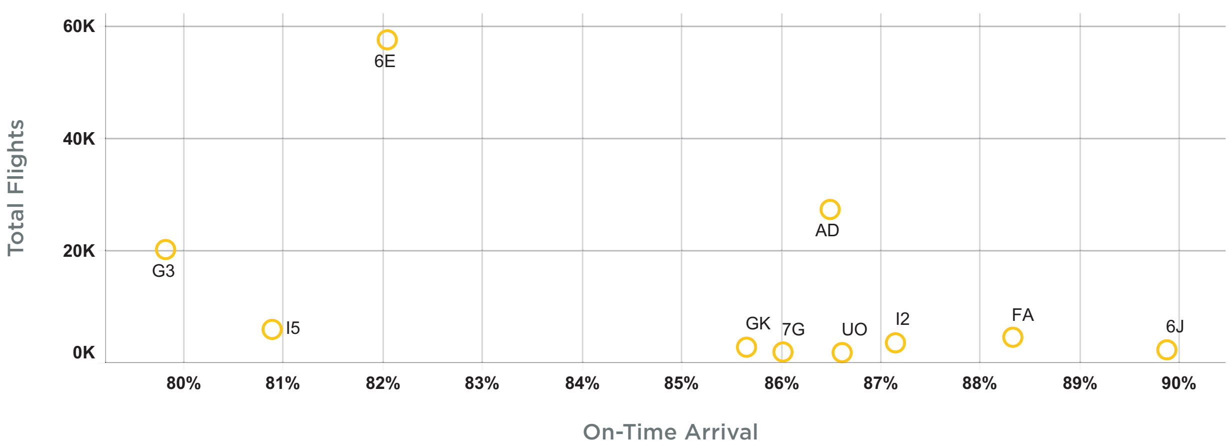
Summary of Top Performers

Total Flights **129,839**

Total Tracked Flights **96.57%**

Total On-Time Arrivals **85.28%**

Relative Performance



Operational Highlights

	Completion Factor	Within Block Time	On-Time Arrivals	On-Time Departures
Solaseed Air (6J)	98.91%	73.76%	89.87%	90.61%
Safair (FA)	99.96%	72.63%	88.32%	87.97%
Iberia Express (I2)	99.89%	77.57%	87.14%	87.44%
Hong Kong Express (UO)	100.00%	69.14%	86.60%	87.22%
Azul (AD)	97.54%	67.24%	86.48%	87.74%

https://www.db.com/news/detail/20220907-christian-sewing-s-keynote-at-the-handelsblatt-banken-summit-2022?language_id=1

News September 7, 2022

Christian Sewing's keynote at the Handelsblatt Banken Summit 2022

- Check against delivery -

Dear Mr Matthes, Ladies and Gentlemen,

I am delighted to be with you today at a time that is more challenging than anything I have experienced in more than 30 years of banking. While the Covid pandemic proved to be a temporary shock to the world economy, Russia's war against Ukraine has destroyed a number of certainties on which we built our economic system over the past decades.

- The brakes have been applied to globalisation and, in the face of major geopolitical tensions, it is unlikely to pick up its old momentum any time soon.
- As a result, many seemingly perfect global value and supply chains have been disrupted.
- The workforce, which for a long time was thought to be available without limit, has become a bottleneck factor worldwide.
- At the same time, electricity and gas have become scarce and extremely expensive. Energy is set to stay an expensive commodity in Europe for some time. This represents a structural competitive drawback and it is a threat to our economy. In the long term, we will need to respond with structural solutions.

These points are the most important reasons for soaring inflation. As a result, we will no longer be able to avert a recession in Germany.

Yet we believe that our economy is resilient enough to cope well with this recession – provided the central banks act quickly and decisively now. Right now many people still have their savings to fall back on to pay the higher prices; many companies are still sufficiently financed. But the longer inflation remains high, the greater the strain and the higher the potential for social conflict.

Three lessons

This combination of short and longer-term challenges seems unique at this point. And while it is essential we meet the short-term needs, we also have to explore what this means for our long-term ability to compete. The greatest complexity still lies ahead of us when we begin to draw the real lessons of the past few years. In my view, there are three main lessons:

Firstly, we have seen how dangerous it is for us in Europe to become too dependent on individual countries or regions. At the moment the main focus is on energy and raw material imports from Russia – and rightly so. We must do everything we can to ensure that our cars, our heating and our factories are not only able to run when an autocrat in the Kremlin is favourably disposed towards us. All efforts by politicians and companies to change this deserve unconditional support.

That is not enough, though. When it comes to dependencies, we also have to face the awkward question of how to deal with China. Its increasing isolation and growing tensions, especially between China and the United States, pose a considerable risk for Germany.

China is a cornerstone of our economy. About 8 percent of our exports go to China and 12 percent of our imports are from the country. More than a tenth of the sales of all DAX-listed companies are from China. At the latest during the pandemic it has become clear just how much our supply chains rely on China. Reducing this dependency will require a change no less fundamental than decoupling from Russian energy.

At the same time – and this is my second lesson – we need to tackle the climate crisis with much more resolve than to date. Climate change is already causing damage of gigantic proportions. In light of Covid and the war in Ukraine, the danger is that the topic will slip down the list of priorities. That would be the biggest mistake we could make, though.

Fighting the climate crisis is a generational task that will radically change the economy and society. Every company will have to face the issue – not just out of its responsibility to society, but to secure its own continued existence. Those who fail today to put sustainability firmly at the centre of their strategy will – in ten years – have trouble selling their products, finding employees or attracting investors. They will disappear from the market.

The third lesson, I believe, is that we have been under the illusion for the past 30 years that we could live forever in an ever more globalised world with no major conflicts and with steady growth. Francis Fukuyama has often been criticised for equating the end of the Cold War with the "end of history". But de facto we acted as if this thesis was correct; we have been acting as if the world was on its way to becoming one big village where everyone is interested in economic cooperation because, after all, everyone benefits from it. That has stopped being the case for some time now, though.

The truth is that 30 years of presumed calm will now be followed by a period of heightened volatility with economic uncertainty, regular crises and geopolitical conflicts that are also likely to drag on for decades. Trouble spots are not cut off from the rest of the world; they impact other regions in a number of ways. As such, we must come up with holistic solutions that take this degree of interplay into account. Dealing with this complexity will be a great challenge for us. Good risk management is the order of the day.

“We must not leave the playing field and with it the access to global capital markets largely to foreign banks. The past few months should have taught us this. In Germany, we must not allow ourselves to add a further dependency – access to finance – to our current dependencies on gas, raw materials and supply chains.”Christian Sewing, CEO

National feat of strength

Let us not delude ourselves: we certainly have our work cut out for us if we are to accomplish these three tasks – reducing dependencies, dealing with permanently higher volatility and driving the historic transformation of our economy. We will only succeed through a concerted joint effort, with politics, business and society all working closely hand in hand.
The financial sector must and can play a crucial role.

We need banks that are able to finance these mammoth tasks, while protecting their clients against risks and being reliable partners, accompanying clients worldwide.

