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Energy Tidbits

China Mobility Impact? Its National Health Commission Suggested Reducing Large Gatherings in Public Places

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Table 1. Summary of natural gas supply and disposition in the United States, 2017-2022

billion cubic feet

Year and month	Gross withdrawals	Marketed production	NGPL production[a]	Dry gas production[b]	Supplemental gaseous fuels[c]	Net imports	Net storage withdrawals[d]	Balancing item[e]	Consumption[f]
2017 total	**33,292**	**29,238**	**1,897**	**27,341**	**66**	**-121**	**254**	**-400**	**27,140**
2018 total	**37,326**	**33,009**	**2,235**	**30,774**	**69**	**-719**	**314**	**-300**	**30,139**
2019 total	**40,780**	**36,447**	**2,548**	**33,899**	**61**	**-1,916**	**-503**	**-408**	**31,132**
2020									
January	3,597	3,194	239	2,955	6	-248	581	28	3,321
February	3,363	2,985	223	2,761	5	-216	545	-37	3,059
March	3,582	3,196	239	2,957	6	-284	53	-10	2,722
April	3,374	3,012	225	2,786	5	-231	-311	7	2,257
May	3,285	2,927	219	2,708	5	-209	-454	22	2,072
June	3,217	2,873	215	2,658	5	-151	-363	-21	2,128
July	3,374	3,021	226	2,795	5	-139	-165	-33	2,464
August	3,350	3,012	225	2,786	5	-149	-232	-11	2,400
September	3,265	2,918	218	2,699	5	-221	-329	-3	2,151
October	3,364	2,992	224	2,768	5	-282	-96	-79	2,316
November	3,352	2,985	223	2,761	5	-317	-6	-1	2,442
December	3,490	3,089	231	2,858	5	-287	597	9	3,183
Total	**40,614**	**36,202**	**2,710**	**33,493**	**63**	**-2,734**	**-180**	**-129**	**30,513**
2021									
January	3,517	3,118	235	2,884	6	-279	719	16	3,344
February	2,950	2,609	196	2,412	5	-152	795	40	3,099
March	3,518	3,144	237	2,907	6	-357	64	30	2,649
April	3,438	3,069	231	2,838	5	-356	-180	-42	2,265
May	3,535	3,168	239	2,930	6	-373	-424	-21	2,117
June	3,400	3,056	230	2,826	5	-331	-254	-8	2,238
July	3,514	3,182	240	2,943	6	-338	-175	-23	2,412
August	3,545	3,196	241	2,956	6	-343	-164	-20	2,434
September	3,423	3,087	232	2,854	5	-315	-398	-4	2,142
October	3,600	3,245	244	3,001	6	-317	-368	-60	2,263
November	3,545	3,170	239	2,931	6	-315	137	-66	2,693
December	3,680	3,284	247	3,037	6	-368	330	3	3,007
Total	**41,666**	**37,328**	**2,811**	**34,518**	**66**	**-3,845**	**82**	**-157**	**30,665**
2022									
January	E3,591	E3,199	246	E2,953	7	-314	994	R-47	R3,592
February	E3,227	E2,870	223	E2,647	6	-288	658	37	3,061
March	E3,614	E3,225	267	E2,958	6	R-379	163	34	2,784
April	E3,520	E3,152	257	E2,895	6	R-342	-214	R23	R2,368
May	E3,667	E3,296	266	E3,030	6	-384	-403	R-6	R2,242
June	E3,557	E3,215	259	RE2,956	4	-322	-324	R4	R2,318
July	E3,690	E3,330	276	E3,055	6	R-300	-180	R2	R2,583
August	E3,699	E3,349	270	RE3,079	6	R-320	-206	*	R2,560
September	RE3,638	RE3,281	265	RE3,016	4	R-293	-436	R-2	R2,290
October	RE3,769	RE3,394	275	RE3,119	5	-317	-422	R-18	R2,367
November	E3,677	E3,292	269	E3,023	4	-309	71	-12	2,777
2022 11-month	**E39,649**	**E35,603**	**2,871**	**E32,732**	**60**	**-3,569**	**-298**	**16**	**28,941**
2021 11-month	**37,986**	**34,044**	**2,563**	**31,481**	**60**	**-3,476**	**-248**	**-159**	**27,658**
2020 11-month	**37,124**	**33,114**	**2,479**	**30,635**	**58**	**-2,447**	**-777**	**-138**	**27,331**

[a] We derive monthly natural gas plant liquid (NGPL) production, gaseous equivalent, from sample data reported by gas processing plants on Form EIA-816, *Monthly Natural Gas Liquids Report*, and Form EIA-64A, *Annual Report of the Origin of Natural Gas Liquids Production*.

[b] Equal to marketed production minus NGPL production.

[c] We only collect supplemental gaseous fuels data on an annual basis except for the Dakota Gasification Co. coal gasification facility, which provides data each month. We calculate the ratio of annual supplemental fuels (excluding Dakota Gasification Co.) to the sum of dry gas production, net imports, and net withdrawals from storage. We apply this ratio to the monthly sum of these three elements. We add the Dakota Gasification Co. monthly value to the result to produce the monthly supplemental fuels estimate.

[d] Monthly and annual data for 2017 through 2020 include underground storage and liquefied natural gas storage. Data for January 2021 forward include underground storage only. Appendix A, Explanatory Note 5, contains a discussion of computation procedures.

[e] Represents quantities lost and imbalances in data due to differences among data sources. Net imports and balancing item excludes net intransit deliveries. These net intransit deliveries were (in billion cubic feet): 212 for 2021; 209 for 2020; -8 for 2019; -12 for 2018; and 14 for 2017. Appendix A, Explanatory Note 7, contains a full discussion of balancing item calculations.

[f] Consists of pipeline fuel use, lease and plant fuel use, vehicle fuel, and deliveries to consuming sectors as shown in Table 2.

[R] Revised data.

* Volume is between -500 MMcf and 500 MMcf.

[E] Estimated data.

[RE] Revised estimated data.

Source: 2017-2021: U.S. Energy Information Administration (EIA), *Natural Gas Annual 2021*. January 2022 through current month: Form EIA-914, *Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report*; Form EIA-857, *Monthly Report of Natural Gas Purchases and Deliveries to Consumers*; Form EIA-191, *Monthly Underground Gas Storage Report*; EIA computations and estimates; and Office of Fossil Energy and Carbon Management, *Natural Gas Imports and Exports*. Table 7 includes detailed source notes for Marketed Production. Appendix A, Notes 3 and 4, includes discussion of computation and estimation procedures and revision policies.

Note: Data for 2017 through 2020 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 states and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Table 4. U.S. natural gas imports, 2020-2022

volumes in million cubic feet; prices in dollars per thousand cubic feet

	2022 11-month YTD	2021 11-month YTD	2020 11-month YTD	2022 November	October	September	August	July
Imports								
Volume (million cubic feet)								
Pipeline								
Canada[a]	2,703,810	2,533,531	2,238,902	243,329	236,803	233,605	232,632	254,087
Mexico	917	1,661	1,651	21	24	133	176	196
Total pipeline imports	**2,704,727**	**2,535,193**	**2,240,553**	**243,350**	**236,827**	**233,738**	**232,808**	**254,283**
LNG								
By truck								
Canada	141	151	36	12	25	16	15	5
By vessel								
France	0	0	0	0	0	0	0	0
Nigeria	0	0	4,277	0	0	0	0	0
Norway	0	0	3,032	0	0	0	0	0
Trinidad/Tobago	20,725	19,795	36,379	1,216	0	0	2,862	2,736
United Kingdom	0	0	0	0	0	0	0	0
Total LNG imports	**20,866**	**19,946**	**43,724**	**1,228**	**25**	**16**	**2,877**	**2,742**
CNG								
Canada	347	196	280	29	36	R29	24	27
Total CNG imports	**347**	**196**	**280**	**29**	**36**	**R29**	**24**	**27**
Total imports	**2,725,939**	**2,555,335**	**2,284,557**	**244,607**	**236,888**	**233,782**	**235,709**	**257,052**
Average Price (dollars per thousand cubic feet)								
Pipeline								
Canada	5.79	3.63	1.93	5.61	4.68	5.99	6.50	5.93
Mexico	13.34	11.28	3.49	3.68	4.65	23.68	22.01	12.63
Total pipeline imports	**5.79**	**3.63**	**1.93**	**5.61**	**4.68**	**6.00**	**6.51**	**5.93**
LNG								
By truck								
Canada	W	W	W	W	W	W	W	W
By vessel								
France	--	--	--	--	--	--	--	--
Nigeria	--	--	W	--	--	--	--	--
Norway	--	--	W	--	--	--	--	--
Trinidad/Tobago	W	W	W	W	--	--	W	W
United Kingdom	--	--	--	--	--	--	--	--
Total LNG imports	**28.66**	**10.73**	**4.48**	**43.34**	**W**	**W**	**15.33**	**11.96**
CNG								
Canada	10.41	5.02	3.22	7.13	6.22	R9.23	R9.46	7.27
Total CNG imports	**10.41**	**5.02**	**3.22**	**7.13**	**6.22**	**R9.23**	**R9.46**	**7.27**
Total imports	**5.97**	**3.69**	**1.98**	**5.80**	**4.68**	**6.00**	**6.62**	**6.00**
Net imports - volume	**-3,569,048**	**-3,476,387**	**-2,446,945**	**-309,166**	**R-317,440**	**R-292,683**	**R-319,750**	**R-300,063**

See footnotes at end of table.

Table 4. U.S. natural gas imports, 2020-2022

volumes in million cubic feet; prices in dollars per thousand cubic feet – continued

	2022							2021
	June	May	April	March	February	January	Total	December
Imports								
Volume (million cubic feet)								
Pipeline								
Canada[a]	228,653	230,195	244,792	256,763	253,247	289,703	2,784,438	250,906
Mexico	24	24	24	53	189	54	1,718	57
Total pipeline imports	**228,677**	**230,218**	**244,816**	**256,816**	**253,436**	**289,757**	**2,786,156**	**250,963**
LNG								
By truck								
Canada	22	9	17	14	*	5	165	13
By vessel								
France	0	0	0	0	0	0	0	0
Nigeria	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0
Trinidad/Tobago	0	482	0	2,600	4,448	6,381	21,423	1,628
United Kingdom	0	0	0	0	0	0	0	0
Total LNG imports	**22**	**490**	**17**	**2,614**	**4,448**	**6,387**	**21,587**	**1,641**
CNG								
Canada	R27	36	31	34	38	35	217	22
Total CNG imports	**R27**	**36**	**31**	**34**	**38**	**35**	**217**	**22**
Total imports	**R228,727**	**230,744**	**244,864**	**259,464**	**257,922**	**296,179**	**2,807,961**	**252,626**
Average Price (dollars per thousand cubic feet)								
Pipeline								
Canada	7.03	6.70	5.49	4.44	5.25	6.23	3.71	4.57
Mexico	7.89	6.23	4.20	4.44	7.95	6.89	11.10	5.87
Total pipeline imports	**7.03**	**6.70**	**5.49**	**4.44**	**5.25**	**6.23**	**3.72**	**4.57**
LNG								
By truck								
Canada	W	W	W	W	W	W	7.11	W
By vessel								
France	--	--	--	--	--	--	--	--
Nigeria	--	--	--	--	--	--	--	--
Norway	--	--	--	--	--	--	--	--
Trinidad/Tobago	--	W	--	W	W	W	12.25	W
United Kingdom	--	--	--	--	--	--	--	--
Total LNG imports	**W**	**12.72**	**W**	**30.57**	**29.59**	**39.06**	**12.21**	**30.21**
CNG								
Canada	R8.94	7.48	6.07	9.80	20.64	18.96	5.78	12.68
Total CNG imports	**R8.94**	**7.48**	**6.07**	**9.80**	**20.64**	**18.96**	**5.78**	**12.68**
Total imports	**7.03**	**6.72**	**5.49**	**4.70**	**5.67**	**6.94**	**3.78**	**4.74**
Net imports - volume	**R-322,396**	**R-384,180**	**R-341,969**	**R-378,713**	**R-288,189**	**R-314,500**	**-3,844,648**	**-368,260**

See footnotes at end of table.

Table 4. U.S. natural gas imports, 2020-2022

volumes in million cubic feet; prices in dollars per thousand cubic feet – continued

	2021							
	November	October	September	August	July	June	May	April
Imports								
Volume (million cubic feet)								
Pipeline								
Canada[a]	240,587	228,101	218,703	220,830	225,984	207,811	203,154	208,290
Mexico	52	55	244	99	49	24	40	52
Total pipeline imports	**240,639**	**228,156**	**218,947**	**220,929**	**226,033**	**207,835**	**203,194**	**208,342**
LNG								
By truck								
Canada	15	24	25	22	22	11	13	8
By vessel								
France	0	0	0	0	0	0	0	0
Nigeria	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0
Trinidad/Tobago	1,729	0	1,221	0	1,714	0	1,662	0
United Kingdom	0	0	0	0	0	0	0	0
Total LNG imports	**1,744**	**24**	**1,246**	**22**	**1,735**	**11**	**1,675**	**8**
CNG								
Canada	22	23	13	9	10	13	21	19
Total CNG imports	**22**	**23**	**13**	**9**	**10**	**13**	**21**	**19**
Total imports	**242,405**	**228,203**	**220,206**	**220,959**	**227,779**	**207,859**	**204,890**	**208,369**
Average Price (dollars per thousand cubic feet)								
Pipeline								
Canada	4.97	4.79	4.03	3.52	3.37	2.83	2.66	2.44
Mexico	6.26	5.70	9.32	6.37	4.33	2.08	2.52	2.47
Total pipeline imports	**4.97**	**4.79**	**4.04**	**3.52**	**3.37**	**2.83**	**2.66**	**2.44**
LNG								
By truck								
Canada	W	W	W	W	W	W	W	W
By vessel								
France	--	--	--	--	--	--	--	--
Nigeria	--	--	--	--	--	--	--	--
Norway	--	--	--	--	--	--	--	--
Trinidad/Tobago	W	--	W	--	W	--	W	--
United Kingdom	--	--	--	--	--	--	--	--
Total LNG imports	**34.77**	**W**	**9.30**	**W**	**8.41**	**W**	**7.55**	**W**
CNG								
Canada	8.65	6.19	4.52	4.21	3.98	3.21	3.06	3.09
Total CNG imports	**8.65**	**6.19**	**4.52**	**4.21**	**3.98**	**3.21**	**3.06**	**3.09**
Total imports	**5.18**	**4.79**	**4.07**	**3.52**	**3.41**	**2.83**	**2.70**	**2.44**
Net imports - volume	**-314,578**	**-316,852**	**-315,377**	**-342,614**	**-338,268**	**-331,305**	**-373,167**	**-355,964**

See footnotes at end of table.

Table 4. U.S. natural gas imports, 2020-2022

volumes in million cubic feet; prices in dollars per thousand cubic feet – continued

	2021			2020				
	March	February	January	Total	December	November	October	September
Imports								
Volume (million cubic feet)								
Pipeline								
Canada[a]	237,236	265,227	277,608	2,499,955	261,053	208,648	199,184	172,869
Mexico	56	933	57	1,706	56	57	89	99
Total pipeline imports	**237,292**	**266,160**	**277,665**	**2,501,661**	**261,108**	**208,704**	**199,273**	**172,968**
LNG								
By truck								
Canada	2	7	3	43	7	4	8	6
By vessel								
France	0	0	0	0	0	0	0	0
Nigeria	0	0	0	6,906	2,629	0	0	0
Norway	0	0	0	3,032	0	0	0	0
Trinidad/Tobago	1,406	5,688	6,376	39,233	2,853	2,841	0	1,235
United Kingdom	0	0	0	0	0	0	0	0
Total LNG imports	**1,409**	**5,694**	**6,379**	**49,214**	**5,489**	**2,846**	**8**	**1,241**
CNG								
Canada	23	23	21	300	20	20	25	17
Total CNG imports	**23**	**23**	**21**	**300**	**20**	**20**	**25**	**17**
Total imports	**238,724**	**271,877**	**284,065**	**2,551,175**	**266,618**	**211,570**	**199,306**	**174,225**
Average Price (dollars per thousand cubic feet)								
Pipeline								
Canada	2.63	5.51	2.75	2.02	2.75	2.65	2.19	2.01
Mexico	3.10	15.39	2.91	3.48	3.07	3.20	2.97	3.41
Total pipeline imports	**2.63**	**5.54**	**2.75**	**2.02**	**2.75**	**2.65**	**2.19**	**2.01**
LNG								
By truck								
Canada	W	W	W	6.09	W	W	W	W
By vessel								
France	--	--	--	--	--	--	--	--
Nigeria	--	--	--	3.50	W	--	--	--
Norway	--	--	--	W	--	--	--	--
Trinidad/Tobago	W	W	W	4.67	W	W	--	W
United Kingdom	--	--	--	--	--	--	--	--
Total LNG imports	**8.36**	**9.44**	**7.62**	**4.60**	**5.54**	**6.93**	**W**	**3.40**
CNG								
Canada	4.59	5.83	5.41	3.26	3.82	3.86	2.27	2.26
Total CNG imports	**4.59**	**5.83**	**5.41**	**3.26**	**3.82**	**3.86**	**2.27**	**2.26**
Total imports	**2.66**	**5.63**	**2.86**	**2.07**	**2.80**	**2.71**	**2.19**	**2.02**
Net imports - volume	**-356,687**	**-152,127**	**-279,450**	**-2,733,503**	**-286,558**	**-316,640**	**-282,314**	**-221,199**

See footnotes at end of table.