And for this we need a domestic financial sector that stands on its own two feet and can assert itself against its global competitors. We must not leave the playing field and with it the access to global capital markets largely to foreign banks. The past few years should have taught us this. In Germany, we must not allow ourselves to add a further dependency – access to finance – to our current dependencies on gas, raw materials and supply chains.

We have the means to prevent this, but we still have much to do. As a financial sector, we have already achieved a lot: we are much more stable and resilient today than we were ten years ago. We are profitable. Our industry has foregone relatively little profit in the first half of the year and even managed to increase revenues. And the loan defaults that the industry faces in the coming months should remain manageable because banks have taken the necessary provisions.

Progress in the financial sector is far from sufficient

That is far from enough, though, if the German financial sector is to play a leading role in the long term. What we need is:

- For us banks to work harder at becoming even more efficient and focusing even more on clients, especially in digital services.
- We need reliable regulation that does not always create higher hurdles and tie up more capital than necessary – capital that is needed right now to finance the economy.
- And sooner or later we will also need consolidation, not nationally, but Europe-wide. Size counts in banking – and if we don't want to hand over the playing field to the Americans, Europe must create the right conditions for big banks. I can only repeat what I’ve said before: both the European banking union and the capital markets union are essential here.

The above points are not new, but they are becoming more urgent. We are actually very well equipped so there is no reason to talk ourselves down. We are operating in an economy that has shown enormous resilience and that will also navigate the upcoming recession – because corporate balance sheets are strong, and debt is low by international standards. This economy has great potential as long as we focus now on aligning ourselves for the long term and on how to minimise the threat of de-industrialisation: with less regulation, more courage and more pragmatism; this attitude is incredibly important.

And that goes for banks, too. We have proven banks can be part of the solution. We can do much more, though. Before the financial crisis of 2007, just 15 years ago, Europe's banks were more profitable than their competitors in the US. Since then, the Americans have unrelentingly left us behind. We could, of course, agonise over this. Instead, we should rather see it as an incentive to buck the trend. The dominance of American banks is no law of nature.

At Deutsche Bank, we are convinced that the way to achieve this is by being a strong partner to our clients. They need a bank that supports them in all kinds of environments, in all markets and all over the world. This is what we emphasised when we formulated our Global Hausbank aspiration. We have radically transformed our business since 2019 and strategically repositioned ourselves in line with this aspiration.

We are convinced that this strategy will be especially effective in volatile times – because now is the moment when advice and expertise are highly sought after.

And this does not apply to us alone. Despite all the differences between the banks in Germany, we have one thing in common: we were there for our clients during the pandemic, we were there for our clients when Russia invaded Ukraine and we continue to be there – in these volatile times that urgently call for sustainable transformation. We have regained a great deal of trust. Let us work together to create the conditions for renewed dynamic growth across our entire economy.

https://www.reuters.com/world/china/chinas-fertility-rate-drops-record-low-109-2022-state-media-2023-08-15/

China's fertility rate drops to record low 1.09 in 2022- state media

Story by Reuters •4d

Children play on swings at a playground in Beijing© Thomson Reuters

HONG KONG (Reuters) -China's fertility rate is estimated to have dropped to a record low of 1.09 in 2022, the National Business Daily said on Tuesday, a figure likely to rattle authorities as they try to boost the country's declining number of new births.

The state-backed Daily said the figure from China's Population and Development Research Center put it as having the lowest fertility level among countries with a population of more than 100 million.

China's fertility rate is already one of the world's lowest alongside South Korea, Taiwan, Hong Kong and Singapore.

Concerned about China's first population drop in six decades and its rapid ageing population, Beijing is urgently trying an array of measures to lift the birth rate including financial incentives and improved childcare facilities.

China has said it will focus on education, science and technology to improve population quality and strive to maintain a "moderate fertility" level to support economic growth in future.

High childcare costs and having to stop their careers have put many women off having more children or any at all. Gender discrimination and traditional stereotypes of women caring for their children are still widespread throughout the country.Authorities have in recent months increased rhetoric on sharing the duty of child rearing but paternity leave is still limited in most provinces.

Hong Kong's Family Planning Association said in a separate release on Tuesday that the number of childless women in the special Chinese administrative region more than doubled from five years ago to 43.2% last year.

The percentage of couples with one or two children also tumbled while the average number of children per woman dropped from 1.3 in 2017 to a record low of 0.9 last year, according to its survey.

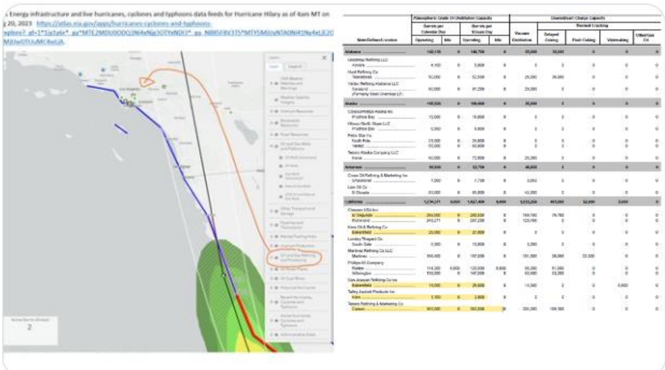
(Reporting by Farah Master and Beijing newsroom; Editing by Angus MacSwan)

Dan Tsubouchi @Energy_Tidbits · 5h

726,500 of California refinery capacity still expected to be in impact area when Hilary hits with Tropical Storm strength later today.

See 👇 @EIA has great mapping system showing energy infrastructure in hurricane paths. here is 4am MT look.

#OOTT



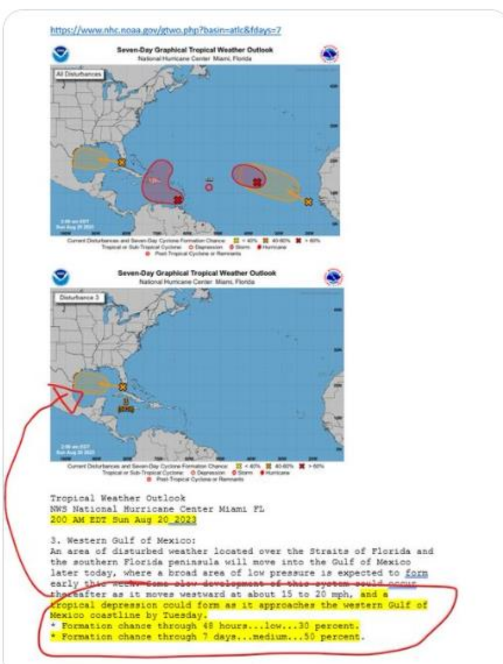
4 · 5 · 1,377

Dan Tsubouchi @Energy_Tidbits · 6h

50% chance for cyclone formation to move into GoM and Gulf Coast major #Oil #NatGas #LNG production and infrastructure.

@NHC_Atlantic 7-day outlook as of 2am ET update.