Table 4. U.S. natural gas imports, 2020-2022

volumes in million cubic feet; prices in dollars per thousand cubic feet – continued

	2020							
	August	**July**	**June**	**May**	**April**	**March**	**February**	**January**
Imports								
Volume (million cubic feet)								
Pipeline								
Canada[a]	208,069	206,195	182,539	183,618	186,752	210,237	232,269	248,524
Mexico	376	119	32	63	60	100	355	300
Total pipeline imports	**208,445**	**206,315**	**182,571**	**183,681**	**186,812**	**210,337**	**232,624**	**248,824**
LNG								
By truck								
Canada	9	4	0	*	0	3	1	1
By vessel								
France	0	0	0	0	0	0	0	0
Nigeria	0	0	2,693	0	0	0	0	1,584
Norway	0	0	0	0	0	0	0	3,032
Trinidad/Tobago	2,874	4,078	2,178	2,811	3,214	2,857	5,689	8,602
United Kingdom	0	0	0	0	0	0	0	0
Total LNG imports	**2,883**	**4,083**	**4,871**	**2,811**	**3,214**	**2,860**	**5,689**	**13,218**
CNG								
Canada	24	22	36	26	23	34	15	38
Total CNG imports	**24**	**22**	**36**	**26**	**23**	**34**	**15**	**38**
Total imports	**211,352**	**210,419**	**187,478**	**186,518**	**190,049**	**213,231**	**238,328**	**262,080**
Average Price (dollars per thousand cubic feet)								
Pipeline								
Canada	1.89	1.59	1.54	1.59	1.50	1.64	1.95	2.46
Mexico	7.81	1.89	0.84	1.51	1.26	1.64	2.11	2.34
Total pipeline imports	**1.90**	**1.59**	**1.54**	**1.59**	**1.50**	**1.64**	**1.95**	**2.46**
LNG								
By truck								
Canada	W	W	--	W	--	W	W	W
By vessel								
France	--	--	--	--	--	--	--	--
Nigeria	--	--	W	--	--	--	--	W
Norway	--	--	--	--	--	--	--	W
Trinidad/Tobago	W	W	W	W	W	W	W	W
United Kingdom	--	--	--	--	--	--	--	--
Total LNG imports	**1.52**	**4.59**	**1.61**	**4.26**	**W**	**4.34**	**5.67**	**6.03**
CNG								
Canada	2.39	2.24	2.13	2.37	2.27	2.92	3.99	7.16
Total CNG imports	**2.39**	**2.24**	**2.13**	**2.37**	**2.27**	**2.92**	**3.99**	**7.16**
Total imports	**1.89**	**1.65**	**1.54**	**1.63**	**1.50**	**1.68**	**2.04**	**2.64**
Net imports - volume	**-148,878**	**-138,748**	**-151,009**	**-208,954**	**-230,717**	**-284,206**	**-215,917**	**-248,363**

[a] EIA has reduced the reported volume of gas imported by pipeline from Canada by the amount of natural gas liquids removed from the saturated natural gas carried by Alliance Pipeline. Alliance moves saturated natural gas from the border to a processing plant in Illinois. After the adjustment, volumes of imported natural gas on this pipeline are on the same physical basis as other reported volumes of pipeline imports.

[b] For the "Other" area the point of origin for volumes of imported LNG was unassigned in the reports to the Office of Fossil Energy and Carbon Management.

[W] Withheld.

[R] Revised data.

[--] Not applicable.

* Volume is less than 500 Mcf.

Source: Office of Fossil Energy and Carbon Management, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Note: In the case of missing import or export reports on Form FE-746R, *Import and Export of Natural Gas*, we estimate the missing volumes using pipeline flows or other available information. Prices are in nominal dollars. LNG prices are a volume-weighted average of the prices reported by cargo. The "LNG Monthly" (https://www.energy.gov/fecm/listings/lng-reports) from the Office of Fossil Energy and Carbon Management, U.S. Department of Energy, provides more information on what is included in the individual LNG prices. Totals may not equal sum of components because of independent rounding and/or withheld data.

Table 7. Marketed production of natural gas in selected states and the Federal Gulf of Mexico, 2017-2022

million cubic feet

Year and month	Alaska	Arkansas	California	Colorado	Kansas	Louisiana	Montana	New Mexico	North Dakota	Ohio
2017 total	**344,385**	**694,676**	**212,458**	**1,706,364**	**219,639**	**2,139,830**	**46,311**	**1,299,732**	**593,998**	**1,791,359**
2018 total	**341,315**	**589,985**	**202,617**	**1,847,402**	**201,391**	**2,832,404**	**43,530**	**1,493,082**	**706,552**	**2,403,382**
2019 total	**329,361**	**524,757**	**196,823**	**1,986,916**	**183,087**	**3,212,318**	**43,534**	**1,769,086**	**850,826**	**2,651,631**
2020										
January	30,018	42,187	15,908	178,066	14,623	274,755	3,527	162,016	78,798	203,701
February	28,537	39,093	14,649	166,620	13,636	255,885	3,340	155,323	77,940	190,559
March	29,219	43,677	15,376	175,202	14,486	276,544	3,527	169,244	83,892	203,701
April	27,513	39,748	14,906	168,438	13,595	264,869	3,148	156,722	72,059	193,050
May	27,076	40,463	15,172	163,768	14,012	281,636	2,692	147,782	52,874	199,485
June	25,545	38,742	14,837	159,601	13,321	264,072	2,667	153,276	52,626	193,050
July	26,779	39,855	15,061	167,105	13,674	264,875	3,322	165,335	64,860	201,686
August	26,846	40,295	13,344	165,091	13,504	260,226	3,248	168,311	74,940	201,686
September	26,978	38,734	12,857	162,531	13,030	255,690	3,009	165,008	78,195	195,180
October	29,080	40,172	13,059	164,462	13,461	263,120	3,204	171,376	82,649	201,097
November	29,575	38,565	12,934	159,409	12,917	267,312	3,143	167,213	80,112	194,610
December	31,161	39,452	12,475	160,168	13,097	277,178	3,135	166,561	83,498	201,097
Total	**338,329**	**480,982**	**170,579**	**1,990,462**	**163,356**	**3,206,163**	**37,963**	**1,948,168**	**882,443**	**2,378,902**
2021										
January	31,667	39,285	11,467	160,766	12,900	276,873	3,292	173,929	83,193	193,911
February	28,365	30,183	10,846	143,192	10,142	223,268	2,859	144,804	70,129	175,146
March	31,483	42,466	12,136	157,254	13,251	282,668	3,299	180,669	83,243	193,911
April	29,514	37,756	11,791	156,092	12,842	273,643	3,078	178,912	82,917	185,964
May	29,005	38,563	12,342	162,416	13,063	283,576	3,328	187,994	85,384	192,163
June	27,715	36,918	11,885	154,617	12,716	276,142	2,975	184,732	82,520	185,964
July	26,280	38,045	12,141	160,287	13,215	299,939	3,321	195,904	80,072	189,515
August	27,864	37,753	12,076	158,586	13,224	292,784	3,343	199,365	84,297	189,515
September	28,534	36,508	11,617	153,270	12,769	290,606	3,283	194,290	85,041	183,401
October	30,458	37,626	11,655	160,291	13,213	307,744	3,460	200,567	87,446	199,379
November	30,735	36,079	11,279	155,653	12,722	310,363	3,291	195,365	87,089	192,947
December	33,039	37,006	11,371	157,031	12,928	313,823	3,163	201,176	87,692	199,379
Total	**354,660**	**448,187**	**140,604**	**1,879,457**	**152,986**	**3,431,429**	**38,693**	**2,237,706**	**999,025**	**2,281,193**
2022										
January	32,865	[E]37,302	[E]11,186	[E]151,815	[E]12,255	[E]311,786	[E]3,092	[E]196,780	[E]81,699	[E]196,005
February	30,014	[E]33,465	[E]9,336	[E]138,369	[E]10,930	[E]284,177	[E]2,801	[E]183,345	[E]74,429	[E]172,829
March	32,473	[E]37,518	[E]11,388	[E]155,246	[E]12,194	[E]313,229	[E]3,214	[E]219,028	[E]86,190	[E]187,872
April	30,910	[E]36,247	[E]11,212	[E]151,319	[E]12,037	[E]313,229	[E]3,042	[E]215,953	[E]68,484	[E]179,444
May	31,677	[E]37,042	[E]11,489	[E]155,982	[E]12,469	[E]340,363	[E]3,152	[E]223,843	[E]80,563	[E]189,214
June	28,644	[E]35,573	[E]11,057	[E]150,046	[E]12,037	[E]335,290	[E]3,464	[E]214,602	[E]86,013	[E]190,021
July	29,654	[E]36,446	[E]11,651	[E]153,067	[E]12,457	[E]345,647	[E]3,465	[E]227,099	[E]89,572	[E]193,519
August	29,380	[E]36,659	[E]11,970	[E]154,806	[E]12,526	[E]355,454	[E]3,634	[E]230,690	[E]88,700	[E]196,604
September	29,288	[RE]34,405	[RE]11,100	[RE]151,415	[RE]11,565	[RE]346,479	[RE]3,572	[RE]233,548	[RE]88,797	[RE]189,795
October	31,122	[RE]35,321	[RE]11,358	[RE]155,324	[RE]12,745	[RE]363,758	[RE]3,589	[RE]246,278	[RE]90,623	[RE]195,926
November	30,934	[E]33,728	[E]10,914	[E]151,398	[E]12,020	[E]351,855	[E]3,414	[E]236,453	[E]84,550	[E]195,534
2022 11-month	**336,960**	**[E]393,707**	**[E]122,659**	**[E]1,668,788**	**[E]133,236**	**[E]3,661,267**	**[E]36,439**	**[E]2,427,620**	**[E]919,619**	**[E]2,086,763**
2021 11-month	**321,621**	**411,182**	**129,233**	**1,722,426**	**140,058**	**3,117,605**	**35,531**	**2,036,530**	**911,333**	**2,081,815**
2020 11-month	**307,168**	**441,530**	**158,104**	**1,830,294**	**150,259**	**2,928,985**	**34,828**	**1,781,607**	**798,945**	**2,177,805**

See footnotes at end of table.

Table 7. Marketed production of natural gas in selected states and the Federal Gulf of Mexico, 2017-2022

million cubic feet – continued

Year and month	Oklahoma	Pennsylvania	Texas	Utah	West Virginia	Wyoming	Other states	Federal Gulf of Mexico	U.S. total
2017 total	**2,513,897**	**5,453,638**	**7,223,841**	**315,211**	**1,514,278**	**1,590,059**	**517,698**	**1,060,452**	**29,237,825**
2018 total	**2,875,787**	**6,264,832**	**8,041,010**	**295,826**	**1,771,698**	**1,637,517**	**485,675**	**974,863**	**33,008,867**
2019 total	**3,036,052**	**6,896,792**	**9,378,489**	**271,808**	**2,155,214**	**1,488,854**	**456,024**	**1,015,343**	**36,446,918**
2020									
January	263,734	603,836	843,432	21,944	209,896	124,274	37,391	86,071	3,194,177
February	243,139	569,721	783,094	20,373	198,090	108,722	34,782	81,114	2,984,616
March	257,387	607,689	841,347	21,765	210,559	117,977	36,689	87,955	3,196,236
April	235,642	586,955	783,283	20,379	204,826	111,744	34,389	80,574	3,011,842
May	217,154	592,126	734,176	20,326	212,646	107,288	33,986	64,374	2,927,037
June	222,324	560,390	741,401	19,244	212,831	103,890	32,957	62,227	2,873,001
July	226,843	604,716	775,851	20,312	220,032	108,679	34,568	67,778	3,021,331
August	226,344	607,221	782,436	19,814	223,208	107,320	33,757	43,988	3,011,580
September	222,010	567,029	755,253	19,283	218,893	104,520	30,468	48,900	2,917,569
October	219,403	595,653	773,720	20,042	226,064	104,787	31,775	38,702	2,991,827
November	224,327	605,244	751,562	19,200	223,428	103,236	31,246	60,496	2,984,528
December	228,057	647,714	770,555	19,307	231,845	103,933	32,383	67,085	3,088,701
Total	**2,786,366**	**7,148,295**	**9,336,110**	**241,989**	**2,592,319**	**1,306,368**	**404,391**	**789,262**	**36,202,446**
2021									
January	221,544	652,640	798,426	19,392	234,432	97,657	35,223	71,772	3,118,370
February	163,094	585,371	609,757	18,126	208,571	89,337	31,366	64,024	2,608,580
March	220,130	645,407	826,381	20,404	227,218	95,164	34,671	74,200	3,143,955
April	214,334	615,899	820,570	19,783	229,075	92,340	34,427	69,762	3,068,700
May	223,372	635,584	844,723	20,313	234,118	94,341	35,868	72,053	3,168,206
June	213,314	616,270	815,947	19,502	227,987	90,259	29,234	67,429	3,056,126
July	221,002	638,200	858,526	20,601	229,376	93,644	30,467	71,744	3,182,278
August	222,329	646,169	863,509	20,347	241,373	89,749	32,659	61,377	3,196,320
September	216,455	622,275	855,425	19,928	216,452	91,662	30,611	34,559	3,086,687
October	223,093	645,126	873,479	20,457	240,446	93,162	37,663	60,037	3,245,301
November	214,361	646,233	836,104	20,014	229,812	90,176	32,023	65,610	3,169,856
December	218,805	677,331	872,543	20,538	241,569	91,741	36,962	67,903	3,283,998
Total	**2,571,834**	**7,626,504**	**9,875,390**	**239,405**	**2,760,429**	**1,109,232**	**401,172**	**780,471**	**37,328,378**
2022									
January	E213,419	E660,345	E853,214	E20,789	E234,795	E85,192	E31,292	E65,454	E3,199,287
February	E192,596	E581,432	E766,441	E18,966	E209,707	E76,605	E28,839	E55,884	E2,870,165
March	E219,732	E635,076	E871,961	E21,315	E239,344	E84,319	E31,519	E63,547	E3,225,163
April	E223,078	E616,181	E856,759	E21,254	E235,580	E81,405	E29,705	E65,810	E3,151,649
May	E237,032	E640,189	E887,465	E22,840	E247,179	E82,036	E31,011	E62,326	E3,295,871
June	E230,337	E616,632	E862,817	E22,278	E240,568	E80,395	E31,237	E63,627	E3,214,637
July	E239,295	E641,726	E887,919	E23,066	E251,625	E85,506	E32,355	E66,393	E3,330,463
August	E238,265	E632,014	E897,401	E23,500	E255,603	E81,633	E32,294	E68,280	E3,349,415
September	RE236,726	E613,657	RE882,979	RE22,110	RE245,734	RE81,528	E31,485	RE66,585	RE3,280,768
October	RE241,859	RE629,461	RE916,265	RE22,236	RE251,647	RE87,054	RE31,967	RE67,558	RE3,394,092
November	E236,585	E605,616	E883,858	E21,366	E255,623	E82,719	E30,821	E64,342	E3,291,729
2022 11-month YTD	**E2,508,924**	**E6,872,330**	**E9,567,079**	**E239,721**	**E2,667,405**	**E908,391**	**E342,524**	**E709,807**	**E35,603,240**
2021 11-month YTD	**2,353,029**	**6,949,173**	**9,002,846**	**218,868**	**2,518,860**	**1,017,491**	**364,211**	**712,567**	**34,044,380**
2020 11-month YTD	**2,558,308**	**6,500,582**	**8,565,555**	**222,681**	**2,360,474**	**1,202,435**	**372,007**	**722,177**	**33,113,745**

E Estimated data.

RE Revised estimated data.

Source: 2017-2021: U.S. Energy Information Administration (EIA), *Natural Gas Annual 2021*, Bureau of Safety and Environmental Enforcement (BSEE), IHS Markit, and Enverus. January 2022 through current month: Form EIA-914, *Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report*; and EIA computations.

Note: For 2022 forward, we estimate state monthly marketed production from gross withdrawals using historical relationships between the two. We collect data for Arkansas, California, Colorado, Kansas, Louisiana, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania, Texas, Utah, West Virginia, Wyoming, and federal offshore Gulf of Mexico individually on the EIA-914 report. The "other states" category comprises states/areas not individually collected on the EIA-914 report (Alabama, Arizona, Federal Offshore Pacific, Florida, Idaho, Illinois, Indiana, Kentucky, Maryland, Michigan, Mississippi, Missouri, Nebraska, Nevada, New York, Oregon, South Dakota, Tennessee, and Virginia). Before 2022, Federal Offshore Pacific is included in California. We obtain all data for Alaska directly from the state. Monthly preliminary state-level data for all states not collected individually on the EIA-914 report are available after the final annual reports for these series are collected and processed. Final annual data are generally available in the third quarter of the following year. The sum of individual states may not equal total U.S. volumes because of independent rounding.

Summary

Overview of Activity for September 2023

- **Top five countries of destination, representing 42.2% of total U.S. LNG exports in September 2023**
  - Netherlands (39.7 Bcf), Japan (33.2 Bcf), France (28.7 Bcf), South Korea (24.1 Bcf), and Italy (22.1 Bcf)
- **350.1 Bcf of exports in September 2023**
  - 0.8% decrease from August 2023
  - 18.6% more than September 2022
- **107 cargos shipped in September 2023**
  - Sabine Pass (33), Cameron (28), Freeport (18), Corpus Christi (17), Elba (6), and Cove Point (5)
  - 114 cargos in August 2023
  - 98 cargos in September 2022

1a. Table of Exports of Domestically-Produced LNG Delivered by Region (Cumulative from February 2016 through September 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	5,164.3	30.8%	1541
Europe and Central Asia	15	7,837.9	46.8%	2448
Latin America and the Caribbean**	14	2,372.2	14.2%	867
Middle East and North Africa	5	415.1	2.5%	121
South Asia	3	963.6	5.8%	285
Sub-Saharan Africa	0	0.0	0.0%	0
Total LNG Exports	**45**	**16,753.1**	**100.0%**	**5,262**

*Split cargos counted as both individual cargos and countries

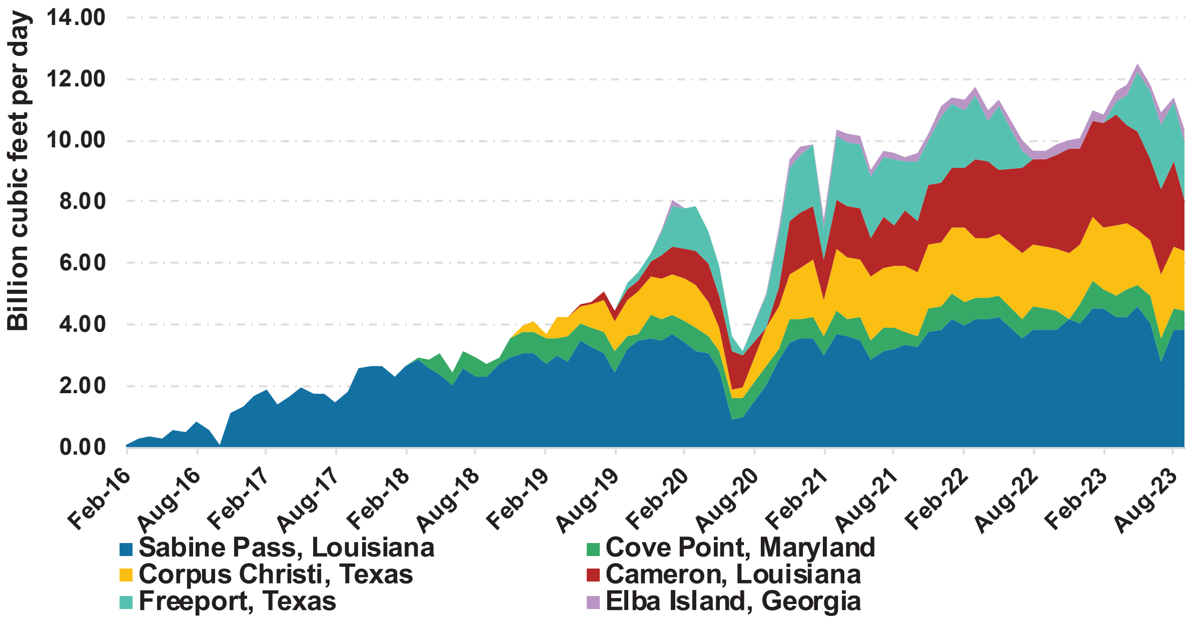
**Number of cargos does not include the shipments by ISO container