#OOTT



1 · 3 · 1,580

Dan Tsubouchi @Energy_Tidbits · 6h

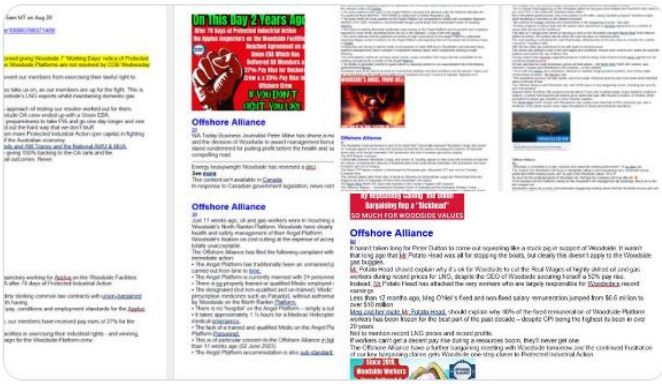
"Getting ready to rumble"

Woodside platform #OffshoreAlliance vote unanimously in servicing Woodside with 7-day industrial action if no deal by Aug 23.

ie. #LNG supply interruption would be Aug 30.

See 👇 OA posts on Woodside this week.

#OOTT #NatGas



2 · 4 · 1,468

Dan Tsubouchi @Energy_Tidbits · 19h

Key dates to Aug 31 on potential #LNG supply interruption in Sept at Chevron & Woodside in AUS

Aug 23, new Woodside/union discussions. See 👇 08/15 tweet, union view of last discussion.

No date for Chevron/union discussions.

Thx @David_Stringer.
#OOTT #NatGas

Here are the key dates so far:
* July 26: Australia's Fair Work Commission, a labor regulator, authorizes the Australian Workers' Union and the Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union of Australia to hold ballots of members at Woodside's North West Shelf operations on industrial actio
* Aug. 9: Almost 150 Woodside workers vote in favor of potential action, including stoppages of between 30 minutes and four hours, and activities such as refusing to unload cargo other than food, water or medical supplies, to restart process gas compressors or generators, or to facilitate helicopter landings
** Industrial action must start within 30 days of a completed ballot, unless the commission grants an extension
** A union needs to give up to seven days' notice before any industrial action commences
* Aug. 10: The commission approves requests by the AWU and CEPU to hold ballots on action among members at Chevron's Gorgon LNG facility. Separately, the regulator approves both unions to hold votes among workers at the Wheatstone downstream LNG facility
** Voting needs to be completed no later than 10 days after a ballot order is made
* Aug. 14: Requests by the AWU and CEPU to hold ballots of workers at Chevron's Wheatstone platform on industrial action are also approved
* Aug. 15: Talks take place between Woodside and unions on disputes at the North West Shelf operations. The sides remain apart on job security and remuneration, according to the Offshore Alliance, a group that includes the AWU. The sides have "an in-principle agreement on a number of issues," Woodside says
* Aug. 18: A ballot of workers at Chevron's Gorgon and Wheatstone downstream facilities will begin, according to the alliance
* Aug. 21: Voting among workers at Chevron's Wheatstone offshore platform is scheduled to open
* Aug. 23: New discussions are expected to take place between

Dan Tsubouchi @Energy_Tidbits · Aug 15

Increasing #LNG strike risk.

👇Offshore Alliance update 5am Aug 16 local time.

"Woodside are well off the pace on key bargaining ...

1 1 2,590

Dan Tsubouchi @Energy_Tidbits · 20h

popular day for weddings on #Canmore. these are the 3rd and 4th weddings above the coal mine beside the Bow River.

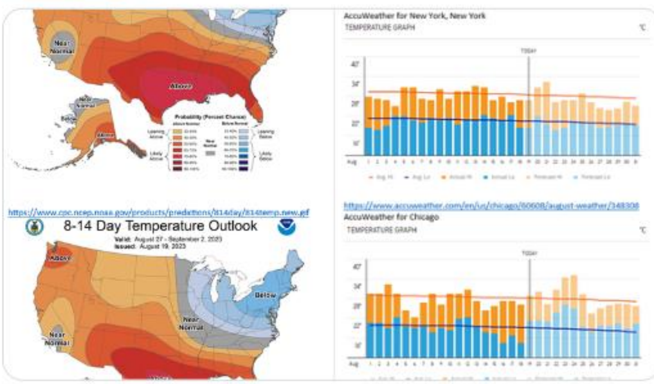
1 · 1,684

Dan Tsubouchi @Energy_Tidbits · 20h

Today's @NOAA updated 6-10 & 8-14 day temperature outlook covering Aug 25-Sept 2

Really hot ending this week. Should lose big A/C push in NE & Great Lakes moving to below normal temps ie. highs in NYC ~25C.

#NatGas #OOTT



5 · 1,607

SAF

Dan Tsubouchi @Energy_Tidbits · 21h

Item to watch!

Another shorter term #LNG deal: ADNOC 5-yr deal with JAPEX.

Follows 👇 OmanLNG 4-yr deal with DEU's SEFE.

is the rush to tie up late 2020s LNG ending? ie. buyers expect restart #TotalEnergies Mozambique LNG leads to 5 bcfd of MZ LNG post 2026?

#OOTT #NatGas

https://wam.ae/en/details/1395303187230
Thu 17-08-2023 10:24 AM

ADNOC Gas signs 5-Year LNG supply agreement with Japan Petroleum Exploration Co. Ltd

- Previous
- Next

A-/A+

ABU DHABI, 17th August, 2023 (WAM) – ADNOC Gas plc, a world-class integrated gas processing company, today announced a five-year liquefied natural gas (LNG) supply agreement with Japan Petroleum Exploration Co., Ltd. (JAPEX), the Japan-based energy company.

The agreement, valued between $450 million (AED1.65 billion) and $550 million (AED2 billion), builds on the long-standing bilateral relationship between the UAE and Japan and ADNOC's track record of fostering mutually beneficial strategic partnerships with Japanese energy companies.

Commenting on the agreement, Ahmed Alebri, Chief Executive Officer of ADNOC Gas, said, "Japan is one of the UAE's largest and most important energy partners and we are very pleased to strengthen this relationship through this LNG supply agreement with JAPEX. The agreement reinforces ADNOC Gas' position as a global LNG export partner of choice and highlights the Company's growing global presence, particularly in the Asian LNG market."

Natural gas plays a crucial role as a transitional fuel with lower carbon emissions compared to other fossil fuels. It also serves as an important raw material in industrial value chains.

ADNOC Gas continues to leverage opportunities arising from ADNOC's integrated gas masterplan which links every part of the gas value chain in the UAE, ensuring a sustainable and economic supply of natural gas to meet local and international demand.

Esraa Esmail/ Binsal Abdulkader

Dan Tsubouchi @Energy_Tidbits · Aug 14

One off? or is rush to tie up late 2020s #LNG ending? ie. buyers expect restart #TotalEnergies Mozambique LNG leads to 5 bcf/d of MZ LNG post 2026?

#OmanLNG to supply 0.4 mtpa to Germany's SEFE ...

4 · 2,355

Dan Tsubouchi @Energy_Tidbits · Aug 19

#Vortexa crude #Oil floating storage at 08/18 est 95.32 mmb, -14.91 mmb WoW vs revised up by +7.30 mmb 08/11 of 110.23 mmb.

Finally seeing floating storage below 100 mmb.

New 7-wk ave 107.28 mmb, WoW vs prior 106.13 mmb,

Thx @Vortexa @business. #OOTT

Vortexa Crude Oil Floating Storage Estimate Posted on Bloomberg as of 9am MT, Aug 19

Source: Bloomberg, Vortexa

Posted Aug 19, 9am MT

FZWWFST VTXA Inde 01/01/2020 - 08/18/2023

Date	FZWWFST VT... Last Px
Fr 08/18/2023	95321
Fr 08/11/2023	110.233k
Fr 08/04/2023	109.534k
Fr 07/28/2023	110.553k
Fr 07/21/2023	102.657k
Fr 07/14/2023	107.813k
Fr 07/07/2023	114.87k
Fr 06/30/2023	104.206k
Fr 06/23/2023	127.016k
Fr 06/16/2023	115.986k
Fr 06/09/2023	98412

Aug 12, 9am MT

FZWWFST VTXA Inde 01/01/2020 - 08/11/2023

Date	FZWWFST VT... Last Px
Fr 08/11/2023	102.926k
Fr 08/04/2023	105.335k
Fr 07/28/2023	107.492k
Fr 07/21/2023	101.807k
Fr 07/14/2023	107.016k
Fr 07/07/2023	113.739k
Fr 06/30/2023	104.561k
Fr 06/23/2023	125.059k
Fr 06/16/2023	114.605k
Fr 06/09/2023	98183
Fr 06/02/2023	101.73k

Aug 5, 9am MT

FZWWFST VTXA Inde 01/01/2020 - 08/04/2023

Date	FZWWFST VT... Last Px
Fr 08/04/2023	101.748k
Fr 07/28/2023	107.366k
Fr 07/21/2023	106.429k
Fr 07/14/2023	109.407k
Fr 07/07/2023	119.648k
Fr 06/30/2023	105.631k
Fr 06/23/2023	125.781k
Fr 06/16/2023	114.804k
Fr 06/09/2023	98560
Fr 06/02/2023	102.284k
Fr 05/26/2023	95875

Source: Bloomberg, Vortexa

Vortexa Crude Oil Floating Storage by Region (mmb)

Region	Aug 18/23	Aug 11/23	WoW	Original Posted Aug 11/23	Recent Peak June 23/23	Aug 18 vs June 23
Asia	42.39	56.25	-13.86	50.10	69.43	-27.04
Europe	8.11	8.92	-0.81	6.63	6.52	1.59
Middle East	8.75	5.56	3.19	6.86	9.03	-0.28
West Africa	7.64	5.82	1.82	6.99	3.72	3.92
US Gulf Coast	0.79	0.79	0.00	0.79	1.23	-0.44
Other	27.64	32.89	-5.25	31.56	37.09	-9.45
Global Total	95.32	110.23	-14.91	102.93	127.02	-31.70

Vortexa crude oil floating storage posted on Bloomberg 9am MT on Aug 19

Source: Vortexa, Bloomberg

2 4 16 3,966

Dan Tsubouchi @Energy_Tidbits · Aug 19

always a good morning in the Cdn Rockies when you look up from the screen to see the local #Canmore elk coming down for the morning graze. smells like a little bit of smoke in the air. hope all our friends in BC are safe.

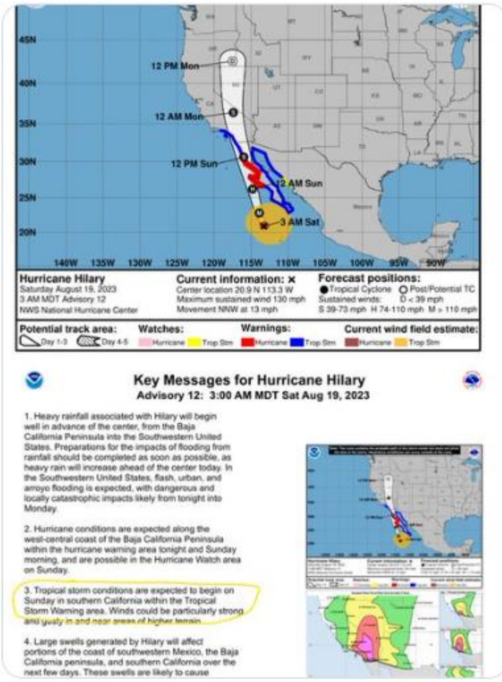
1 11 1,820

Dan Tsubouchi @Energy_Tidbits · Aug 19

Hurricane Hilary is forecast by @NHC_Atlantic to hit Southern California at Tropical Storm strength. Would be the first Tropical Storm to hit California since 1939.

But Hilary expected to be a big hit to the Baja in Mexico.

Hope everyone can be safe!

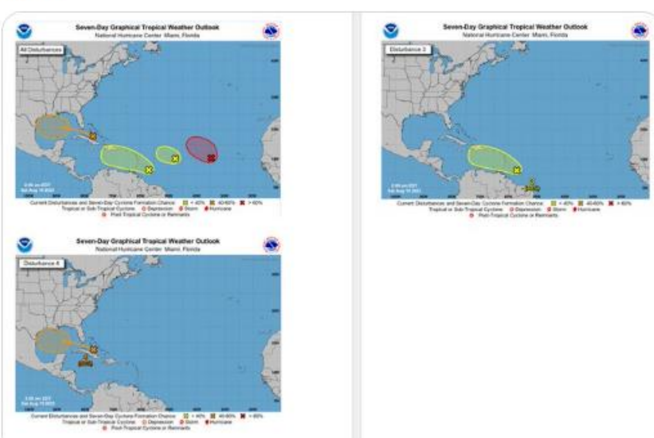


2 · 1 · 1,417

Dan Tsubouchi @Energy_Tidbits · Aug 19

Increasing probability, @NOAA now sees 50%, for potential storm development over next 7 days with potential track into #Oil #NatGas #LNG production & infrastructure in Gulf Coast.

#OOTT



1 · 8 · 2,324

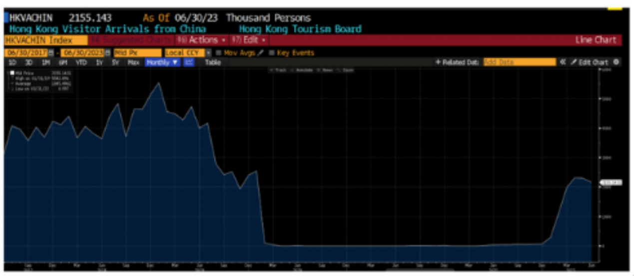
Dan Tsubouchi @Energy_Tidbits · Aug 18

Still a long way to for recovery in Hong Kong visitor arrivals.

Total. June/23 of 2.749 mm is -46.6% vs June/19 of 5.144 mm.

From China. June/23 of 2.155 mm is -46.1% vs June/19 of 4.001 mm. Plus June/23 was -6.7% vs Apr/23 of 2.309 mm.

Thx @business
#OOTT



1 1,342

Dan Tsubouchi @Energy_Tidbits · Aug 18

Reminder Novorossiysk is Russia's major Black Sea #Oil export terminal at ~0.4 mmb/d. See 👇 Aug 5 tweet.

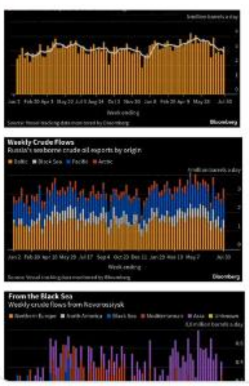
Not clear yet what damage has been done to the port.