1b. Shipments of Domestically-Produced LNG Delivered – by Country
(Cumulative from February 2016 through September 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	553	1,911.3	11.4%
2.	Japan*	East Asia and Pacific	430	1,465.5	8.7%
3.	United Kingdom*	Europe and Central Asia	398	1,324.4	7.9%
4.	France*	Europe and Central Asia	401	1,304.7	7.8%
5.	Spain*	Europe and Central Asia	398	1,241.1	7.4%
6.	Netherlands*	Europe and Central Asia	351	1,188.9	7.1%
7.	China*	East Asia and Pacific	331	1,108.8	6.6%
8.	India*	South Asia	221	752.6	4.5%
9.	Turkiye*	Europe and Central Asia	210	671.2	4.0%
10.	Brazil*	Latin America and the Caribbean	229	635.9	3.8%
11.	Mexico*	Latin America and the Caribbean	167	555.1	3.3%
12.	Italy*	Europe and Central Asia	143	463.3	2.8%
13.	Chile*	Latin America and the Caribbean	143	450.5	2.7%
14.	Taiwan*	East Asia and Pacific	129	411.2	2.5%
15.	Poland*	Europe and Central Asia	110	365.4	2.2%
16.	Argentina*	Latin America and the Caribbean	142	342.2	2.0%
17.	Portugal*	Europe and Central Asia	101	321.3	1.9%
18.	Dominican Republic*	Latin America and the Caribbean	88	210.9	1.3%
19.	Greece*	Europe and Central Asia	91	206.6	1.2%
20.	Belgium*	Europe and Central Asia	61	193.2	1.2%
21.	Kuwait	Middle East and North Africa	55	191.5	1.1%
22.	Lithuania	Europe and Central Asia	61	189.2	1.1%
23.	Croatia	Europe and Central Asia	52	159.1	0.9%
24.	Germany	Europe and Central Asia	48	156.1	0.9%
25.	Pakistan*	South Asia	40	128.9	0.8%
26.	Jordan*	Middle East and North Africa	37	127.5	0.8%
27.	Singapore*	East Asia and Pacific	38	124.4	0.7%
28.	Thailand*	East Asia and Pacific	35	123.4	0.7%
29.	Bangladesh*	South Asia	24	82.1	0.5%
30.	Panama*	Latin America and the Caribbean	35	67.7	0.4%
31.	Jamaica*	Latin America and the Caribbean	36	63.6	0.4%
32.	United Arab Emirates	Middle East and North Africa	15	51.1	0.3%
33.	Colombia*	Latin America and the Caribbean	26	40.5	0.2%
34.	Finland	Europe and Central Asia	12	33.1	0.2%
35.	Israel*	Middle East and North Africa	9	28.0	0.2%
36.	Malta*	Europe and Central Asia	11	20.1	0.1%
37.	Egypt*	Middle East and North Africa	5	16.9	0.1%
38.	Indonesia*	East Asia and Pacific	24	16.0	0.1%
39.	Malaysia	East Asia and Pacific	1	3.7	0.0%
40.	El Salvador	Latin America and the Caribbean	1	0.0	0.0%
	Total Exports by Vessel		**5,262**	**16,747.3**	
	Jamaica	Latin America and the Caribbean	187	2.0	0.0%
41.	Bahamas	Latin America and the Caribbean	798	1.9	0.0%
42.	Barbados	Latin America and the Caribbean	305	1.3	0.0%
43.	Haiti	Latin America and the Caribbean	157	0.5	0.0%
44.	Antigua and Barbuda	Latin America and the Caribbean	69	0.1	0.0%
45.	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		**1,518**	**5.8**	
	Total Exports by Vessel and ISO		**6,780**	**16,753.1**	

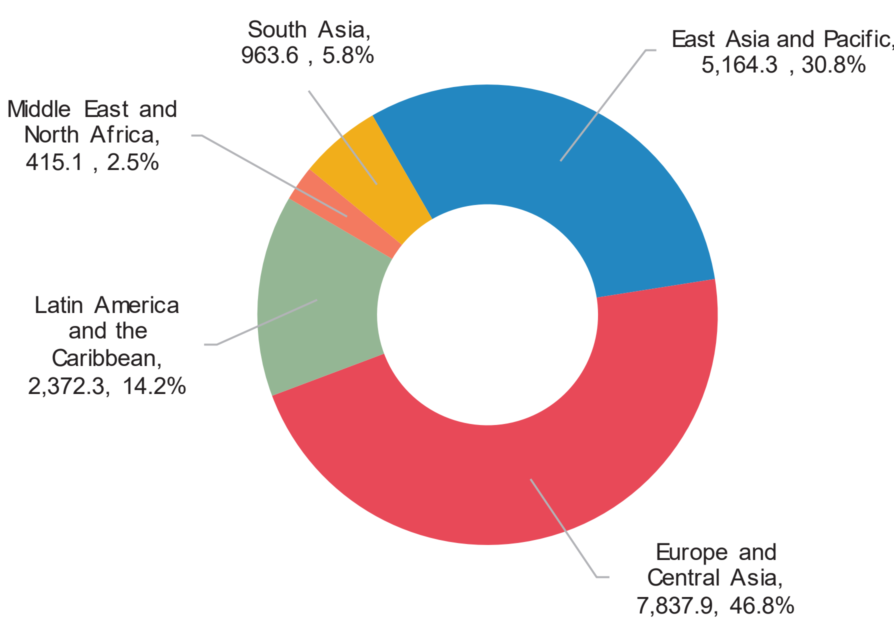
Note:
Volume and Number of Cargos are the cumulative totals of each individual Country of Destination by Region starting from February 2016.
Jamaica has received U.S. LNG exports by both vessel and ISO container. The volumes are totaled separately
* Split cargos counted as both individual cargos and 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 September 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 September 2023) (Bcf, %)



November 29, 2023

Cheniere Announces Long-Term Integrated Production Marketing Agreement with ARC Resources

IPM Agreement with ARC Resources expected to support Sabine Pass Expansion Project and secure increased LNG supplies into Europe

HOUSTON--(BUSINESS WIRE)-- Cheniere Energy, Inc. (“Cheniere”) (NYSE American: LNG) and Cheniere Energy Partners, LP (“Cheniere Partners”) (NYSE American: CQP) announced today that Sabine Pass Liquefaction Stage V, LLC (“SPL Stage 5”) has entered into a long-term Integrated Production Marketing (“IPM”) gas supply agreement with ARC Resources U.S. Corp. (“ARC Resources”), a subsidiary of ARC Resources Ltd. (TSX: ARX), a leading natural gas producer in Canada.

Under the IPM agreement, ARC Resources has agreed to sell 140,000 MMBtu per day of natural gas to SPL Stage 5 for a term of 15 years, commencing with commercial operations of the first train (“Train 7”) of the Sabine Pass Liquefaction Expansion Project (“SPL Expansion Project”). SPL Stage 5 will pay ARC Resources an LNG-linked price for its gas, based upon the Dutch Title Transfer Facility (“TTF”) price, after deductions for a fixed regasification fee, fixed LNG shipping costs and a fixed liquefaction fee. The IPM agreement is subject to, among other things, a positive Final Investment Decision with respect to Train 7. The LNG associated with this gas supply, approximately 0.85 million tonnes per annum (“mtpa”), will be marketed by Cheniere Marketing International LLP (“Cheniere Marketing”, a subsidiary of Cheniere).

“This is the second long-term IPM agreement between Cheniere and ARC Resources, and further progresses the commercialization of the SPL Expansion Project. This agreement will enable Cheniere to deliver increased quantities of Canadian natural gas to Europe, where energy security has never been more important,” said Jack Fusco, Cheniere’s President and CEO. “We are pleased to build upon our existing long-term relationship with ARC Resources, and further demonstrate Cheniere’s ability to construct innovative solutions that help meet the needs of customers and counterparties along the LNG value chain while delivering value to our stakeholders.”

“Canadian natural gas can play a critical role in helping to meet growing global energy demand,” said Terry Anderson, President and Chief Executive Officer, ARC Resources. “Through this agreement, we are advancing our LNG strategy and delivering low-cost, low-emission natural gas to consuming regions in Europe – the first long-term arrangement of its kind for a Canadian producer. We are pleased to further our long-term partnership with Cheniere and bring more responsibly produced Canadian energy to the world.”

In addition to the IPM agreement announced today, Cheniere Marketing has entered into an LNG sale and purchase agreement (“SPA”) with OMV Gas Marketing and Trading GMBH

(“OMV”), a wholly-owned subsidiary of OMV AG. Under the SPA, Cheniere Marketing will supply OMV with up to 12 LNG cargoes per year, or approximately 0.85 mtpa of LNG, at a TTF-linked price commencing in late 2029. The LNG will be sold to OMV on a delivered ex-ship (“DES”) basis at the Gate LNG Terminal in the Netherlands where OMV holds regasification capacity.

The SPL Expansion Project is being developed with a production capacity of up to approximately 20 mtpa of total LNG capacity, inclusive of estimated debottlenecking opportunities. In May 2023, certain subsidiaries of Cheniere Partners entered the pre-filing review process with respect to the SPL Expansion Project with the Federal Energy Regulatory Commission under the National Environmental Policy Act.

About Cheniere

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

For additional information, please refer to the Cheniere website at www.cheniere.com and Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, filed with the Securities and Exchange Commission.

About ARC Resources

ARC Resources Ltd. is a pure-play Montney producer and one of Canada's largest dividend-paying energy companies, featuring low-cost operations and leading ESG performance. ARC Resources Ltd.'s investment-grade credit profile is supported by commodity and geographic diversity and robust risk management practices around all aspects of the business. ARC Resources Ltd.'s common shares trade on the Toronto Stock Exchange under the symbol ARX.

About OMV Aktiengesellschaft

With Group sales revenues of €62bn and a workforce of around 22,300 employees in 2022, OMV is amongst Austria’s largest listed industrial companies. In Chemicals & Materials, OMV through its subsidiary Borealis, is one of the world’s leading providers of advanced and circular polyolefin solutions and a European market leader in base chemicals and plastics recycling. Together with its two major joint ventures – Borouge (with ADNOC, in the UAE and Singapore) and Baystar™ (with TotalEnergies, in the US) – Borealis supplies products and services to customers across the globe. OMV’s Fuels & Feedstock business produces and markets fuels as well as feedstock for the chemical industry, operates three refineries in Europe, and holds a 15% stake in a refining joint venture in the UAE. OMV operates around

1,700 filling stations in eight European countries. In the Energy segment, OMV explores and produces oil and gas in the four core regions of Central and Eastern Europe, Middle East and Africa, North Sea, and Asia-Pacific. Average daily production in 2022 amounted to 392 kboe/d. Its activities also include the Low Carbon Business as well as the entire gas business. OMV intends to transition from an integrated oil, gas, and chemicals company to become a leading provider of innovative and sustainable fuels, chemicals, and materials, while taking a leading global role in the circular economy. By switching over to a low-carbon business, OMV is striving to achieve net zero in all three Scopes by 2050 at the latest. OMV shares are traded on the Vienna Stock Exchange (OMV) and as American Depository Receipts (OMVKY) in the US.

Forward-Looking Statements

This press release contains certain statements that may include “forward-looking statements” within the meanings of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements, other than statements of historical or present facts or conditions, included herein are “forward-looking statements.” Included among “forward-looking statements” are, among other things, (i) statements regarding Cheniere’s financial and operational guidance, business strategy, plans and objectives, including the development, construction and operation of liquefaction facilities, (ii) statements regarding regulatory authorization and approval expectations, (iii) statements expressing beliefs and expectations regarding the development of Cheniere’s LNG terminal and pipeline businesses, including liquefaction facilities, (iv) statements regarding the business operations and prospects of third-parties, (v) statements regarding potential financing arrangements, (vi) statements regarding future discussions and entry into contracts, and (vii) statements relating to Cheniere’s capital deployment, including intent, ability, extent, and timing of capital expenditures, debt repayment, dividends, share repurchases and execution on the capital allocation plan. Although Cheniere believes that the expectations reflected in these forward-looking statements are reasonable, they do involve assumptions, risks and uncertainties, and these expectations may prove to be incorrect. Cheniere’s actual results could differ materially from those anticipated in these forward-looking statements as a result of a variety of factors, including those discussed in Cheniere’s periodic reports that are filed with and available from the Securities and Exchange Commission. You should not place undue reliance on these forward-looking statements, which speak only as of the date of this press release. Other than as required under the securities laws, Cheniere does not assume a duty to update these forward-looking statements.

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Source: Cheniere Energy, Inc.

Delfin Midstream Signs Long-Term LNG Supply Agreement with Gunvor

Agreement is the latest in a series of long-term LNG supply and purchase agreements from the Delfin Deepwater Port LNG Export Facility

Houston, November 27, 2023 – Delfin Midstream Inc. (“Delfin” or the “Company”) and Gunvor Group Ltd announced today that Gunvor Singapore Pte Ltd (“Gunvor”) has entered into long-term LNG Sale and Purchase Agreement (“SPA”) with Delfin LNG LLC (“Delfin LNG”), a subsidiary of Delfin.

Under the SPA, Delfin LNG will supply between 0.5 to 1.0 million tonnes of LNG per annum to Gunvor on a free-on-board (“FOB”) basis at the Delfin Deepwater Port, located 40 nautical miles off the coast of Louisiana for a minimum duration of 15 years.

Kalpesh Patel, Co-Head of LNG Trading of Gunvor said:

“We continue to support US LNG projects and unlock new sources to meet the growing global LNG demand while further expanding our supply portfolio. We look forward to a successful, long-term relationship with the Delfin LNG team as their project continues to progress.”

Dudley Poston, CEO of Delfin said:

“We are very pleased to have entered into a major long-term LNG supply agreement with Gunvor. This latest sale and purchase agreement further demonstrates our attractiveness as a long-term source of scalable, reliable, and clean LNG.”

Delfin has successfully been developing the Delfin LNG Deepwater Port project, which can support four FLNG vessels with a combined export capacity of up to 13.3 million tons per annum (“MTPA”). The Company has secured commercial agreements for LNG sales and liquefaction services and is in the final phase towards FID on its first three FLNG vessels.

About Delfin

Delfin is a leading LNG export infrastructure development company utilizing low-cost Floating LNG technology solutions. Delfin is the parent company of Delfin LNG and Avocet LNG LLC. Delfin LNG is a brownfield Deepwater Port requiring minimal additional infrastructure investment to support up to four FLNG Vessels producing up to 13.3 MTPA of LNG. Delfin purchased the UTOS pipeline, the largest natural gas pipeline in the Gulf of Mexico. Delfin LNG received a positive Record of Decision from MARAD and approval from the Department of Energy for long-term exports of LNG to countries that do not have a Free Trade Agreement with the United States. Further information is available at www.delfinmidstream.com.

About Gunvor Group

Gunvor Group is one of the world's largest independent commodities trading houses by turnover, creating logistics solutions that safely and efficiently move physical energy from where it is sourced and stored to where it is demanded most. With strategic investments in energy infrastructure—refineries, pipelines, storage and terminals —Gunvor further generates sustainable value across the global supply chain for its customers. In 2022, Gunvor Group generated US $150 billion in revenue on 165 million metric tons of turnover. The Group's main trading offices are in Geneva, Singapore, Houston, Stamford, Calgary, Dubai, and London, with a network of more than 20 representative and other trading offices around the globe. More information can be found at GunvorGroup.com or @Gunvor.

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Published November 29, 2023

OMV and Cheniere sign long-term LNG supply agreement

Supply of up to 12 LNG cargo ships per year beginning in 2029

OMV announced today the signing of a long-term sale and purchase agreement (SPA) with US-based company Cheniere Energy, Inc. covering the supply of up to 850,000 tons per annum of liquefied natural gas (LNG) beginning in late 2029. Under the terms of the agreement, Cheniere will provide OMV up to 12 cargoes per year of LNG, which will be received and re-gasified through the Gate LNG Terminal in Rotterdam, the Netherlands, where OMV holds long term regasification capacities. The contractual price for LNG is linked to the TTF index[1].

Berislav Gaso, Executive Vice President for OMV Energy business, said: "OMV has made another significant step in diversifying and safeguarding alternative non-Russian gas supply sources for its customers in the long-term. We are delighted to be working together with Cheniere, the largest LNG provider in the US. This contract underlines our prudent strategy of taking action in the face of changing market dynamics."

"This long-term agreement between Cheniere and OMV will enhance Cheniere's ability to supply LNG to Europe, where energy security has never been more important," said Anatol Feygin, Cheniere Executive Vice President and CCO. "Cheniere is pleased to deepen its relationship further since we first supplied OMV in 2018."

[1] TTF (Title Transfer Facility) is the main reference virtual market for gas trading in Europe, which is based in Amsterdam, the Netherlands

About Cheniere

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

For additional information, please refer to the Cheniere website at www.cheniere.com and Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, filed with the Securities and Exchange Commission.

OMV Aktiengesellschaft

At OMV, we are re-inventing essentials for sustainable living. OMV is transitioning to become a leading sustainable fuels, chemicals and materials company with a focus on circular economy solutions, while operating today across three integrated business segments of Energy, Fuels & Feedstock, and Chemicals & Materials. By gradually switching over to low-carbon businesses, OMV is striving to achieve net zero by latest 2050. The company achieved revenues of EUR 62 billion in 2022 with a diverse and talented workforce of around 22,300 employees worldwide. OMV shares are traded on the Vienna Stock Exchange (OMV) and as American Depository Receipts (OMVKY) in the U.S. Further information at www.omv.com

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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.*

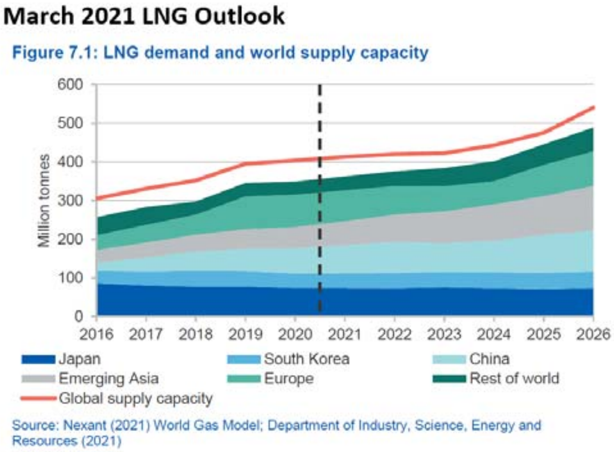
Common theme - new LNG supply is being delayed ie. [Total] Mozambique. Don't forget need capacity>demand due to normal maintenance, etc. Positive for LNG." (ii) Chevron's Gorgon. A big LNG story in H2/20 was the emergence of weld quality issues in the propane heat exchangers at Train 2, which required 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."*

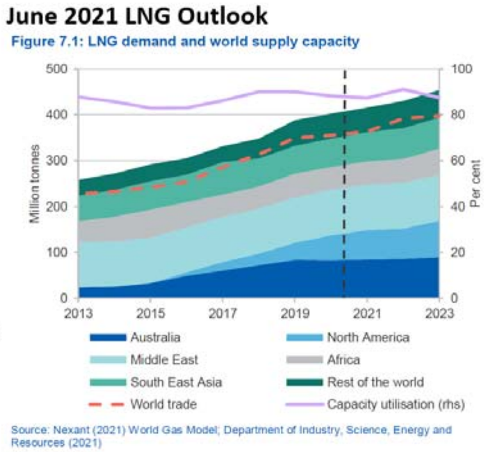
<u>Cheniere stopped the game playing the game on June 30</u>. Our July 4, 2021 Energy Tidbits memo noted that it looks like Cheniere has stopped playing stupid with respect to the strengthening LNG market in 2021. We can't believe they thought they were fooling anyone, especially their competitors. Bu 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



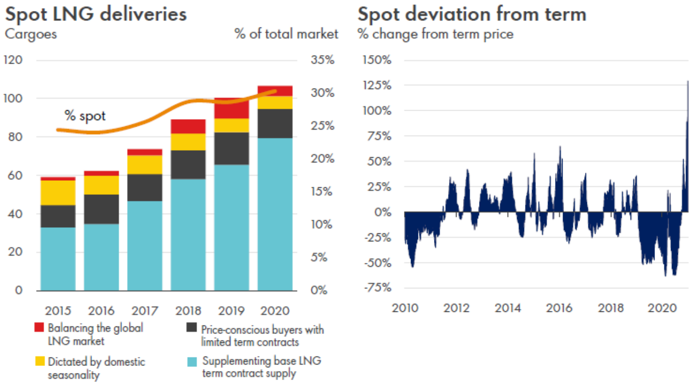


Source: Australia Resources and Energy Quarterly

<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.

Warren Buffet & Charlie Munger on shale

SAF Group created transcript of comments by Warren Buffett, Charlie Munger, Greg Abel, and Ajit Jain in the Q&A of the 2023 Berkshire Hathaway annual meeting from CNBC 5hr 16 min video.
https://www.cnbc.com/video/2023/05/06/watch-warren-buffett-and-charlie-munger-preside-over-full-2023-berkshire-hathaway-annual-meeting.html?&qsearchterm=berkshire
Items in "italics" are SAF Group created transcript
3 hr 51:30 min mark, asked on their investments in Occidental and Chevron in light of some views that Permian oil production may have peaked.
Buffett: "*it's really interesting about oil and Charlie knows way more about oil than I do. When did you buy that royalty near Bakersfield or wherever it is. That was before I met you*?" Munger "no, it wasn't before, Yes it was, it was just before. And that goddam royalty is still paying me $70,000 a year." Buffett "*what'd you pay for it*". Munger "*a thousand dollars"*. Buffett "*now that's the opposite of the Permian. My dad bought a thousand or $1,500 worth of royalties, before he died in 1964. He left them to my mother, my mother left them to her two daughters. My older sister died and my younger sister is here today and she gets these checks every month. She knows about all these different fields and what they're producing. And that's the reality of half of the oil production, or something around that in the US. And the other half is shale and, you know if you've gone to the movies and ever watched oil. You never watch the things pumping oil out in California, you'd see these gushers of oil. Well, in the Permian, this should sink in on you, in the first day, the first day when you bring in a well, it may be 12,000 barrels, it may be 15,000 barrels. It's dangerous. Occidental had one come in at 19,000 barrels or something like that. One day. And in a year, a year and a half, it becomes practically nothing. It's a different business, in effect. In the US, it's interesting, we use, what do we use maybe 11 and a fraction, we produce at 11 and a fraction million barrels of oil equivalent a day. But if shale stopped, it would drop to 6 million very fast. Well, just imagine taking 5 million barrels a day out of the production in the world. And then we're also taking down our Strategic Petroleum Reserve. Strategic Petroleum Reserve is the ultimate oil field, you don't have to drill, we've got it. And it was supposed to be Strategic, but it gets involved in politics. The oil business, different kinds of business basically. We like Occidental's position in the Permian. We wouldn't like that position if, well it got to minus one day, minus $30 a barrel, that was crazy of course. But if oil sells at x, you do very well, if sells half of x, your costs are the same, it doesn't change the production, it doesn't work as well, but it also brings down the oil production of the US very fast. We don't know what oil prices will be, but we do very much like the Occidental position they have and that's why we financed them a few years ago when it looked like a terrible mistake. …. she [Occidental CEO Vicki Holub] knows what happens beneath the surface. I know the math of it. I wouldn't have the faintest Idea to do if I was in an oil field. I can dig two feet down in my backyard and that's my understanding of subsoil in the world. I can't picture the field that Charlie has been collecting that monthly check from for 50+ years, 60 years roughly. Or my sister's getting at various fields where they just keep pumping and pumping and pumping. We in the US are lucky to have the ability to produce the kind of oil we've got from shale, but it is not a long-term source like you might think by watching movies about oil, or the sort. Charlie do you have anything to add*". Munger *"Yeah, it really dies fast, those shale wells. If you like quick death in your oil wells, we have them for you*".
Buffett "*Occidental, they're doing a lot of good things*." Munger "*Yeah, they drill a lot of new wells and they're doing it at a profit but it's different kind of oil*". Buffett "*it's just different. And that's true of almost half the oil produced in the US.".* Munger "*there's a lot oil down there that nobody knows how to produce. And they've been working at it for like 50 years, but they worked at the existing shale production for about 50 years before they figured it out. And it was weirdly complicated when they were finally able to do it. There is only one type of sand that works*". Buffett "*can you imagine a horizontal pipe maybe a mile and a half, it's just so different than what you think about*". Munger "*it goes laterally for three miles, two miles down. How the hell do you drill two or three miles laterally when you are already two or three miles under the earth. They've mastered a lot of very tricky technology to get the oil out of these wells at all.*" Buffett "*we love the position with Occidental, we love having Vicki run it*." Munger "*there is a lot more oil down there if anybody can figure out another magic trick. That's all we need is another magic trick."* Buffett "*Occidental has some other things too. The price of oil is still is incredibly important in terms of the economics of short-lived oil, no question about that. Incidentally, there is speculation about us buying control, we're not going to buy control. We don't want to run it. We've got the right management running it. We wouldn't know what to do with it*."
Prepared by SAF Group https://safgroup.ca/news-insights/

https://www.detroitnews.com/story/news/local/michigan/2023/12/01/enbridge-line5-oil-pipeline-straits-of-mackinac-tunnel/71758727007/

Enbridge wins state panel's OK to move Line 5 oil pipeline into straits tunnel

Beth LeBlanc

The Detroit News

Delta Township — The Michigan Public Service Commission ruled Friday that the relocation of Enbridge Energy's Line 5 oil pipeline from the lakebed of the Straits of Mackinac to a yet-to-be-constructed tunnel beneath the lakebed is the "best option" to improve safety while still securing the "public need" for fossil fuels.

Commission Chair Dan Scripps, in approving a site permit for the project, noted the current placement of the dual pipeline on the lakebed west of the Mackinac Bridge, where it is exposed to a potential anchor strike, presents a risk that must be addressed.

"It's clear," Scripps said. "We need to get those pipelines off the bottomlands and out of the Great Lakes."

The commission did require Enbridge to make additional risk assessments and safety considerations while moving forward with its plans, but the approval vote still angered Line 5 and tunnel opponents who attended the meeting.

The motion to approve the site permit passed 2-0. Commissioner Alessandra Carreon abstained since she was recently appointed to the commission and had not been present for much of the debate on the matter. The two "yes" votes, Scripps and Commissioner Katherine Peretick, are both appointees of Democratic Gov. Gretchen Whitmer.

The decision was greeted with outbursts from the packed meeting room of "Shut it down!" and "Blood on your hands." One of those addressing the panel said the commission should remove "public service" from its title after Friday's decision.

"You've broken my heart," said Lissa Spitz, a resident from Washtenaw County. "We are at the most critical time in human history right now. Our house is burning down. We must end the use of fossil fuels as soon as possible."

Andrea Pierce, a member of the Little Traverse Bay Bands of Odawa Indians, said she was "disgusted" by the vote and expected there would be an appeal. She and others argued the pipeline and tunnel would soon be "obsolete" as the state moved away from fossil fuels.

"This will be on your heads for the rest of your lives," Pierce said.

Whitmer's office said Friday it was reviewing the decision from the "independent" Michigan Public Service Commission and noted there are still pending federal lawsuits over the pipeline's operation and federal approvals Enbridge must obtain for its project.

"Our goal has always been to get the dual pipelines out of the water as quickly as possible while also working to secure our energy independence and lower the cost of energy for Michiganders," Whitmer spokeswoman Stacey LaRouche said.

An Enbridge official said Friday the company was pleased with the approval and felt it resulted from a "well thought out" and deliberative process.

"We think that this does the best job of protecting the Great Lakes while at the same time securing a vital energy resource for people that depend on it in Michigan and across the region in the U.S. and Canada," said Mike Fernandez, senior vice president and chief communications officer for Enbridge.

Tunnel plan deemed 'reasonable'

The vote came after Whitmer and Attorney General Dana Nessel have engaged in so far unsuccessful litigation seeking to shut down the oil pipeline. It also came three days after the governor signed a bill mandating 100% "clean" energy by 2040, effectively banning the burning of coal for generating electricity.

Staff members told commissioners Friday that their analysis of Enbridge's siting request found there is a public need for Line 5's oil products, and that the route, location and design of the replacement pipeline is "reasonable" and a "significant improvement" to the current placement on the bottom of Lake Michigan.

There is no other feasible alternative, the commission said.

Transporting Line 5's light crude oil or natural gas liquids by barge, tanker, rail or truck "likely would increase environment impairment and increase the risk of spills that could significantly harm the Great Lakes and its environment," the commission said in a statement after Friday's meeting.

The commission put certain additional conditions on the site permit approval, including requirements that Enbridge make no significant changes to the route and location, that the company obtain approval from the commission before any third-party utility is located in the tunnel, and that Enbridge take certain safety precautions during construction.

More: Whitmer vows Michigan will lead 'clean energy future' in signing policy overhaul

The commission has been considering Enbridge's application to replace or relocate the segment of Line 5 connecting the Upper and Lower peninsulas since 2020. In June 2022, the commission delayed its decision, reopened the record in the case and asked the Canadian pipeline giant to provide more information on its plans to create a "full and complete record" of tunnel engineering and the safety of the current dual pipelines.

The Michigan Public Service Commission's approval was one of two remaining hurdles Enbridge needs to clear before it can begin construction on the tunnel announced in 2018. Enbridge is also waiting on a federal review by the U.S. Army Corps of Engineers, which said earlier this year that its study would not be completed until late 2025.

Line 5 history

The Line 5 pipeline has been a source of controversy for nearly 15 years after a separate Enbridge pipeline, Line 6B, leaked into the Kalamazoo River in Marshall. It is considered one of the country's largest in-land oil spills in history.

Environmental advocates argued a similar spill from the 4.5-mile segment of Line 5 in the Straits of Mackinac, where Lakes Michigan and Huron join, would have devastating effects on the Great Lakes. A 2018 anchor strike on Line 5 escalated those fears.

The 70-year-old pipeline carries oil from western Canada through northern Wisconsin, before crossing into the Upper Peninsula, where it travels east, before turning south and traveling through the Straits of Mackinac for 4.5 miles. Once the pipeline emerges from the straits, it travels south through the Lower Peninsula, then turns east, crosses under the St. Clair River and ends in Sarnia, Ontario.

Enbridge's Line 5 pipeline carries 22.7 million gallons a day of light sweet crude oil and natural gas liquids, which are used to make propane for heating and cooking.

In 2018, Enbridge agreed to a deal with departing Republican Gov. Rick Snyder to build a straits tunnel to house a new segment of the pipeline; at that point, the tunnel was estimated to cost about $500 million.

Democrats Whitmer and Nessel, who both vowed on the campaign trail to shut down Enbridge's oil pipeline, challenged laws establishing a committee that approved the tunnel agreement shortly after taking office.

When the agreement was upheld, Whitmer tried to negotiate a shorter turnaround for tunnel completion, which Enbridge said it could not meet.

Whitmer and Nessel both filed suits to shut down the tunnel, which Enbridge removed to federal court on the argument that federal regulators had sole jurisdiction over the operation of the pipeline.

When the federal judge upheld the removal of the cases to federal court, Whitmer dropped her case but Nessel continued to pursue hers. It is currently pending before the Sixth Circuit U.S. Court of Appeals.

Apart from the ongoing lawsuit, Canadian Prime Minister Justin Trudeau, in October 2021, invoked a never-used 1977 treaty over Michigan's threats to shutter the pipeline. The treaty, Canada argued, prevents the U.S. government or Michigan from disrupting the operation of a transit pipeline if it harms the energy supply in either country.

The treaty negotiations are ongoing.

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Pemex Refineries Run Below 50% Capacity for Sixth Straight Month
2023-11-27 20:17:39.815 GMT

By Lucia Kassai
(Bloomberg) -- Pemex's refineries ran at 37.4% capacity in October, the lowest utilization rate since Nov. 2020 as the Madero and Salina Cruz plants curtailed rates, according to company data compiled by Bloomberg.
* Utilization rate fell from 47.2% in September
* Refineries have been operating below the 50% mark since May, when half of the company's plants were hit by fires; prior to that, they were operating at 56.2% of capacity
** NOTE: Mexico's six refineries have capacity to process 1.627m b/d of crude, according to Pemex
* The Madero refinery, a processor of heavy crude Maya, operated at less than 5% of capacity; drop in domestic oil processing freed up more barrels for the export market
** Read more: Mexico Oil Exports at 4-Year High in October With Japan Taking Crude
* Pemex didn't disclose data for its new Olmeca refinery near the port of Dos Bocas, which started operations in September
** Read More: Mexico Dos Bocas to Start Producing Diesel This year: Linea
* Jan.-Oct. refineries processed avg 792k b/d oil; compares with target of 865k b/d for this year
* Here's the data by refinery:

Refinery	October (b/d)	m/m	y/y	Capacity use	NOTE
Cadereyta	120,963	29%	4.1%	44.0%	4-month high
Madero	6,104	-91%	-94%	3.2%	Lowest since June 2021
Tula	148,805	-30%	-37%	47.2%	4-month low
Salamanca	97,501	-9.0%	-1.6%	44.3%	
Minatitlan	92,458	50%	11%	32.4%	
Salina Cruz	142,412	-37%	-17%	43.2%	Lowest since June 2022
Dos Bocas	not available				
Total	608,243	-21%	-25%	37.4%	Lowest since Nov. 2020

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https://www.bloomberglinea.com/latinoamerica/mexico/exclusiva-refineria-dos-bocas-producira-gasolina-comercial-hasta-2024-revela-pemex/

Exclusive: Dos Bocas refinery to produce commercial gasoline until 2024, Pemex reveals

Mexico's President Andrés Manuel López Obrador promised the first commercial gasoline production would be ready in November 2023

Exclusive: Dos Bocas **refinery to produce commercial gasoline in 2024**, Pemex reveals Signrero outside the Olmeca refinery, known as Dos Bocas of the state-owned company Petroleos Mexicanos (Pemex) in the municipality of Paraiso in the state of Tabasco, Mexico.(

By ***Arturo Solís***
Nov 21 2023 | 05:02 AM

MEXICO CITY — The Dos Bocas refinery will produce commercial gasoline in January 2024, an executive at Petróleos Mexicanos, a state-owned company known as Pemex, told **Bloomberg Línea,** a date that exceeds the deadline promised by Mexican President Andrés Manuel López Obrador.

VIEW +

AMLO's Dos Bocas Refinery Will Be Profitable in 20 Years: Pemex

Héctor Ruíz, director of projects for gas, petrochemical and refining processes at Pemex, said that the final price of the Dos Bocas refinery will not be

Pemex's project director for gas, petrochemical and refining processes, Héctor Gustavo Ruíz Monjaraz, explained in an interview that the real risk conditions of the project have required more time than planned, but the start-up process of Pemex's seventh refinery is going "well."

"We're going to do diesel in a jiffy, and gasoline in the first few weeks of next year, there's going to be white smoke and everybody's going to be very happy," he said.

AMLO, as the president is known, assured that commercial production of gasoline and diesel in Dos Bocas would begin "at the latest" in November 2023, after multiple breaches in the start date, originally scheduled for July 1, 2022, when the refinery was inaugurated.

Dos Bocas refinery to start production no later than November: AMLO

The Mexican president said the Dos Bocas refinery will start producing 170,000 barrels of fuel and the rest up to two months later

Dos Bocas, located in Tabasco, will produce 170,000 barrels of gasoline and 120,000 barrels of diesel per day that will be shipped by ship to multiple Mexican ports in the Atlantic and Pacific Oceans in order to meet the demand of the Valley of Mexico.

Although he declined to share the final cost of Dos Bocas considering the surrounding works, the executive commented at a construction industry congress that the refinery will be profitable within 20 years, according to business estimates made by Pemex. The former Secretary of Energy, Rocío Nahle, estimated that the project had an Internal Rate of Return of 13% in 2019.

Ruiz Monjaraz said commercial diesel production will begin this year.

"It's much easier to make diesel than gasoline," he said.

He added that Pemex already has two storage tanks filled with primary gasoline waiting to remove the sulfur required by Mexican regulations.

"That's what we're doing now, starting up the hydrodesulphurisation plant, it's a complex system."

The Government of Mexico's energy policy is self-sufficiency in gasoline and diesel in order to lower prices. To achieve this, he proposed to rehabilitate Pemex's six refineries, build a new one, and bought the entirety of Deer Park, a refinery in Texas with his private partner Shell, in the middle of his six-year term.

AMLO's oil refining plan has been one of the main variables that has pressured its credit rating with the agencies Moody's and Fitch, which have placed Pemex's rating in a highly speculative range, a segment known in the financial world as 'junk bond'.

Venezuela Stirs Nationalism in Dispute Over Oil-Rich Territory
2023-12-02 12:00:00.0 GMT

By Andreina Itriago Acosta and Fabiola Zerpa
(Bloomberg) -- For decades, Venezuelan schoolchildren have been taught to draw a map of their country different from the one in use elsewhere: theirs includes a disputed region roughly the size of Florida which is controlled by neighboring Guyana.
Following massive offshore oil discoveries in the region by Exxon Mobil Corp. and others, and with elections approaching, Venezuelan President Nicolás Maduro is inflaming regional tension by reviving a long-dormant border dispute over the area known as the Essequibo.
On Sunday, Venezuelans are voting on five referendum questions over whether this region should be ruled from Caracas.
These include, “Do you agree in opposing, by all legal means, Guyana’s pretension to use unilaterally a sea whose borders haven’t been defined, illegally and in violation of international law?”