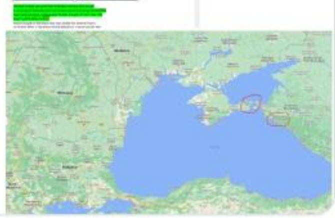
But thick black smoke seen in all videos often signifies fuel or oil was hit.

twitter.com/KyivPost/statu...

#OOTT

> **Dan Tsubouchi** @Energy_Tidbits · Aug 5
>
> Buckle up!
>
> Ukraine hits Russian #Oil tanker & warns 6 Russian ports are now in "war risk area". @business.
>
> Including major RUS Black Sea #Oil export port Novorossiysk. See great 👇 @JLeeEnergy graph, still loading ~0.4 million b/d.
>
> #OOTT





1 3 2,407

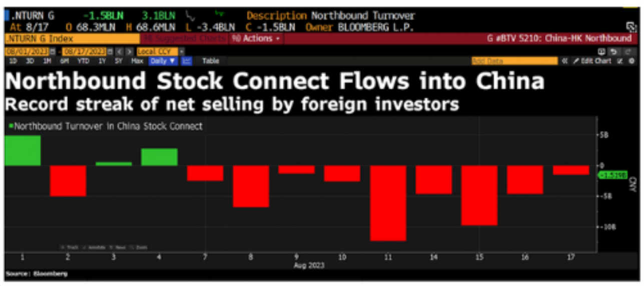
Dan Tsubouchi @Energy_Tidbits · Aug 18

Economic strength is about access to, and flows of, capital.

Xi may be able to "convince" Chinese investors to not sell, but foreign investors are reducing capital allocated to China.

And #Oil gets dragged down with any China weakness.

Thx @SheryAhnNews @PaulAllenLive
#OOTT



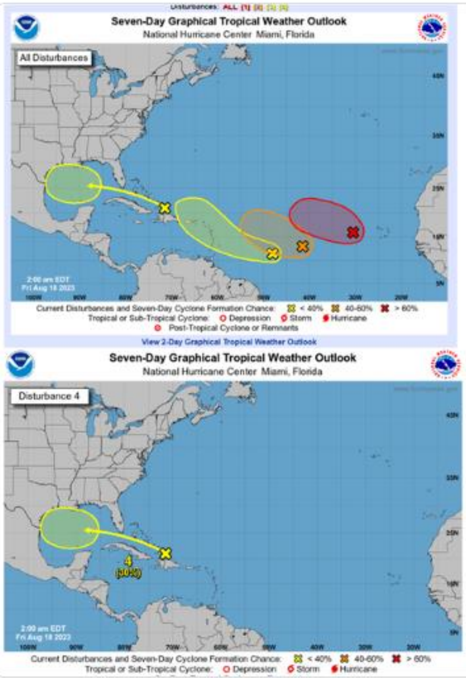
1 2 3 1,379

SAF

Dan Tsubouchi @Energy_Tidbits · Aug 18

Still early, @NOAA sees 30% chance for potential storm development over the next 7 days with potential track into #Oil #NatGas #LNG in GoM.

#OOTT



3 4 2,468

SAF

Dan Tsubouchi @Energy_Tidbits · Aug 17

Refreshing!

".. our current strategic framework is not or is insufficient in terms of what it takes to win. The lack of emphasis on today's business drivers & while important, we have a bit of a disproportionate emphasis on the longer-term #EnergyTransition" $SU CEO Kruger

#OOTT

SAF Group created transcript of Suncor CEO Rich Kruger's prepared remarks in the Suncor Q2/23 call on Aug 15, 2023. https://edge.media-server.com/mmc/p/k8cqhpjo

Items in *"Italics"* are SAF Group created transcript.

At 8:50 min mark, Kruger ""*Another area we spent time in during the quarter was a strategy re-examination. In particular, we've taken a, we've started a comprehensive re-look at our strategies and our articulated objectives. Where we stand is we judge that our current strategic framework is not or is insufficient in terms of what it takes to win. The lack of emphasis on today's business drivers and while important, we have a bit of a disproportionate emphasis on the longer-term energy transition. Today, we win by creating value through our large integrated asset base underpinned by oil sands. Discussions have occurred with our Board of Directors who are supportive of our revised direction and tone. And I would just leave this with more to come, but you can expect a sharper, clearer, more tangible articulation of how Suncor plans to win."*

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

4 6 2,278

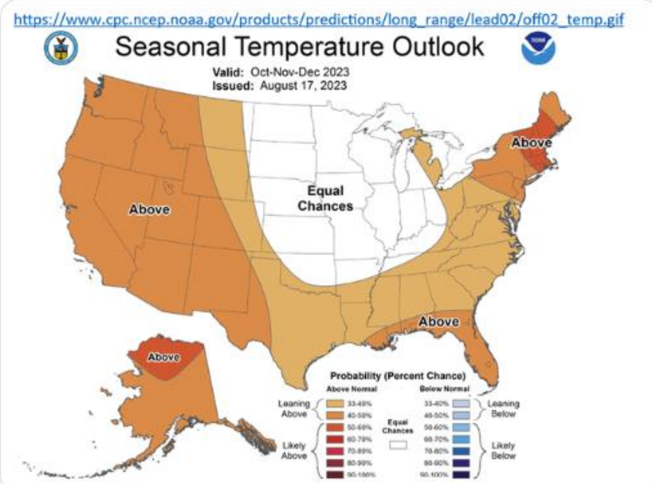
Dan Tsubouchi @Energy_Tidbits · Aug 17

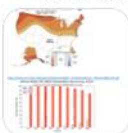
forgot to add

@NOAA also expects a warm start to winter with warmer than normal temps for Oct/Nov/Dec.

holdback to near term #NatGas prices.

#OOTT



> **Dan Tsubouchi** @Energy_Tidbits · Aug 17
>
> 
>
> Holdback to near term #NatGas prices?
>
> It's still early, but @NOAA Dec/Jan/Feb temperature outlook is for a warmer than normal winter.
> ...

2 · 4 · 2,937

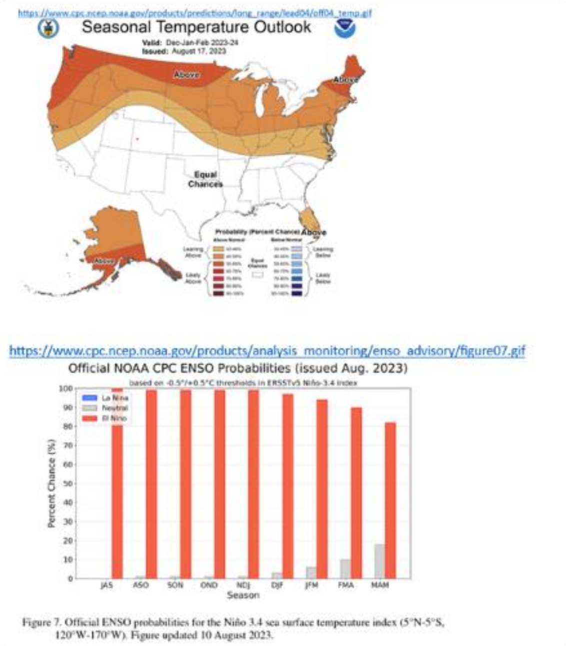
Dan Tsubouchi @Energy_Tidbits · Aug 17

Holdback to near term #NatGas prices?