The dispute pits Guyana’s pro-western government against an ally of socialist Cuba. As the rhetoric heated up, Brazil said it would send more troops to its northern border with the two

countries.
Read more: Brazil's Military on Watch as Venezuela-Guyana Tension Rises
The Maduro government campaigned with marches, patriotic songs and videos reinforcing their claim to the thinly-populated, thickly-forested region, which makes up about two-thirds of Guyana's national territory. Nearly all Venezuelans, including the opposition, believe the Essequibo is theirs.
"I'm going to the Essequibo, it's mine, I'm going to defend the gold, the silver and even the coltan," says one song promoted by the government, referring to the region's mineral wealth.
Stoking Venezuelan nationalism could potentially help Maduro in 2024 presidential elections. If the vote were held tomorrow, 13% would vote for Maduro, while 63% would back opposition candidate María Corina Machado, according to Oswaldo Ramirez, head of local polling firm ORC Consultores. However, there are questions over whether the vote will be fair, and whether Machado will be allowed to run.
Guyana, South America's only English-speaking nation, is the world's fastest-growing economy, which has quadrupled in size over the last five years thanks to massive offshore oil deposits first drilled by Exxon in 2015. Its crude reserves are so large relative to its population of 800,000 that some projections show the nation overtaking Kuwait to become the world's largest per-capita crude producer.
Read more: Tsunami of Oil Wealth Poses Risks to Guyana's Growing Economy

Maduro's Rage

In September, Guyana's government provoked Maduro's rage by saying it would award new oil blocks by the end of the year. The Maduro government said some of those blocks are on waters that have not been delimited, or belong to Venezuela.
"The referendum is a nationalist political response expressed at a time of weakness for the Maduro government," said Rocío San Miguel, Venezuela-based president of watchdog group Control Ciudadano.
Guyana's government has called for the referendum to be canceled. Machado also opposed the vote, saying that it was a distraction and a mistake.
Maduro says he expects 12 million Venezuelans to vote in the referendum, out of an electorate of 20 million." Whether he achieves it will be a test on how much his regime can still mobilize its supporters after 2.4 million voters took part in an opposition primary last month. Maduro hasn't said how he plans to proceed after that.

Longstanding Conflict

Guyana and Venezuela have been disputing their boundary since the late 1800s, with Venezuela claiming all the land west of the Essequibo River. In 1899, an international arbitration panel awarded Britain the territory, but in 1962 Venezuela said the decision was invalid and has periodically demanded the area be handed over, in some previous cases even threatening military action.

The United Nations referred the dispute to the International Court of Justice, but Venezuela doesn’t recognize its jurisdiction.

--With assistance from Dave Merrill.

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Russia's Crude Shipments Rebound Ahead of Delayed OPEC+ Meeting
2023-11-28 10:21:57.759 GMT

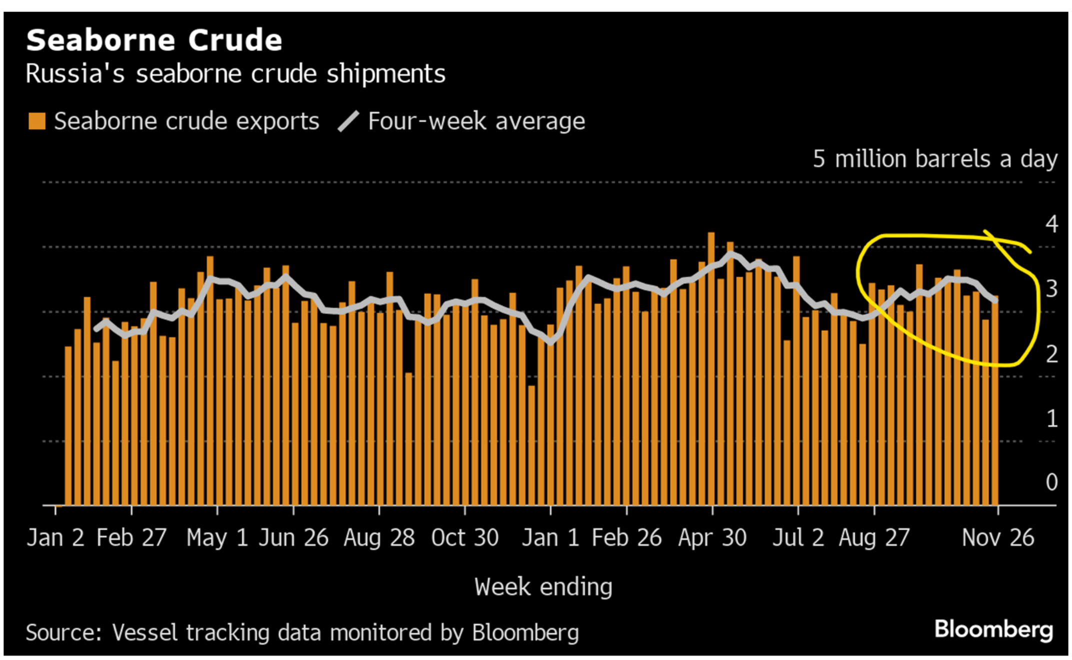
By Julian Lee

(Bloomberg) -- Russia's weekly seaborne crude exports rebounded before a meeting of OPEC+ oil minsters, which has been delayed by disagreements within the group over individual output targets.

About 3.24 million barrels a day of crude was shipped from Russian ports in the week to Nov. 26, tanker-tracking data monitored by Bloomberg show. That was up by 370,000 barrels a day from the revised figure for the period to Nov. 19, even though tanker loading in the Black Sea was disrupted by storms. Four-week average flows slipped.

The OPEC+ group of oil producers, jointly led by Russia and Saudi Arabia, are due to meet virtually on Nov. 30 to set output targets for the first part of next year. The group was forced to postpone its scheduled gathering after some African members objected to lower output targets that were pressed on them back in June. Saudi Arabia is now asking others in the OPEC+ coalition to reduce their oil-output quotas further in a bid to shore up global markets, according to people familiar with the discussions.

Moscow said in early August that it would prolong export restrictions at a reduced rate of 300,000 barrels a day below their May-June average level until the end of the year, a policy confirmed earlier this month. If the burden falls entirely on crude, that would imply seaborne shipments of 3.28 million barrels a day. But Deputy Prime Minister Alexander Novak told Interfax last month that the reduction is spread across both crude and refined products. That complicated assessments of whether Russia was meeting its commitment after the government imposed a temporary fuel export ban in September.

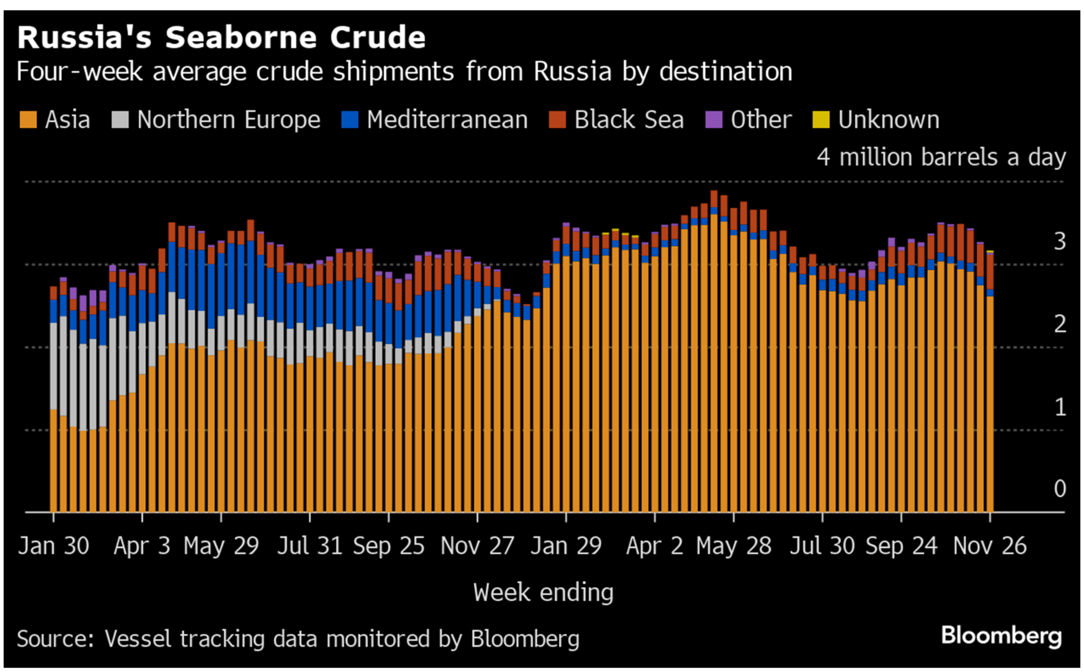


The less volatile four-week average flow fell for a third week, as the last week of October's export surge dropped out of the calculation. Using this measure, shipments dropped to 3.16 million barrels a day, down by about 100,000 barrels a day from the revised figure for the period to Nov. 19. That was the lowest in 12 weeks, but still about 270,000 barrels a day above shipments in the period to Aug. 20, when Moscow's crude export cuts were at their deepest.

Russia's oil processing climbed to the highest since mid-August in the week to Nov. 22, as refineries ended seasonal maintenance and the government relaxed fuel-export restrictions. The Kremlin's weekly revenues from oil export duties rebounded, recovering most of the previous week's drop. From January, Russia's oil producers are set to pay a higher output tax to fund increased downstream subsidies, which were reinstated in October after being halved the previous month. Export duty is set to be abolished at the end of this year as part of Russia's long-running tax reform plans.

Greek oil tanker owners have scaled back how much Russian crude they're hauling after the US Treasury sent letters to shipping companies for potentially breaching a Group of Seven price cap on Moscow's oil trades. That may well alarm officials in the Kremlin because the country still needs assistance from foreign vessel operators to get all its barrels to the global market.Flows by Destination

Russia's seaborne crude flows in the four weeks to Nov. 26 fell to 3.16 million barrels a day. That was down from a revised 3.26 million barrels a day in the period to Nov. 19. Shipments were about 420,000 barrels a day below the average seen during the surge in volumes between April and June.

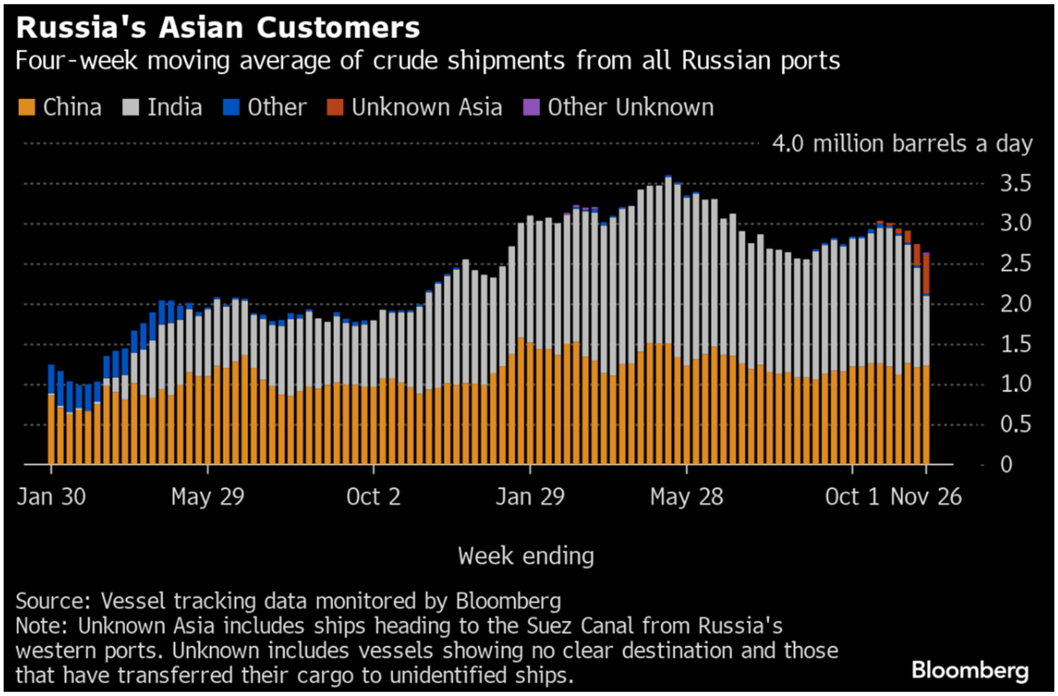


All figures exclude cargoes identified as Kazakhstan's

KEBCO grade. Those are shipments made by KazTransoil JSC that transit Russia for export through Novorossiysk and the Baltic port of Ust-Luga and are not subject to European Union sanctions or a price cap.
The Kazakh barrels are blended with crude of Russian origin to create a uniform export grade. Since Russia's invasion of Ukraine, Kazakhstan has rebranded its cargoes to distinguish them from those shipped by Russian companies.

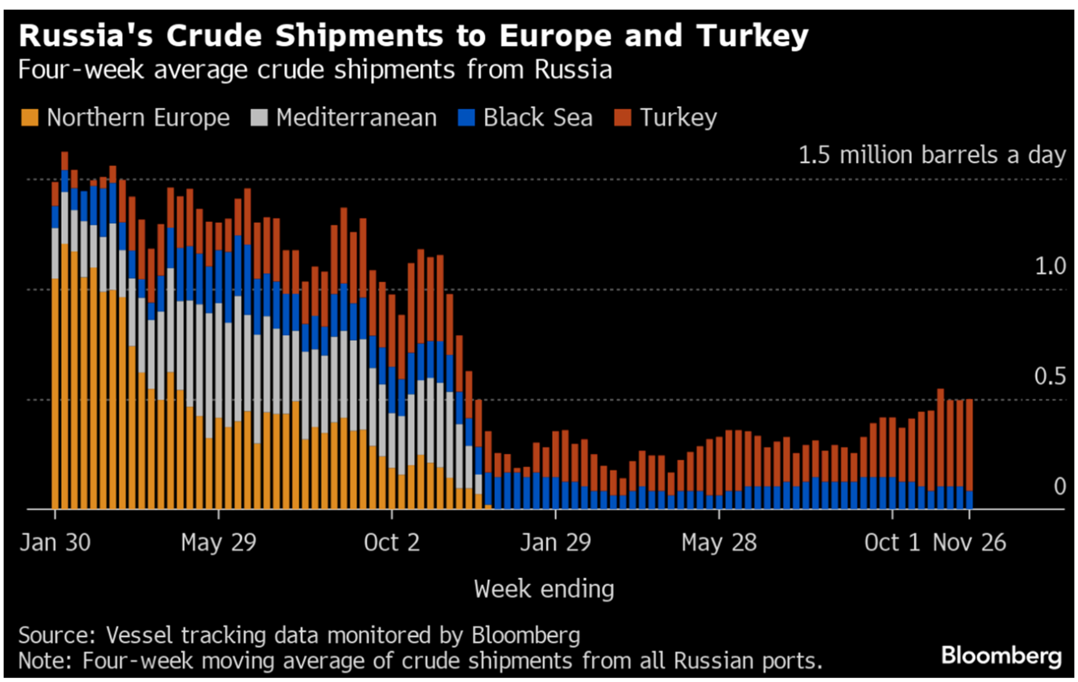
*** Asia**

Observed shipments to Russia's Asian customers, including those showing no final destination, fell to 2.63 million barrels a day in the four weeks to Nov. 26, down from a revised 2.74 million barrels a day in the period to Nov. 19. That's well below a peak of about 3.6 million barrels a day seen in May.
About 1.23 million barrels a day of crude was loaded onto tankers heading to China in the four weeks to Nov. 26. China's seaborne imports are supplemented by about 800,000 barrels a day of crude delivered directly from Russia by pipeline, either directly, or via Kazakhstan.
Flows on ships signaling destinations in India averaged about 870,000 barrels a day in the four weeks to Nov. 26.
Both the Chinese and Indian figures will rise as the discharge ports become clear for vessels that are not currently showing final destinations.
The equivalent of about 485,000 barrels a day was on vessels signaling Port Said or Suez in Egypt, or are expected to be transferred from one ship to another off the South Korean port of Yeosu. Those voyages typically end at ports in India or China and show up in the chart below as "Unknown Asia" until a final destination becomes apparent.
The "Other Unknown" volumes, running at about 26,000 barrels a day in the four weeks to Nov. 26, are those on tankers showing no clear destination. Most of those cargoes originate from Russia's western ports and go on to transit the Suez Canal, but some could end up in Turkey. Others could be moved from one vessel to another, with most such transfers now taking place in the Mediterranean, off the coast of Greece.



*** Europe and Turkey**

Russia's seaborne crude exports to European countries have collapsed since Moscow's troops invaded Ukraine in February 2022. A market that consumed about 1.5 million barrels a day of short-haul seaborne crude, coming from export terminals in the Baltic, Black Sea and Arctic has been lost almost completely, to be replaced by long-haul destinations in Asia that are much more costly and time-consuming to serve.

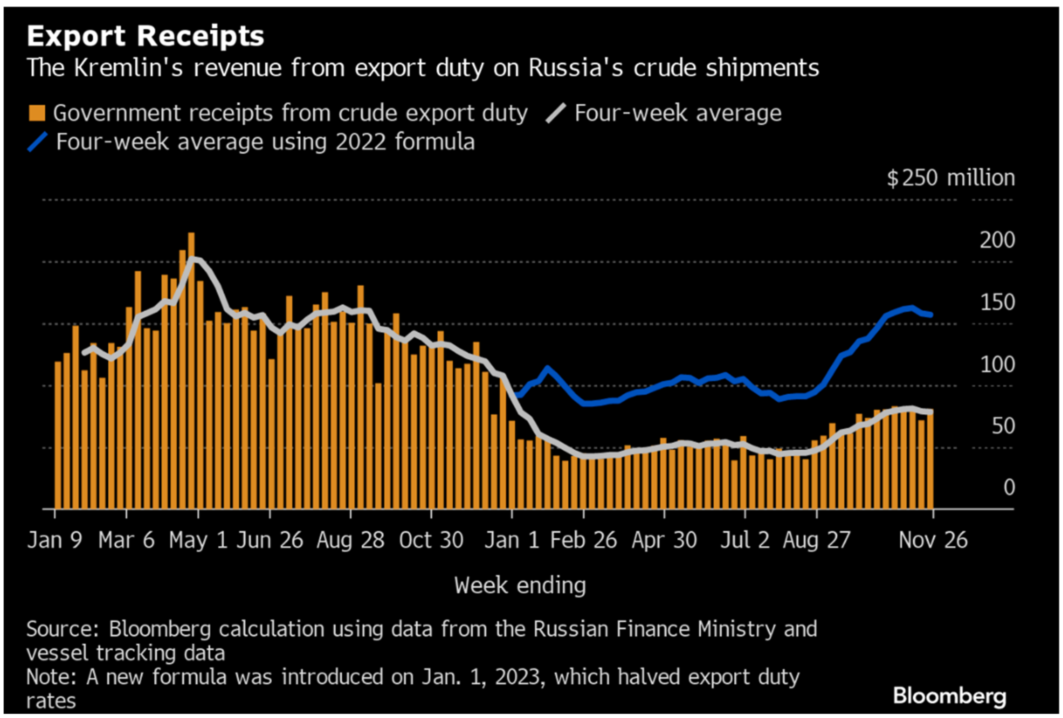


No Russian crude was shipped to northern European countries, or those in the Mediterranean in the four weeks to

Nov. 26.
Flows to Bulgaria, now Russia’s only European market for crude, fell to about 83,000 barrels a day in the most recent four-week period.
Exports to Turkey rose to about 420,000 barrels a day in the four weeks to Nov. 26. They remain more than twice as high as they were in July and August.
Vessel-tracking data are cross-checked against port agent reports as well as flows and ship movements reported by other information providers including Kpler and Vortexa Ltd.

Export Revenue

Inflows to the Kremlin's war chest from its crude-export duty rebounded to $81 million in the seven days to Nov. 26, while four-week average income was little changed at $78 million. The weekly income recovered 90% of the loss seen the previous week.

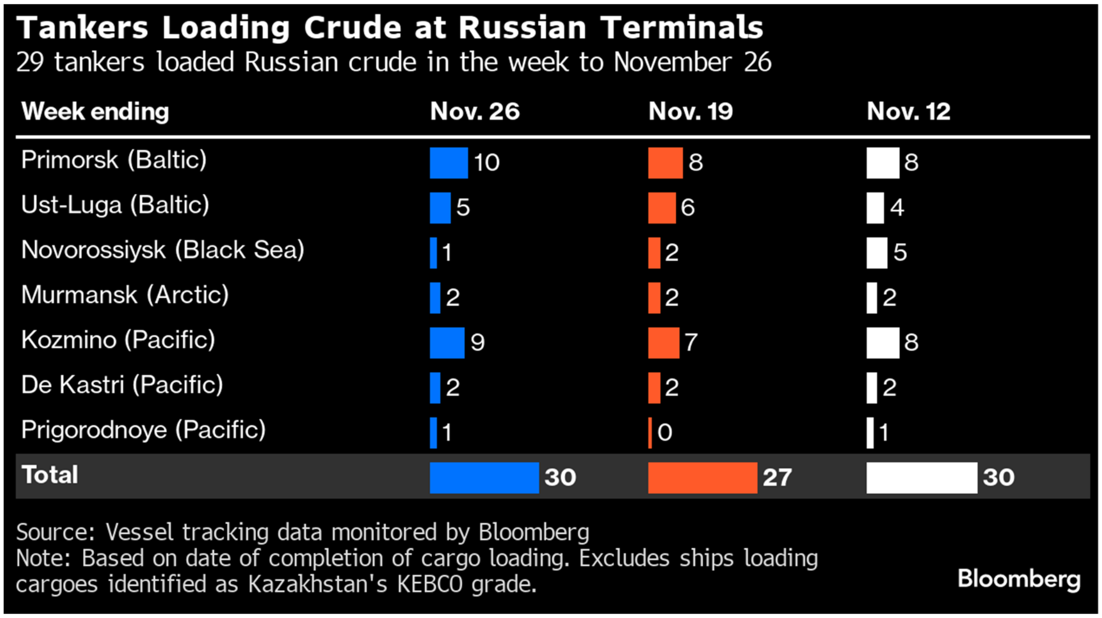


The duty rate for November has been set at $3.57 a barrel, based on an average Urals price of $83.35 during the calculation period between Sept. 15 and Oct. 14. That was about $7.70 a barrel below Brent over the same period. November’s duty rate sets another new high for the year.
The rate for December will be $3.37 a barrel, based on an average Urals price of $79.23 during the calculation period between Oct. 15 and Nov. 14. That was about $9.39 a barrel below Brent over the same period.

Origin-to-Location Flows

The following table shows the number of ships leaving each export terminal.

A total of 30 tankers loaded 22.7 million barrels of Russian crude in the week to Nov. 26, vessel-tracking data and port agent reports show. That’s up by about 2.6 million barrels from the revised figure for the previous week.
There was just one shipment from Novorossiysk, with storms hampering activity at the port for a second week.
Destinations are based on where vessels signal they are heading at the time of writing, and some will almost certainly change as voyages progress. All figures exclude cargoes identified as Kazakhstan’s KEBCO grade.



No cargoes of KEBCO were loaded at Novorossiysk or Ust-Luga during the week.NOTES
Note: This story forms part of a weekly series tracking shipments of crude from Russian export terminals and the export duty revenues earned from them by the Russian government. Weeks run from Monday to Sunday. The next update will be on Tuesday, Dec. 5.
Note: All figures exclude cargoes owned by Kazakhstan’s KazTransOil JSC, which transit Russia and are shipped from Novorossiysk and Ust-Luga as KEBCO grade crude.
If you are reading this story on the Bloomberg terminal, click here for a link to a PDF file of four-week average flows from Russia to key destinations.

--With assistance from Sherry Su.

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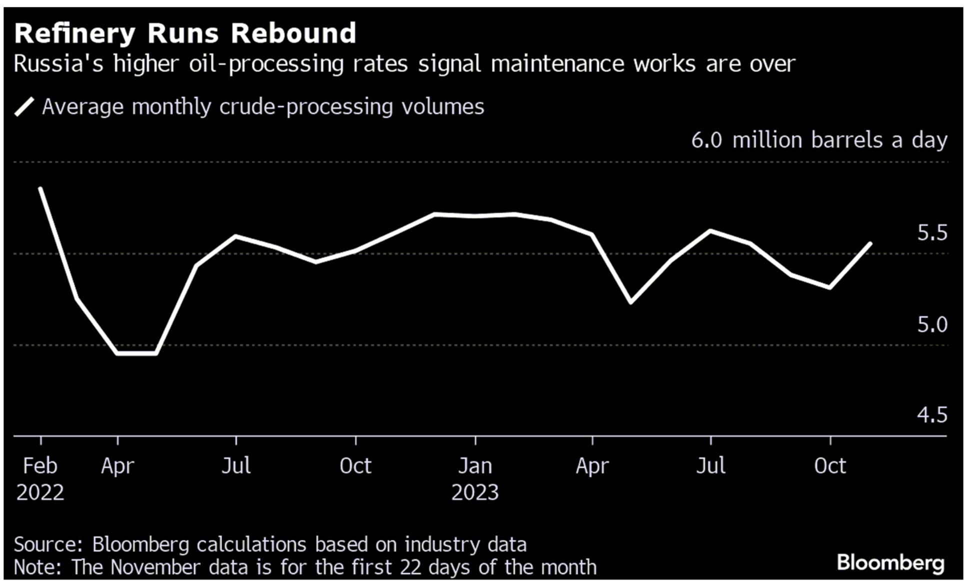
https://blinks.bloomberg.com/news/stories/S4TWSLDWX2PS

Russian Oil Refining Rises as Maintenance Ends, Fuel Ban Lifted
2023-11-27 12:47:34.792 GMT

By Bloomberg News
(Bloomberg) -- Russia's oil processing climbed to the highest since mid-August in the latest week, as refineries ended seasonal maintenance and the government relaxed fuel-export restrictions.
The country processed 5.65 million barrels a day in the Nov. 16-22 period, more than 100,000 barrels a day above the previous week, according to a person with knowledge of the matter. Refining totaled 5.55 million barrels a day in the first 22 days of November, up about 236,000 barrels compared with most of October, Bloomberg calculations based on historic data show.
Russia's refineries are churning through crude as the government lifted temporary restrictions on exports of gasoline and summer-grade diesel, giving them more incentive to produce the road fuels. Refining runs have also been boosted after seasonal maintenance was completed ahead of winter.



The market closely watches Russian refinery runs as the data — together with seaborne crude exports — helps traders and analysts assess the nation's oil production after Moscow stopped releasing official output data.
While the country's domestic processing has climbed, its seaborne oil exports fell to the lowest since August in the week to Nov. 19, tanker-tracking data monitored by Bloomberg show. Shipments were down by 580,000 barrels a day from the previous week, the biggest week-on-week drop in more than four months.
Russia and its allies in the Organization of Petroleum Exporting Countries are set to hold an online meeting on Nov. 30 to discuss their production policies for the next year. Moscow has pledged to keep its crude output tapered through the end of 2024 and its oil exports, including flows of petroleum products, curbed through this year to stabilize the global market.

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https://www.opec.org/opec_web/en/press_room/7267.htm

Several OPEC+ countries announce additional voluntary cuts to the total of 2.2 million barrels per day

No 25/2023
Vienna, Austria
30 Nov 2023

The OPEC Secretariat noted the announcement of several OPEC+ countries of additional voluntary cuts to the total of 2.2 million barrels per day, aimed at supporting the stability and balance of oil markets.

These voluntary cuts are calculated from the 2024 required production level as per the 35th OPEC Ministerial Meeting held on June 4 2023, and are in addition to the voluntary cuts previously announced in April 2023 and later extended until the end of 2024.

These additional voluntary cuts are announced by the following OPEC+ countries : Saudi Arabia (1,000 thousand b/d); Iraq (223 thousand b/d); United Arab Emirates (163 thousand b/d); Kuwait (135 thousand b/d); Kazakhstan (82 thousand b/d); Algeria (51 thousand b/d); and Oman (42 thousand b/d) starting 1st of January until the end of March 2024. Afterwards, in order to support market stability, these voluntary cuts will be returned gradually subject to market conditions.

The above will be in addition to the announced voluntary cut by the Russian Federation of 500 thousand barrels per day for the same period (starting 1st of January until the end of March 2024), which will be made from the average export levels of the months of May and June of 2023, and will consist of 300 thousand barrels a day of crude oil and 200 thousand barrels per day of refined products.

https://www.opec.org/opec_web/en/press_room/7265.htm

36th OPEC and non-OPEC Ministerial Meeting

No 24/2023
Vienna, Austria
30 Nov 2023

The 36th OPEC and non-OPEC Ministerial Meeting (ONOMM), was held via videoconference, on Thursday November 30, 2023.

The Meeting welcomed HE Alexandre Silveira de Oliveira, Minister of Mines and Energy of the Federative Republic of Brazil, which will join the OPEC+ Charter of Cooperation starting January 2024.

The meeting reaffirmed the continued commitment of the Participating Countries in the Declaration of Cooperation (DoC) to ensure a stable and balanced oil market. In view of current oil market fundamentals, the Meeting:

1. Reaffirmed the Framework of the Declaration of Cooperation, signed on 10 December 2016 and further endorsed in subsequent meetings including the 35th OPEC and Non-OPEC Ministerial Meeting on 4 June 2023; as well as the Charter of Cooperation, signed on 2 July 2019.

2. Noted that, in accordance with the decision of the 35th OPEC and non-OPEC Ministerial Meeting, the completion of the assessment by the three independent sources (IHS, Wood Mackenzie and Rystad Energy) for production level that can be achieved in 2024 by Angola, Congo and Nigeria as follows: Angola at 1,110 t/bd, Congo at 277 t/bd and Nigeria at 1,500 t/bd.

3. The 37th OPEC and non-OPEC Ministerial Meeting will be held on 1 June 2024 in Vienna.

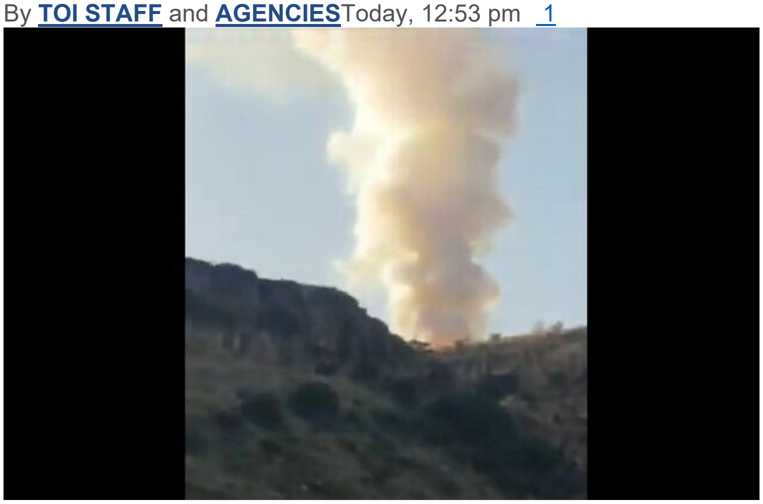
Source: Google Maps

https://www.timesofisrael.com/israeli-strike-behind-blast-at-houthi-weapons-depot-in-yemens-capital-report/

Israeli strike behind blast at Houthi weapons depot in Yemen's capital — report

Saudi outlet says missiles target precision rockets, drones in Sana'a; Iran-backed group denies claim, says explosion occurred at gas station

By **TOI STAFF** and **AGENCIES**Today, 12:53 pm 1


A screenshot purportedly showing a blast at a weapons depot in Sana'a, Yemen's capital, November 30, 2023. (X video screenshot: used in accordance with Clause 27a of the Copyright Law)

An Israeli strike was behind an explosion at an arms depot in Yemen's capital Sana'a, controlled by the Iran-backed Houthi rebels, Saudi media reported Friday.

Missiles targeted the site Thursday, where drones and precision missiles are stored, the Saudi-owned Al-Hadath news network reported. The Israel Defense Forces have not commented on the matter.

Houthi officials denied the report, claiming that the blast occurred at a gas station, while Hezam al-Asad, a member of the Iran-backed Houthi's political bureau, tweeted that it was caused by remnants of a bomb left over from the civil war.

Al-Asad occasionally posts Hebrew-language taunts at Israel.

The Houthis, who control much of Yemen and are part of an "axis of resistance" arrayed against Israel, have launched a series of drone and missile strikes targeting Israel since thousands of Hamas terrorists poured over the border into Israel on October 7, killing 1,200 people, mostly civilians, and kidnapping some 240.

The projectiles have all been intercepted or missed their targets.

Houthis also seized an Israeli-linked cargo vessel, the Galaxy Leader, in the Red Sea on November 19, and have vowed to target others.
On Thursday, the United Kingdom said it was sending one of its most advanced naval ships, the HMS Diamond, a Type 45 destroyer, to conduct operations to ensure freedom of navigation, reassure merchant vessels, and ensure the safe flow of trade in the area. The vessel will join the frigate HMS Lancaster which deployed to the region last year, as well as three mine hunters and a support ship.

The United States has also bolstered its naval presence in the Middle East, deploying two carrier groups to the region.

On Wednesday, a US Navy warship shot down a drone over the South Red Sea launched from a part of Yemen controlled by Houthis, the American military's Central Command said.
The US Navy downed multiple drones launched from Yemen on November 23, one drone on November 15, and both missiles and drones on October 19, while the Houthis shot down an American drone earlier this month.

https://www.eia.gov/todayinenergy/detail.php?id=41073
AUGUST 27, 2019

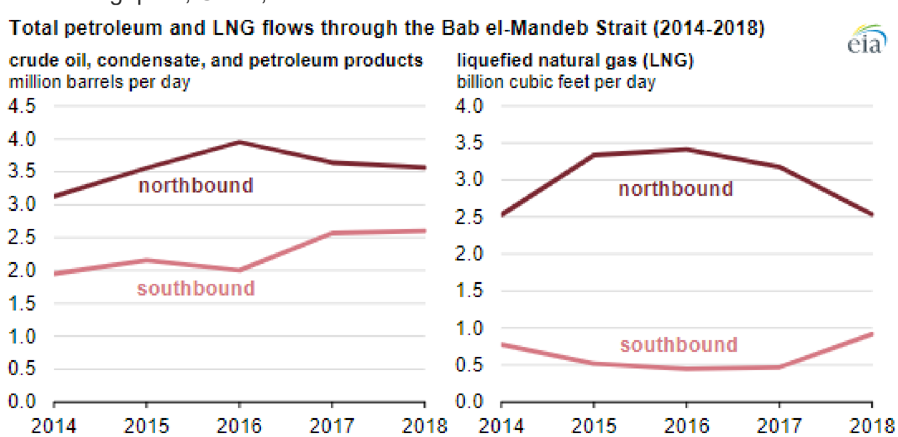
The Bab el-Mandeb Strait is a strategic route for oil and natural gas shipments

Source: U.S. Energy Information Administration

The Bab el-Mandeb Strait is a sea route chokepoint between the Horn of Africa and the Middle East, connecting the Red Sea to the Gulf of Aden and Arabian Sea. Most exports of petroleum and natural gas from the Persian Gulf that transit the Suez Canal or the SUMED Pipeline pass through both the Bab el-Mandeb and the Strait of Hormuz.

Chokepoints are narrow channels along widely used global sea routes that are critical to global energy security. The Bab el-Mandeb Strait is 18 miles wide at its narrowest point, limiting tanker traffic to two 2-mile-wide channels for inbound and outbound shipments. Closure of the Bab el-Mandeb Strait could keep tankers originating in the Persian Gulf from transiting the Suez Canal or reaching the SUMED Pipeline, forcing them to divert around the southern tip of Africa, which would increase transit time and shipping costs.

In 2018, an estimated 6.2 million barrels per day (b/d) of crude oil, condensate, and refined petroleum products flowed through the Bab el-Mandeb Strait toward Europe, the United States, and Asia, an increase from 5.1 million b/d in 2014. Total petroleum flows through the Bab el-Mandeb Strait accounted for about 9% of total seaborne-traded petroleum (crude oil and refined petroleum products) in 2017. About 3.6 million b/d moved north toward Europe; another 2.6 million b/d flowed in the opposite direction mainly to Asian markets such as Singapore, China, and India.



Source: U.S. Energy Information Administration, based on ClipperData, Inc; Suez Canal Authority; and International Group of LNG Importers (GIIGNL) using EIA conversion factors.
Note: CSV data

Before 2015, volumes of liquefied natural gas (LNG) passing through the Bab el-Mandeb Strait matched those passing through the Suez Canal because the Red Sea did not have any LNG infrastructure. In 2015, both Jordan and Egypt began importing small volumes of LNG into Red Sea ports, and these countries' imports of LNG peaked in 2016 at 1.4 billion cubic feet per day, 80% of which was delivered through the Bab el-Mandeb Strait.

More recently, as new natural gas fields in Egypt have come online, the need for Egypt to import LNG has decreased. Like flows to Egypt, total northbound flows of LNG via the Bab el-Mandeb have also decreased since 2016 as northbound flows to other destinations have remained fairly constant.

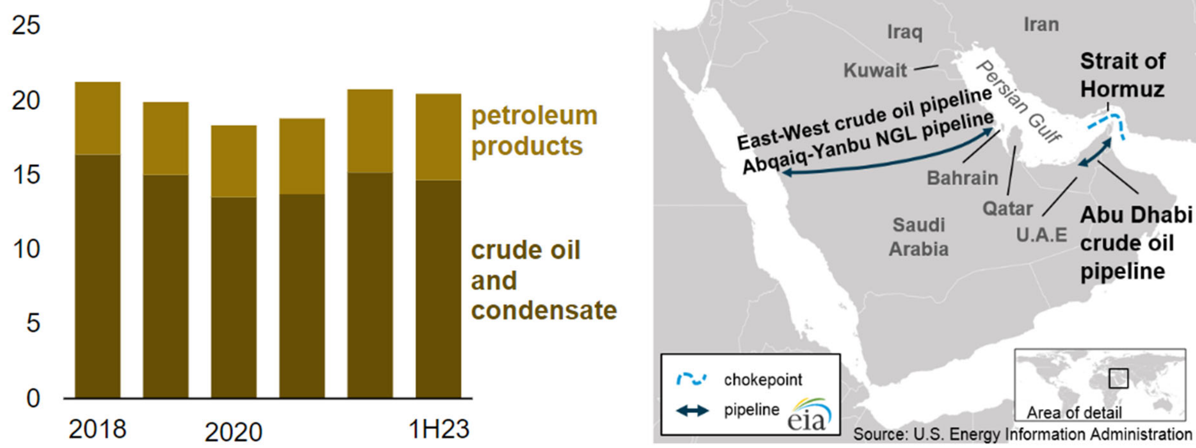
https://www.eia.gov/todayinenergy/detail.php?id=61002

NOVEMBER 21, 2023

The Strait of Hormuz is the world's most important oil transit chokepoint

Annual volumes of crude oil, condensate and petroleum products transported through the Strait of Hormuz (2018–1H23)

million barrels per day



Data source: U.S. Energy Information Administration analysis based on Vortexa tanker tracking and FACTS Global Energy

Note: 1H23=first half of 2023

The Strait of Hormuz, located between Oman and Iran, connects the Persian Gulf with the Gulf of Oman and the Arabian Sea. The Strait of Hormuz is the world's most important oil chokepoint because large volumes of oil flow through the strait. In 2022, its oil flow averaged 21 million barrels per day (b/d), or the equivalent of about 21% of global petroleum liquids consumption. In the first half of 2023, total oil flows through the Strait of Hormuz remained relatively flat compared with 2022 because increased flows of oil products partially offset declines in crude oil and condensate.