It's still early, but @NOAA Dec/Jan/Feb temperature outlook is for a warmer than normal winter.

Other winter temp forecasts will be issued over next month and suspect to see similar views to NOAA given the strong El Nino conditions

#OOTT



3 1 3 4,548

Dan Tsubouchi @Energy_Tidbits · Aug 17

China summer holidays winding down = more return to cities & increasing city-level traffic congestion.

China Baidu city-level road congestion +1.6% WoW to 111.9% of Jan/21 levels.

Only "gradual climb" so far, ahead of normal Sept/Oct seasonal ramp.

Thx @BloombergNEF
#OOTT

3 12 2,322

SAF

Dan Tsubouchi @Energy_Tidbits · Aug 16

Rule of Thumb for North Dakota #Oil production

May 1.14 mmbd
June 1.17 mmbd

"*It takes 60 to 70 completions a mth to hold production* [North Dakota] *flat. We saw 83 in July & 85 in June so next month we ought to be reporting another production increase*" NDIC Lynn Helms
#OOTT

SAF Group created transcript of comments by North Dakota Oil and Gas Division's director, Lynn Helms in the monthly podcast on North Dakota's August 2023 Director's Cut and June 2023 Production Numbers on Aug 16, 2023.
https://podcasts.apple.com/us/podcast/north-dakota-oil-and-gas/id1488639877

Items in "*italics*" are SAF Group created transcript.

At 4:05 min mark, Helms "*... we saw as we thought we would a rig count increase of four. It takes 60 to 70 completions a month to hold production [North Dakota] flat. We saw 83 in July and 85 in June so next month we ought to be reporting another production increase, Looking forward to that. We saw wells waiting on completion go down. So the DUC well count is coming down. And that also is reflected with 22 frack crews operating today. They're able to more than keep up with 41 drilling rigs.*"

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

1 2 17 3,821

SAF

Dan Tsubouchi @Energy_Tidbits · Aug 16

North Dakota warns on multiple #Biden regulatory rule revisions.

"All of these have significant downside for #Oil and #NatGas production. so a major concern there" says NDIC's Lynn Helms.

#OOTT

SAF Group created transcript of comments by North Dakota Oil and Gas Division's director, Lynn Helms in the monthly podcast on North Dakota's August 2023 Director's Cut and June 2023 Production Numbers on Aug 16, 2023.
https://podcasts.apple.com/us/podcast/north-dakota-oil-and-gas/id1488639877

Items in "*italics*" are SAF Group created transcript.

At 7 min mark, Helms "*... so we are facing Bureau of Land Management leasing rule modification. The CEQ is out with a new NEPA rule. The EPA is out with their greenhouse gas rule. PHMSA is getting into the act. They're the Pipeline and Hazardous Materials Agency so they are supposed to look at pipeline safety, but they've written a rule that involves LDAR and methane emissions. So even the pipeline safety organization is in the act. And now, US Fish & Wildlife is modifying the endangered species act. So in terms of oil and gas, we're working on the list of five active rule revisions and trying to get comments put in and looking at what we can do. All of these have significant downside for oil and gas production. So a major concern there.*"

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

6 20 3,858

Dan Tsubouchi @Energy_Tidbits · Aug 16

More #Oil potential in #Bakken?

"*.. a lot of that* [Bakken] *Tier 2 acreage with the newer drilling and completion technologies is now performing like Tier 1 acreage*" says NDIC's Lynn Helms.

See 👇 SAF transcript

#OOTT

SAF Group created transcript of comments by North Dakota Oil and Gas Division's director, Lynn Helms in the monthly podcast on North Dakota's August 2023 Director's Cut and June 2023 Production Numbers on Aug 16, 2023. https://podcasts.apple.com/us/podcast/north-dakota-oil-and-gas/id1488639877

Items in "*italics*" are SAF Group created transcript.

At 1:05 min mark, Helms "*... what we're seeing is the migration of the drilling and completion activity out of the core and into the Tier 2 area and somewhat out into the Tier 3 areas. I think if you were at Mr. Hamm's event earlier in the week or late last week, you also heard comments from him that a lot of that Tier 2 acreage with the newer drilling and completion technologies is now performing like Tier 1 acreage.*" [Note Helms was referring to Harold Hamm's Aug 10 event promoting his new book "Game Changer: Our Fifty-Year Mission to Secure America's Energy Independence"]

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

2 9 17 13.9K

Dan Tsubouchi @Energy_Tidbits · Aug 16

For those not near their laptops. At 8:30am MT, @EIAgov released its #Oil #Gasoline #Distillates inventory as of Aug 11. Table below compares EIA data vs @business expectations and vs @APIenergy yesterday. Prior to release, WTI was $80.85. #OOTT

Oil/Products Inventory Aug 11: EIA, Bloomberg Survey Expectations, API

(million barrels)	EIA	Expectations	API
Oil	-5.96	-2.50	-6.20
Gasoline	-0.26	-1.10	0.70
Distillates	0.30	-0.50	-0.80
	-5.92	-4.10	-6.30

Note: Oil is commercial so builds in a build of 0.6 mmb in SPR for the Aug 11 week
Note: Included in the oil data, Cushing had a 0.84 mmb draw for Aug 11 week
Source EIA, Bloomberg
Prepared by SAF Group https://safgroup.ca/news-insights/

1 5 1,349

SAF

Dan Tsubouchi @Energy_Tidbits · Aug 15

China scheduled domestic flights +0.8% WoW to 104,823.

Chinese consumer stepped up to fly this summer.

BUT summer holiday travel is to peak in next week or so.

What happens to air travel in Sept/Oct with weak China economy?

Thx @BloombergNEF Claudio Lubis
#OOTT #JetFuel

5 6 2,690

Dan Tsubouchi @Energy_Tidbits · Aug 15

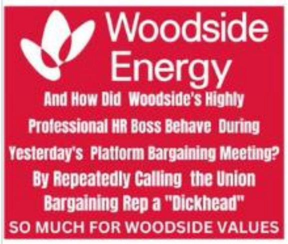
Increasing #LNG strike risk.

👇 Offshore Alliance update 5am Aug 16 local time.

"*Woodside are well off the pace on key bargaining issues including job security and remuneration*"

"*Woodside's actions and bargaining postion at yesterday's meeting will determine the destiny of our...* Show more

Posted as of approx. 5am on Aug 16, local time in Perth
https://www.facebook.com/people/Offshore-Alliance/100063786371409/
Offshore Alliance
1h
"Woodside is committed to a safe, inclusive and respectful working environment". Or so they say.
The conduct of a Woodside's HR boss in repeatedly calling a union bargaining rep a "dickhead" during yesterday's EBA meeting surely can't be part of the Woodside values. Or is it?
So much for the professionalism of Woodside HR. Perhaps the Compass isn't true after all.
If OA members on the Platforms carried on like Woodside's HR management did yesterday, they'd be on the first chopper out.
Woodside's values are a sham and yesterday's bargaining meeting shows that the Woodside bosses pick and choose when these values apply.
It's no wonder that bargaining on the Woodside Platforms has gone pearshaped and members have voted 99% 'YES' in the Protected Industrial Action Ballot.
Woodside are well off the pace on key bargaining issues including job security and remuneration.
Woodside's actions and bargaining position at yesterday's meeting will determine the destiny of our bargaining campaign.