Chokepoints are narrow channels along widely used global sea routes that are critical to global energy security. The inability of oil to transit a major chokepoint, even temporarily, can create substantial supply delays and raise shipping costs, increasing world energy prices. Although most chokepoints can be circumvented by using other routes, which often add significantly to transit time, some chokepoints have no practical alternatives.

Between 2020 and 2022, volumes of crude oil, condensate, and petroleum products transiting the Strait of Hormuz rose by 2.4 million b/d as oil demand recovered after the economic downturn from the COVID-19 pandemic. In the first half of 2023, shipments of crude oil and condensates dropped because OPEC+ members implemented crude oil production cuts starting in November 2022. Flows through the Strait of Hormuz in 2022 and the first half of 2023 made up more than one-quarter of total global seaborne traded oil. In addition, around one-fifth of global liquefied natural gas trade also transited the Strait of Hormuz in 2022.

Volume of crude oil, condensate, and petroleum products transported through the Strait of Hormuz (2018–1H23)
million barrels per day

	2018	2019	2020	2021	2022	1H23
Total oil flows through Strait of Hormuz	**21.3**	**19.9**	**18.3**	**18.8**	**20.8**	**20.5**
Crude oil and condensate	16.4	15.0	13.5	13.7	15.2	14.7
Petroleum products	4.9	4.9	4.8	5.1	5.6	5.8
World maritime oil trade	**77.4**	**77.1**	**71.9**	**73.2**	**75.2**	**76.3**
World total petroleum and other liquids consumption	**100.1**	**100.9**	**91.6**	**97.1**	**99.6**	**100.3**
LNG flows through Strait of Hormuz (billion cubic feet per day)	**10.3**	**10.6**	**10.4**	**10.6**	**10.9**	**10.8**

Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, and U.S. Energy Information Administration analysis based on Vortexa tanker tracking and FACTS Global Energy
Note: World maritime oil trade excludes intra-country volumes except those volumes that transit the Strait of Hormuz. LNG=liquefied natural gas. 1H23=first half of 2023.

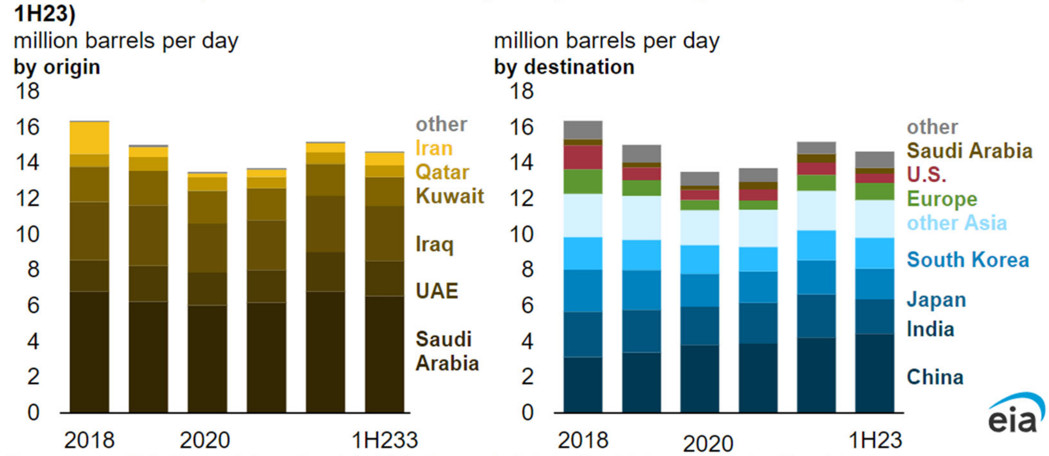
Only Saudi Arabia and the United Arab Emirates (UAE) have operating pipelines that can circumvent the Strait of Hormuz. Saudi Aramco operates the 5-million-b/d East-West crude oil pipeline and temporarily expanded the pipeline’s capacity to 7 million b/d in 2019 when it converted some natural gas liquids pipelines to accept crude oil. The UAE links its onshore oil fields to the Fujairah export terminal on the Gulf of Oman with a 1.5 million b/d pipeline.

Iran inaugurated the Goreh-Jask pipeline and the Jask export terminal on the Gulf of Oman with a single export cargo in July 2021. The pipeline’s capacity was 0.3 million b/d at that time, although Iran has not used the pipeline since then. We estimate that around 3.5 million b/d of effective unused capacity from these pipelines could be available to bypass the strait in the event of a supply disruption.

Based on tanker tracking data published by Vortexa, Saudi Arabia moves more crude oil and condensate through the Strait of Hormuz than any other country, most of which is exported to other countries. Around 0.5 million b/d transited the strait in 2022 from Saudi ports in the Persian Gulf to Saudi ports in the Red Sea.

We estimate that 82% of the crude oil and condensate that moved through the Strait of Hormuz went to Asian markets in 2022. China, India, Japan, and South Korea were the top destinations for crude oil moving through the Strait of Hormuz to Asia, accounting for 67% of all Hormuz crude oil and condensate flows in 2022 and the first half of 2023.

Annual volumes (crude oil and condensate) transported through the Strait of Hormuz (2018–1H23)



Data source: U.S. Energy Information Administration analysis based on Vortexa tanker tracking data
Note: 1H23=first half of 2023.

In 2022, the United States imported about 0.7 million b/d of crude oil and condensate from Persian Gulf countries through the Strait of Hormuz, accounting for about 11% of U.S. crude oil and condensate imports and 3% of U.S. petroleum liquids consumption. U.S. crude oil imports from countries in the Persian Gulf have fallen by half since 2018 as domestic production has increased.

Principal contributors: Candace Dunn, Justine Barden https://www.globaltimes.cn/page/202312/1302897.shtml

No new infectious diseases or pathogens detected in China’s prevalent acute respiratory diseases: NHC

By Global Times Published: Dec 02, 2023 08:43 PM

The acute respiratory diseases that are currently prevalent in China are all caused by known pathogens, with no new infectious diseases caused by new virus or bacteria have been detected, according to the National Health Commission (NHC) during a press conference held on Saturday.

At the same time, China has been in close communication with the World Health Organization regarding the prevalence of respiratory diseases. Officials stated that there are mature treatment methods available for the currently prevalent diseases.

In addition, the health authorities have actively responded to the high incidence of respiratory diseases in children and the significant increase in visits to medical institutions. They have coordinated necessary measures and required all types of medical institutions at all levels to fully open pediatric outpatient services.

The medical institutions are also required to increase the number of midday, evening, and weekend outpatient services, extend service hours, expand hospital bed capacity, and continuously optimize registration, examination, payment, and other medical processes to facilitate people's seeking medical treatment.

Furthermore, the National Influenza Center under the Chinese Centre for Disease Control and Prevention (China CDC) has been continuously conducting monitoring of the sensitivity of influenza viruses to antiviral drugs. The monitoring results show that the current antiviral drugs are effective against influenza viruses.

Wang Dayan, the director of the National Influenza Centre, said that the China CDC has been conducting surveillance of mutations, including the sensitivity of viruses to antiviral drugs and whether the viruses have developed drug resistance.

The National Influenza Centre, along with multiple laboratories worldwide, has been monitoring the sensitivity of influenza viruses to antiviral drugs. "The monitoring results show that influenza viruses are sensitive to several antiviral drugs currently available, which means that the drugs are effective against influenza viruses," Wang said.

Another aspect of surveillance is the compatibility between circulating viruses and vaccines, specifically whether the viruses have undergone antigenic changes. Wang stated that the components of the influenza vaccine administered this winter are consistent with those of the previous winter.

Currently prevalent subtypes of influenza viruses have not undergone any changes and are consistent with the main branches circulating in most regions globally, she said.

Regarding the public response to the current situation, the NHC emphasized the need to strengthen the ventilation and disinfection of public venues. In addition to opening windows and ventilating regularly, indoor venues should also increase the frequency of cleaning and disinfecting public supplies and facilities that are frequently touched to ensure that the environment in public areas is clean and hygienic.

In addition, the NHC suggested reducing large gatherings in public places. The public cultural venues, museums, and indoor tourist attractions could require reservation and dynamically divert passenger flow in a timely manner to avoid high levels of people gathering.

Officials from the China CDC also emphasized the need to ensure the supply of influenza and other vaccines and vaccination services remain sufficient. They urged key populations such as the elderly and children to receive vaccines as early as possible to reduce the risk of illness.

On Friday, the Chinese health authorities and the WHO held another teleconference regarding ongoing respiratory diseases. During the conference, Chinese experts provided an update on the national monitoring and clinical diagnosis since the previous teleconference on November 23, led by China's NHC.

In-depth technical exchanges took place between both parties, focusing on multiple pathogen monitoring and mycoplasma pneumoniae infection. Both sides expressed their intention to continue communication on these matters.

Global Times

https://www.globaltimes.cn/page/202311/1302731.shtml

Hospitals across China grapple with respiratory illnesses surge

By GT staff reporters Published: Nov 29, 2023 10:37 PM Updated: Nov 29, 2023 10:47 PM


Sick children receive a drip at a children's hospital in Beijing on November 23, 2023. Photo: VCG

From providing more beds for pneumonia treatment and allocating more manpower to extending working hours, hospitals across China are grappling with a surge in cases of respiratory illnesses in children, especially a spike in mycoplasma pneumonia.

But the Global Times learned from several hospitals and clinics in Beijing, Shanghi and Central China's Henan Province that though facing an obvious increase in outpatient and inpatient visits for respiratory illnesses this winter, the health system has not been overwhelmed as it did during the early stage of the fight against COVID-19.

The Capital Institute of Pediatrics, a Beijing-headquartered renowned hospital for children, which has been one of the top choices for Beijing parents when their children get sick, has made several improvements to enhance its medical treatment capability - raising the number of infusion seats by 48.7 percent on the daily basis compared to their usual capacity, and also expanding the number of beds available for patients with pneumonia by 40.58 percent, according to Beijing Youth Daily.

In order to manage the high demand at the hospital, there has been an 86.36 percent increase in the number of doctors available for visits. Moreover, a dedicated fast-track system has been implemented for critically ill children, allowing them to receive diagnostic reports promptly, the Beijing Youth Daily report said.

The Global Times spoke with the pediatrics department at the First Affiliated Hospital of Henan University of Chinese Medicine on Wednesday. Zhou Rongyi, deputy director of the hospital's pediatrics department, stated that his department receives more than 2,000 visits a day, about 70 percent of whom are patients of respiratory tract infections. It has been hard to find a ward since October. Many children are infected with mycoplasma this time. One of the main reasons for this is the combination infections of influenza and mycoplasma."

As one of the coping measures, Zhou's hospital has opened pediatric wards previously used for treating COVID-19 patients to accommodate the surge in cases. Like many other pediatric hospitals, they have extended their working hours from 5:30 pm until 8 pm to provide convenience for working parents.

Zhou emphasized that "while some pediatric hospitals may have long queues and limited ward availability, overall, medical resources have not reached an overwhelmed state. Hospitals have learned from their experiences with COVID-19 and have developed strategies to prioritize severe cases and classify treatment based on symptoms."

Major hospitals and local health authorities have also disseminated information on influenza and pneumonia prevention measures to communities and grass-roots hospitals in a bid to alleviate pressure, Zhou said.

The overall medical situation in our hospital is currently stable, with a decrease in the number of children seeking treatment for mycoplasma pneumonia infection and an increase in cases of influenza, an expert from Shanghai Children's Medical Center, who asked for anonymity, told the Global Times on Wednesday.

The Global Times learned in Shanghai that major hospitals in this metropolis have been adding pre-examination tests, medical scheduling, and enhancing internet-based outpatient services as parts of their efforts to alleviate their pressure of receiving patients. The move has also reduced waiting time of patients.

Though facing overcrowding in hospitals, most people still tend to seek doctors in major hospitals. However, experts said, community hospitals can play a crucial role in managing this wave of respiratory disease.

A Beijing mother, preferred to be referred to as Song, who recently brought her child to the Liulitun Community Health Service Center in Beijing, shared her experience with the Global Times. Due to difficulties in registering at pediatric hospitals and long waiting times, she opted to visit the community hospital near her home. The doctor conducted various tests and prescribed medication for routine treatment. Song emphasized that parents do not need to overcrowd large hospitals when community hospitals are fully capable of providing effective treatment at an early stage.

Lu Hongzhou, head of the Third People's Hospital of Shenzhen, echoed this sentiment. He told the Global Times on Wednesday that most community hospitals can prescribe effective medications and treat respiratory diseases at an early stage.

This year's respiratory diseases are caused by commonly known pathogens, but there has been a noticeable increase in cases of mycoplasma pneumonia, which is more resistant to antibiotics due to long-term overuse. Zhou stated that in his clinical practice, about 80-90 percent of children infected with mycoplasma pneumonia are resistant to commonly used drugs. Early oral treatment in outpatient clinics is no longer effective, leading to more hospitalized cases.

Lu believes the recent outbreak of mycoplasma pneumonia is an "immunization gap," which resulted in children not having the opportunity to develop resistance to common viruses like influenza. As a result, when the COVID-19 restrictions were lifted, they became vulnerable to these pathogens, Lu told the Global Times on Wednesday.

Lu advised parents to consider the prevalence of the disease in their child's environment and seek timely diagnosis and medication. Lu reassured parents that there is no need to worry, as timely treatment can effectively manage infections like mycoplasma pneumonia.

Hypes are biased

Amid a surge in respiratory illnesses in China, which the country's health authorities have already attributed to known pathogens, certain overseas media reports have been sensationalizing the severity of the diseases and even raising doubts about China's transparency in dealing with respiratory illnesses. These reports have hyped concerns about whether travel restrictions should be imposed on China.

Respiratory and pediatric experts have rebuffed these claims, stating that such hype is not based on facts and reminding individual countries and media to avoid their biased perspectives when reporting on China-related affairs.

However, health experts reached by the Global Times have criticized these reports for sensationalizing an inhumane image of the country. The truth is that this practice is not common in hospitals across the country.

The Global Times found out that very few hospitals had set up study areas for children, including Jiangsu Nantong First People's Hospital. Later on, the hospital in Jiangsu clarified that the study zone was set up two months ago as a makeshift measure for students who haven't finished their homework, not as an encouragement for children to study while receiving medical treatment.

Both educational and health authorities in provinces including East China's Shandong Province as well as Beijing have also advised students not to take classes or do their homework when they are sick. Personal health always comes first.

When the World Health Organization made a standard request to China last week for information regarding the reported cases of "undiagnosed pneumonia," some Western media outlets publicized this request as unusual. Experts have noted that this was an attempt to sensationalize China's transparency over increase in respiratory diseases.

On Tuesday, when a reporter from Antara asked the spokesperson of China's Foreign Ministry about rising concerns among the international public about the safety of traveling to China as well as people who travel from China, Wang Wenbin, the spokesperson, said, "Let me assure you that it is safe to travel and do business here in China and there's no need to worry."

On Wednesday, answering a reporter from NHK about international attention over increasing outpatient and emergency visits, Wang said China's National Health Commission (NHC) held a press conference on November 26 to share information on the prevention and treatment of respiratory infectious diseases in winter. The NHC has had communication in a timely manner with the WHO, Wang emphasized.

Commenting on media's exaggerated worries and concerns about China's respiratory disease, Zhou, from the First Affiliated Hospital of Henan University of Chinese Medicine,told the Global Times that it is not surprising to see some Western media outlets spreading false information about China. "But facts speak for themselves."

Caixin China General Manufacturing PMI®

PMI improves to three-month high in November

Chinese manufacturing firms signalled a fresh improvement in the health of the sector during November, according to the latest PMI data. A sustained rise in new orders helped to lift factory production for the third time in the past four months, albeit marginally. New export business fell slightly, however, with firms often linking this to subdued global demand conditions. At the same time, manufacturers registered only a marginal drop in staffing levels and a slight rise in purchasing activity, as confidence around the year-ahead ticked up.

On the inflation front, average input costs rose at a modest pace that remained much slower than the series average, while selling prices were broadly unchanged.

The headline seasonally adjusted *Purchasing Managers' Index™ (PMI®)* – a composite indicator designed to provide a single-figure snapshot of operating conditions in the manufacturing economy – increased from 49.5 in October to a three-month high of 50.7 in November, to signal a renewed improvement in manufacturing conditions. Though only marginal, it marked the third time in the past four months that the health of the sector has strengthened.

Supporting the above 50.0 PMI figure was a sustained and quicker rise in overall new business received by Chinese goods producers in November. Though modest, the rate of new order growth was the best seen since June, with firms often noting that firmer market conditions had helped to lift sales. However, new work from overseas continued to fall slightly, underscoring a relatively challenging external demand environment.

The further increase in total new orders prompted firms to expand their production schedules after a slight reduction in October. The rate of growth was quicker than the post-pandemic trend, albeit modest overall.

In line with the trend seen for output, purchasing activity also returned to expansion in November. Input buying has now increased in three of the past four months, though the latest rise was only slight. Concurrently, stocks of purchases fell at a weaker pace, while the upturn in production contributed to a stronger rise in inventories of finished goods.

Supply chain performance meanwhile improved slightly for the second month in a row. A number of firms mentioned that improved capacity at vendors had meant that they were more able to fulfil requests of quicker deliveries.

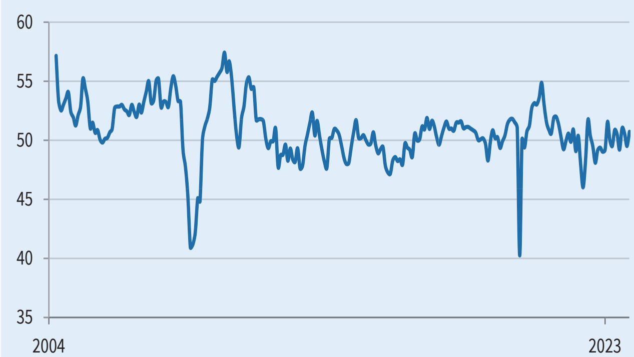
Although employment across China's manufacturing sector continued to contract, the rate of job shedding eased in November. Notably, the rate of payroll cuts was the slowest seen in the current three-month sequence of falling headcounts and only marginal.