1 · 6 · 13 · 6,482

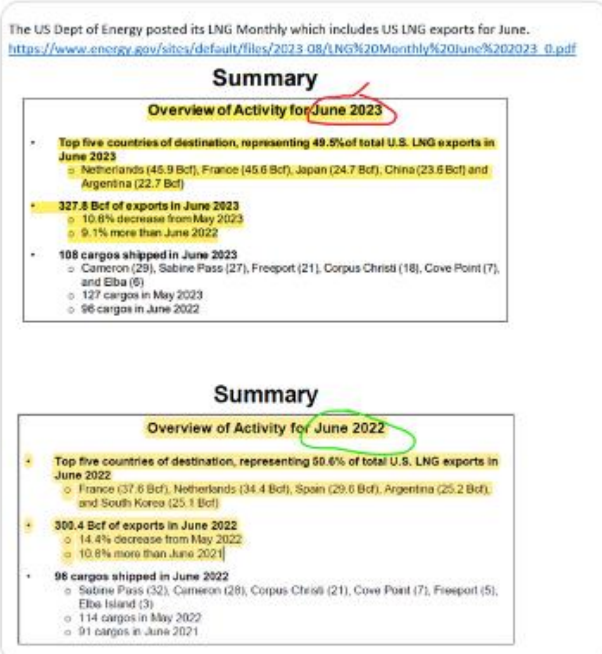
Dan Tsubouchi @Energy_Tidbits · Aug 15

US #LNG exports June/23 of 10.93 bfd, +9.1% YoY, -10.6% MoM. See 👇 07/18 tweet, June expected lower due to higher maintenance.

June/23 top 5 export markets: Dutch, France, Japan, China, Argentina

June/22 top 5 export markets: France, Dutch, Spain, Argentina, Korea

This DOE... Show more



The US Dept of Energy posted its LNG Monthly which includes US LNG exports for June.
https://www.energy.gov/sites/default/files/2023-08/LNG%20Monthly%20June%202023_0.pdf

Summary

Overview of Activity for June 2023

- **Top five countries of destination, representing 49.5%of total U.S. LNG exports in June 2023**
  - Netherlands (45.9 Bcf), France (45.6 Bcf), Japan (24.7 Bcf), China (23.6 Bcf) and Argentina (22.7 Bcf)
- **327.8 Bcf of exports in June 2023**
  - 10.6% decrease from May 2023
  - 9.1% more than June 2022
- **108 cargos shipped in June 2023**
  - Cameron (29), Sabine Pass (27), Freeport (21), Corpus Christi (18), Cove Point (7), and Elba (6)
  - 127 cargos in May 2023
  - 96 cargos in June 2022

Summary

Overview of Activity for June 2022

- **Top five countries of destination, representing 50.6% of total U.S. LNG exports in June 2022**
  - France (37.6 Bcf), Netherlands (34.4 Bcf), Spain (29.6 Bcf), Argentina (25.2 Bcf), and South Korea (25.1 Bcf)
- **300.4 Bcf of exports in June 2022**
  - 14.4% decrease from May 2022
  - 10.8% more than June 2021
- **96 cargos shipped in June 2022**
  - Sabine Pass (32), Cameron (28), Corpus Christi (21), Cove Point (7), Freeport (5), Elba Island (3)
  - 114 cargos in May 2022
  - 91 cargos in June 2021

Dan Tsubouchi @Energy_Tidbits · Jul 18

US #LNG exports May/23 of 11.83 bcfd, +4.4% YoY, -1.4% MoM due to maintenance that should have a larger impact on Jun/23.

May/23 top 5 export markets: Dutch, France, Japan, ...

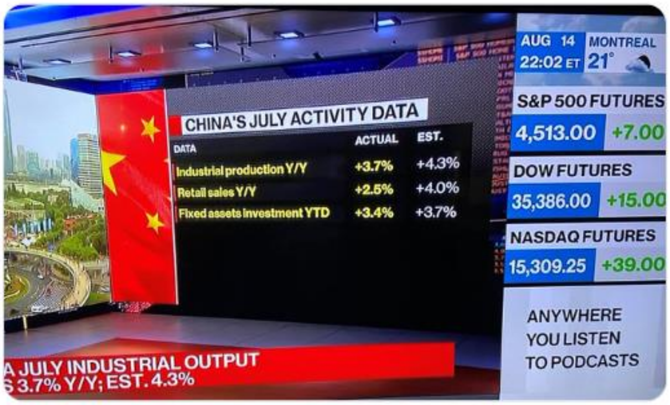
2 3 3,263

Dan Tsubouchi @Energy_Tidbits · Aug 14

Breaking.

Shouldn't be surprised, China July data for Industrial Production, Retail Sales and Fixed Asset Investments all below expectations

Thx @YvonneManTV @DavidInglesTV
#OOTT



> **Dan Tsubouchi** @Energy_Tidbits · Aug 13
>
> 
>
> More China stalling recovery data
>
> July normally sees a MoM decline in lending in China, but this year is really big MoM decline.
>
> ...

2 · 2 · 3 · 2,390

Dan Tsubouchi @Energy_Tidbits · Aug 14

US #Gasoline prices keep inching up..

@EIAgov 08/14/23 national average $3.85, only down $0.09 YoY.

Not what #Biden expected with <15 mths to 2024 elections.

Likely why he hasn't held back Iran's increasing #Oil exports.

#OOTT

https://www.eia.gov/petroleum/gasdiesel/?utm_source=Twitter&utm_medium=EIASocial&utm_id=Amplification

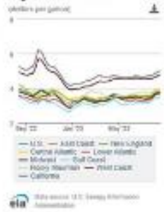
Gasoline and Diesel Fuel Update

Gasoline Release Date: August 14, 2023 | Next Release Date: August 21, 2023
Diesel Fuel Release Date: August 14, 2023 | Next Release Date: August 21, 2023

U.S. Regular Gasoline Prices*(dollars per gallon)

	07/31/23	08/07/23	08/14/23	Change from week ago	Change from year ago
U.S.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
East Coast (PADD1)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New England (PADD1A)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Central Atlantic (PADD1B)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lower Atlantic (PADD1C)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Midwest (PADD2)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gulf Coast (PADD3)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rocky Mountain (PADD4)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
West Coast (PADD5)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
West Coast less California	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Regular Gasoline Prices

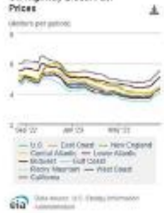


U.S. On-Highway Diesel Fuel Prices*(dollars per gallon)

	07/31/23	08/07/23	08/14/23	Change from week ago	Change from year ago
U.S.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
East Coast (PADD1)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New England (PADD1A)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Central Atlantic (PADD1B)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lower Atlantic (PADD1C)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Midwest (PADD2)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gulf Coast (PADD3)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rocky Mountain (PADD4)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
West Coast (PADD5)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
West Coast less California	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
California	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

*prices include all taxes

On-Highway Diesel Fuel Prices



Dan Tsubouchi @Energy_Tidbits · Aug 12

Who can or will stop Iran from adding up to 0.6 mmbd to #Oil markets over coming mths?

Iran not subject to #OPEC quota.

...

2 2 2,352

Dan Tsubouchi @Energy_Tidbits · Aug 14

One off? or is rush to tie up late 2020s #LNG ending? ie. buyers expect restart #TotalEnergies Mozambique LNG leads to 5 bcf/d of MZ LNG post 2026?

#OmanLNG to supply 0.4 mtpa to Germany's SEFE starting 2026. BUT on a 4-yr term.

NOT the 10+ yr term common post Total Apr 2021... Show more

Oman LNG signs a binding term-sheet agreement with German company

Oman Monday 14/August/2023 15:43 PM

By: ONA

AAAA

The agreement signing ceremony was held under the auspices of Eng. Salim Nasser al Aufi, Minister of Energy and Minerals (ONA)

Muscat: Oman LNG announced the signing of a binding term-sheet agreement with SEFE Secure Energy for Europe (SEFE) to supply 0.4 million metric tonnes per annum (mtpa) of LNG starting from 2026.

The agreement aims to enhance the ever-growing partnership between Oman LNG and international energy firms, where SEFE has become the latest beneficiary of Oman's LNG marking the first LNG term deal with a German firm. The move is considered a remarkable milestone for both countries, thus opening doors for new opportunities in the European markets.

The signed term-sheet agreement encapsulates supplying a total volume of 0.4 million metric tonne per annum of LNG from Oman LNG to SEFE. The agreement is based on a 4-year contract, starting in 2026. Signing term sheet agreements beyond 2024 emphasises Oman LNG's role in sustaining the Sultanate of Oman's reputation as a reliable and trusted LNG supplier, coupled with the effective management of business processes to produce reliable energy, and deliver it to customers around the world safely.

The agreement signing ceremony was held under the auspices of Eng. Salim Nasser al Aufi, Minister of Energy and Minerals. The agreement was signed by Hamed Al Naamany, CEO of Oman LNG, and Frederic Barnaud, Chief Commercial Officer of SEFE.

Mahmoud Abdulsatar Al Balushi, Chief Commercial Officer of Oman LNG, said "The term-sheet signing with SEFE marks another milestone. Going further, the agreement leverages our constant efforts to add value to Oman's economy through growth and collaborations.

On his turn, Egbert Laege, CEO of SEFE said, "We are delighted to announce the historic contract signing between SEFE and Oman LNG, marking a significant milestone for both entities. As pioneers among German companies to embark on this partnership, SEFE is proud to lead the way towards enhanced collaboration."

3 · 8 · 5,262

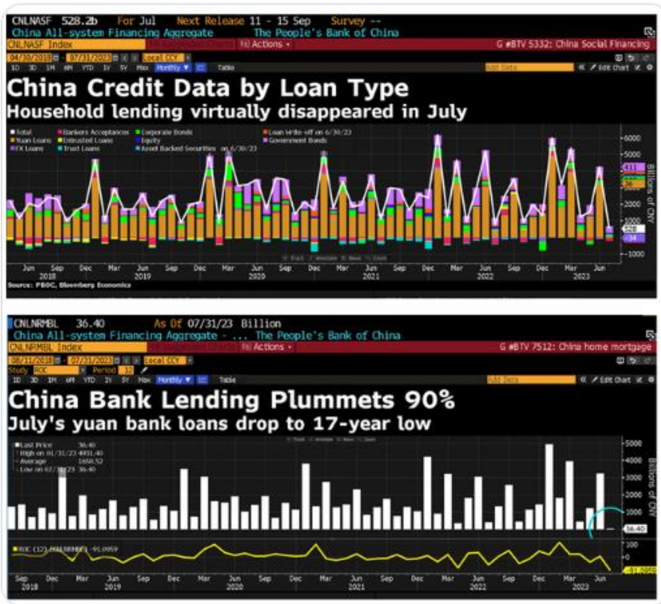
Dan Tsubouchi @Energy_Tidbits · Aug 13

More China stalling recovery data

July normally sees a MoM decline in lending in China, but this year is really big MoM decline.

Note, changed the time frame so the July MoM changes could be clearly seen each year.

Thx @business
#OOTT



4 · 10 · 5,760

Dan Tsubouchi @Energy_Tidbits · Aug 13

#LNG supply risk!

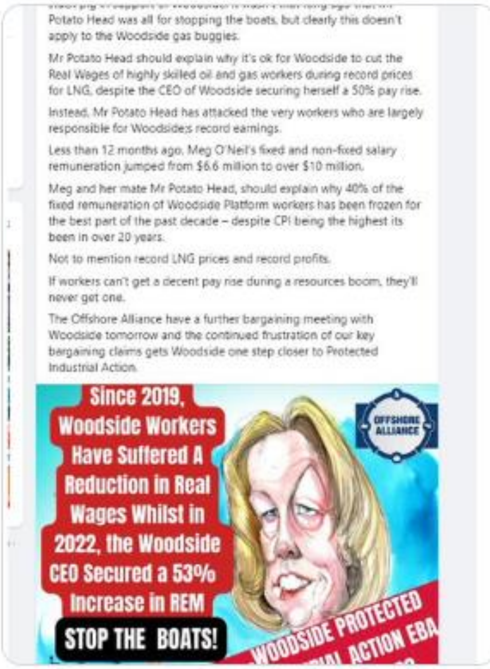
See 👇 Offshore Alliance posting a few hrs ago.

Doesn't sound encouraging for Tues return to bargaining table with #Woodside.

Good thing for EU that storage is on track to be full or near full for winter.

#NatGas #OOTT

facebook.com/people/Offshor...



Potato Head was all for stopping the boats, but clearly this doesn't apply to the Woodside gas buggies.

Mr Potato Head should explain why it's ok for Woodside to cut the Real Wages of highly skilled oil and gas workers during record prices for LNG, despite the CEO of Woodside securing herself a 50% pay rise.

Instead, Mr Potato Head has attacked the very workers who are largely responsible for Woodside;s record earnings.

Less than 12 months ago, Meg O'Neil's fixed and non-fixed salary remuneration jumped from $6.6 million to over $10 million.

Meg and her mate Mr Potato Head, should explain why 40% of the fixed remuneration of Woodside Platform workers has been frozen for the best part of the past decade – despite CPI being the highest its been in over 20 years.

Not to mention record LNG prices and record profits.

If workers can't get a decent pay rise during a resources boom, they'll never get one.

The Offshore Alliance have a further bargaining meeting with Woodside tomorrow and the continued frustration of our key bargaining claims gets Woodside one step closer to Protected Industrial Action.

Dan Tsubouchi @Energy_Tidbits · Aug 12

#LNG Supply risk

Would Chevron take on the risk to safely operate its Wheatstone & Gorgon #LNG downstream facilities with replacement workers & other non-union?...

3 · 7 · 5,552