The weaker reduction in staffing levels coincided with an improvement in business confidence midway through the final quarter of the year. Optimism regarding the 12-month outlook for output picked up to the highest since July. Firms were often hopeful that greater customer demand at home and overseas will support growth over the coming year. However, overall sentiment remained softer than the historical trend.

Prices data indicated that cost pressures remained subdued in November, with average input costs rising at a modest pace that was slower than in October. At the same time, efforts to attract and secure sales curbed overall pricing power, and output charges were broadly unchanged on the month.

China General Manufacturing PMI

sa, >50 = improvement since previous month



Sources: Caixin, S&P Global PMI

Key findings:

Production returns to growth amid sustained rise in total new work

Softer reduction in employment

Business confidence ticks up to four-month high

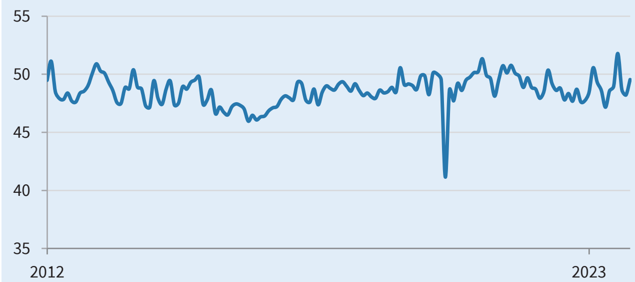
New Export Orders Index

sa, >50 = growth since previous month

Sources: Caixin, S&P Global PMI

Employment Index

sa, >50 = growth since previous month



Sources: Caixin, S&P Global PMI

Commenting on the China General Manufacturing PMI® data, Dr. Wang Zhe, Senior Economist at Caixin Insight Group said:

"In November, the Caixin China General Manufacturing PMI rose 1.2 points from the previous month to 50.7, hitting a three-month high and indicating that the sector improved.

"Manufacturing output returned to expansion from a contraction in October, with the corresponding subindex coming in above 50 for the third time in the past four months.

"Demand continued to grow, as the gauge for new orders remained in expansionary territory for the fourth consecutive month, hitting the highest since June. Compared with consumer goods and intermediate goods, the supply and demand of investment goods were weaker.

"Overseas demand remained sluggish, with the measure for new export orders staying in contraction for the fifth straight month.

"The manufacturing job market worsened for another month. The gauge for employment recorded a contraction for the eighth time in the past nine months, as manufacturers generally remained cautious about hiring. However, manufacturers of consumer goods increased hiring.

"The overall decline in employment combined with the increase in demand led to an increase in backlogs of work, with the corresponding gauge staying above 50 for the sixth consecutive month.

"Prices in the manufacturing sector were mostly stable in November. Input costs increased, but by the smallest amount in the past three months. Prices of chemicals and industrial metals were outliers, rising relatively significantly. The gauge for output prices charged marked a minor contraction, as manufacturers were under pressure to sell products and clear inventory.

"Suppliers' logistics continued to improve. The November reading for their delivery times was above 50 for the eighth time in the past 10 months, indicating smoother logistics and improving transportation efficiency. Manufacturers, especially of consumer goods and intermediate goods, increased their quantity of purchases. Inventories of raw materials dropped as some companies took a cautious approach to inventory management.

"Business optimism rebounded in November. Manufacturers' sentiment improved and the reading for expectations for future output hit a four-month high. But surveyed companies were still worried about the global economic outlook in the next 12 months.

"Overall, the manufacturing sector improved in November. Supply and demand both expanded, prices remained stable, logistics improved, purchasing quantities increased, and manufacturers were more optimistic. However, external demand remained sluggish and employment weak, while manufacturers leaned toward caution in inventory management.

"The macro economy has been recovering. Household consumption, industrial production and market expectations have all improved. But domestic and foreign demand is still insufficient, employment pressure remains high, and economic recovery has yet to find solid footing.

"Policies should focus on expanding consumption, increasing income, promoting employment and stabilizing expectations. Considering that economic growth in the third quarter slightly exceeded expectations and the base number for fourth-quarter year-on-year growth is low, achieving the target of around 5% for the whole year looks attainable. Ultimately, policies should aim to lay a solid foundation for long-term economic growth and cultivate long-lasting market confidence."

https://www.straitstimes.com/singapore/transport/fuelled-by-s-korea-growth-changi-airport-traffic-crosses-90-of-pre-covid-19-levels-for-first-time

Changi Airport traffic crosses 90% of pre-pandemic levels for first time, fuelled by S. Korea travel

Overall passenger traffic at Changi Airport rebounded to 90.7 per cent of 2019 levels in October, the highest since Covid-19 struck. ST PHOTO: KUA CHEE SIONG

Kok Yufeng
Transport Correspondent

UPDATED

NOV 28, 2023, 11:32 P.M. SGT

SINGAPORE - Passenger traffic between Singapore and South Korea eclipsed pre-pandemic levels by 36 per cent in October. This makes South Korea the fastest-growing market for Changi Airport in 2023, the airport's operator said on Nov 28.

This growth has, in turn, helped to drive the airport's post-pandemic rebound, with overall passenger figures in October recovering to 90.7 per cent of 2019 levels, the highest percentage since Covid-19 struck.

This is also the first time monthly passenger traffic has crossed 90 per cent of pre-pandemic levels, said Changi Airport Group (CAG).

The previous peak was in May, when the recovery stood at 89.5 per cent.

Since then, the recovery rate has been hovering below 90 per cent, due to the number of visitor arrivals to Singapore, CAG said.

In October, 5.12 million travellers passed through the airport, compared with 5.65 million in October 2019, according to data released by CAG and the Civil Aviation Authority of Singapore.

About 28,700 commercial flights took off from or landed at Changi, amounting to 89.8 per cent of the flights in October 2019.

CAG said the South Korean market has seen the strongest recovery so far in 2023 among the airport's top 10 markets. Behind it are India, which is at 102 per cent of pre-pandemic levels compared with 2019, and Australia, at 94 per cent.

About 209,000 passengers travelled between Singapore and South Korea in October, compared with 153,000 in October 2019. In the first 10 months of 2023, 1.8 million passengers travelled between the two countries, compared with 1.32 million over the same period in 2019.

For comparison, Changi Airport's top market in October was Indonesia, with 605,876 passenger movements. Markets with similar passenger traffic numbers as South Korea in October include the Philippines (210,878) and Vietnam (195,346).

CAG said passenger traffic between South Korea and Singapore had recovered to above 2019 levels since January, outperforming pre-Covid-19 numbers by at least 25 per cent each month.

It attributed this to the growth in traffic between the Republic and the South Korean cities of Seoul and Busan, as well as low-cost carrier Scoot's launch of flights to and from Jeju island in June 2022.

CAG said Seoul is now Changi Airport's sixth-largest city link by passenger traffic. It was 12th in 2019. In October 2023, 186,000 passengers travelled between Changi Airport and Seoul's Incheon Airport, compared with 142,000 in October 2019.

Another factor behind the growing demand has been a corresponding increase in flight capacity by airlines.

In May 2022, T'way Air became the first South Korean low-cost carrier to operate between Singapore and Seoul, with two flights a week. It now runs daily services.

Meanwhile, Scoot flies between Singapore and Seoul seven times a week, compared with thrice a week in January 2020.

Passenger traffic between the port city of Busan and Singapore has grown the fastest, said CAG, with passenger movements in October 2023 more than double that of January.

CAG noted Jeju Air's reinstatement of flights between Singapore and Busan in June 2022. The frequency has also risen from twice-weekly to six times a week.

Singapore Airlines, too, resumed flights to the city in August.

CAG said there are now six airlines operating flights between Singapore and South Korea, compared with five before the pandemic.

As at November, there are 92 weekly one-way flights to South Korea, compared with 84 in January, it added.

Mr Lim Ching Kiat, CAG's executive vice-president for air hub and cargo development, said the injection of flight capacity and services by low-cost carriers, such as T'way Air and Jeju Air, has improved accessibility to South Korea and increased options for consumers, especially younger travellers who are more price-sensitive.

"With the option of connecting to Busan and Seoul in a single itinerary, travellers now have more ways to experience South Korea," he added.

Ms Chung Tak Ing, assistant general manager of tour agency ASA Holidays, said the company observed a 30 per cent to 40 per cent increase in Singaporeans signing up for its tour packages to South Korea in the last quarter of 2023, compared with the same period in 2022.

October is a peak travel period to South Korea. Ms Chung said some people could have travelled there to see the autumn foliage. South Korea is among the agency's top holiday destinations in 2023, along with Japan, Europe and China, she added.

She said many Singaporeans pick South Korea as they like shopping there, eating Korean food and experiencing Korean culture. She predicts travel demand to South Korea will remain strong, with more families travelling during the year-end school holidays.

- Additional reporting by Esther Loi

PRESS RELEASE

Oil & Gas Decarbonization Charter launched to accelerate climate action

Demonstrating important progress on the road to 2030, many National Oil Companies take historic first steps to decarbonisation.

- The COP28 Presidency and the Kingdom of Saudi Arabia today announced 50 oil and gas companies have joined the Oil and Gas Decarbonization Charter, a global industry Charter dedicated to high-scale impact, and to speed up climate action within the industry.
- The Charter formalizes COP28 President Dr. Sultan Al Jaber's calls for the industry to align around net zero by or before 2050, zero-out methane emissions, eliminate routine flaring by 2030 and to continue working towards industry best practices in emission reduction.
- Launching the OGDC at COP28, Dr. Al Jaber emphasized: "The launch of the OGDC is a great first step — and whilst many national oil companies have adopted net zero 2050 targets for the first time, I know that they and others, can and need to do more. We need the entire industry to keep 1.5C within reach and set even stronger ambitions for decarbonization."
- Signatory companies represent over 40 percent of global oil production, with National Oil Companies representing over 60 percent of signatories – the largest-ever number of NOCs to commit to a decarbonization initiative.

Dubai, 2 December 2023: The COP28 Presidency and the Kingdom of Saudi Arabia today launched the landmark Oil and Gas Decarbonization Charter (OGDC), a global industry Charter dedicated to speeding up climate action and achieving high-scale impact across the oil and gas sectors.

To date, 50 companies, representing more than 40 percent of global oil production have signed on to the OGDC, with National Oil Companies representing over 60 percent of signatories – the largest-ever number of NOCs to commit to a decarbonization initiative.

COP28 President Dr. Sultan Al Jaber said, "The launch of the OGDC is a great first step — and whilst many national oil companies have adopted net-zero 2050 targets for the first time, I know that they and others, can and need to do more. We need the entire industry to keep 1.5C within reach and set even stronger ambitions for decarbonization."

Signatories have committed to net-zero operations by 2050 at the latest, and ending routine flaring by 2030, and near-zero upstream methane emissions. They agree to continue to work towards industry best practices in emission reductions and a number of key actions, including:

- Investing in the energy system of the future including renewables, low-carbon fuels and negative emissions technologies.
- Increasing transparency, including enhancing measurement, monitoring, reporting and independent verification of greenhouse gas emissions and their performance and progress in reducing emissions.
- Increasing alignment with broader industry best practices to accelerate decarbonization of operations and aspire to implement current best practices by 2030 to collectively reduce emission intensity.
- Reducing energy poverty and providing secure and affordable energy to support the development of all economies.

Dr. Al Jaber said of the Charter, "I am committed to both inclusivity and transparency. If we want to accelerate progress across the climate agenda, we must bring everyone in to be accountable and responsible for climate action. We must all focus on reducing emissions and apply a positive can-do vision to drive climate action and get everyone to take action. We need a clear action plan, and I am determined to deliver one."

The OGDC recognizes that climate change is "a collective challenge that requires strong and focused action from producers and consumers of energy, fundamental changes across society and the energy sector, as well as international collaboration, to advance the energy transition and reduce greenhouse gas emissions from oil and gas."

Beyond decarbonization, signatories recognize it is essential for the oil and gas industry to increase actions, including engaging with customers, investing in the energy system of the future, and increasing transparency in measurement, reporting and independent verification.

The OGDC is a key initiative under the Global Decarbonization Accelerator (GDA), which was launched at the World Climate Action Summit today. The GDA is focused on three key pillars: rapidly scaling the energy system of tomorrow; decarbonizing the energy system of today; and targeting methane and other non-CO2 greenhouse gases. It is a comprehensive plan for system-wide change, addressing the demand and the supply of energy at the same time. The GDA has been informed by the thinking of key stakeholders, including international organisations, governments and policy makers, NGOs, and CEOs from every industrial sector.

-ENDS-

Signatories to Oil and Gas Decarbonization Charter

NOCs: ADNOC, Bapco Energies, Ecopetrol, EGAS, Equinor, GOGC, INPEX Corporation, KazMunaiGas, Mari Petroleum, Namcor, National Oil Company of Libya, Nilepet, NNPC, OGDC, ONGC, Pakistan Petroleum Limited (PPL), Pertamina, Petoro, Petrobras, Petroleum Development Oman, Petronas, PTTEP, Saudi Aramco, SNOC, SOCAR, Sonangol, Uzbekneftegaz, ZhenHua Oil, YPF.

IOCs: Azule Energy, BP, Cepsa, COSMO Energy, Crescent Petroleum, Dolphin Energy Limited, Energean Oil & Gas, Eni, EQT Corporation, Exxonmobil, ITOCHU, LUKOIL, Mitsui & Co, Oando plc, Occidental Petroleum, OMV, Puma Energy (Trafigura), Repsol, Shell, TotalEnergies, Woodside Energy Group

Notes to Editors COP28 UAE:

- COP28 UAE is taking place at Expo City Dubai from November 30-December 12, 2023. The Conference is expected to convene over 70,000 participants, including heads of state, government officials, international industry leaders, private sector representatives, academics, experts, youth, and non-state actors.
- As mandated by the Paris Climate Agreement, COP28 UAE is delivering the first ever Global Stocktake – a comprehensive evaluation of progress against climate goals.
- The UAE is leading a process for all parties to agree upon a clear roadmap to accelerate progress through a pragmatic global energy transition and a “leave no one behind” approach to inclusive climate action.

https://www.theguardian.com/environment/2023/dec/03/back-into-caves-cop28-president-dismisses-phase-out-of-fossil-fuels

Cop28 president says there is ‘no science’ behind demands for phase-out of fossil fuels

Exclusive: UAE’s Sultan Al Jaber says phase-out of coal, oil and gas would take world ‘back into caves’

Sultan Al Jaber: ‘There is no science out there that says that the phase-out of fossil fuel is what’s going to achieve 1.5C.’ Photograph: Anadolu/Getty Images

- **Cop28 live – latest updates**

Damian Carrington *and* **Ben Stockton**
Sun 3 Dec 2023 10.33 GMT

The president of Cop28, Sultan Al Jaber, has claimed there is “no science” indicating that a phase-out of fossil fuels is needed to restrict global heating to 1.5C, the Guardian and the Centre for Climate Reporting can reveal.
Al Jaber also said a phase-out of fossil fuels would not allow sustainable development “unless you want to take the world back into caves”.

The comments were “incredibly concerning” and “verging on climate denial”, scientists said, and they were at odds with the position of the UN secretary general, António Guterres.

Al Jaber made the comments in ill-tempered responses to questions from Mary Robinson, the chair of the Elders group and a former UN special envoy for climate change, during a live online event on 21 November. As well as running Cop28 in Dubai, Al Jaber is also the chief executive of the United Arab Emirates’ state oil company, Adnoc, which many observers see as a serious conflict of interest.

Cop28 president refuses to commit to phasing out fossil fuels – video

More than 100 countries already support a phase-out of fossil fuels and whether the final Cop28 agreement calls for this or uses weaker language such as "phase-down" is one of the most fiercely fought issues at the summit and may be the key determinant of its success. Deep and rapid cuts are needed to bring fossil fuel emissions to zero and limit fast-worsening climate impacts.

Al Jaber spoke with Robinson at a She Changes Climate event. Robinson said: "We're in an absolute crisis that is hurting women and children more than anyone … and it's because we have not yet committed to phasing out fossil fuel. That is the one decision that Cop28 can take and in many ways, because you're head of Adnoc, you could actually take it with more credibility."

Al Jaber said: "I accepted to come to this meeting to have a sober and mature conversation. I'm not in any way signing up to any discussion that is alarmist. There is no science out there, or no scenario out there, that says that the phase-out of fossil fuel is what's going to achieve 1.5C."

Robinson challenged him further, saying: "I read that your company is investing in a lot more fossil fuel in the future." Al Jaber responded: "You're reading your own media, which is biased and wrong. I am telling you I am the man in charge."

Al Jaber then said: "Please help me, show me the roadmap for a phase-out of fossil fuel that will allow for sustainable socioeconomic development, unless you want to take the world back into caves."

"I don't think [you] will be able to help solve the climate problem by pointing fingers or contributing to the polarisation and the divide that is already happening in the world. Show me the solutions. Stop the pointing of fingers. Stop it," Al Jaber said.

Guterres told Cop28 delegates on Friday: "The science is clear: The 1.5C limit is only possible if we ultimately stop burning all fossil fuels. Not reduce, not abate. Phase out, with a clear timeframe."

Bill Hare, the chief executive of Climate Analytics, said: “This is an extraordinary, revealing, worrying and belligerent exchange. ‘Sending us back to caves’ is the oldest of fossil fuel industry tropes: it’s verging on climate denial.”

“Al Jaber is asking for a 1.5C roadmap – anyone who cares can find that in the International Energy Agency’s latest net zero emissions scenario, which says there cannot be any new fossil fuel development. The science is absolutely clear [and] that absolutely means a phase-out by mid-century, which will enhance the lives of all of humanity.”

Prof Sir David King, the chair of the Climate Crisis Advisory Group and a former UK chief scientific adviser, said: “It is incredibly concerning and surprising to hear the Cop28 president defend the use of fossil fuels. It is undeniable that to limit global warming to 1.5C we must all rapidly reduce carbon emissions and phase-out the use of fossil fuels by 2035 at the latest. The alternative is an unmanageable future for humanity.”

Dr Friederike Otto, of Imperial College London, UK, said: “The science of climate change has been clear for decades: we need to stop burning fossil fuels. A failure to phase out fossil fuels at Cop28 will put several millions more vulnerable people in the firing line of climate change. This would be a terrible legacy for Cop28.”
Otto also rejected the claim that fossil fuels were necessary for development in poorer countries, saying that the latest report from the Intergovernmental Panel on Climate Change “shows that the UN’s sustainable development goals are not achievable by continuing the current fossil-driven high emission economies. [There are] massive co-benefits that come with changing to a fossil-free world”.

A spokesperson for Cop28 said: “The IEA and IPCC 1.5C scenarios clearly state that fossil fuels will have to play a role in the future energy system, albeit a smaller one. The Cop president was quoting the science, and leading climate experts.
“He has clearly said that the oil and gas industry must tackle scope 1 and 2 emissions [from their operations], must invest in clean energy and clean technologies to address scope 3 emissions [from burning fuels], and that all industry must align around keeping the north star of 1.5C within reach.

“Once again, this is clearly part of a continued effort to undermine the Cop presidency’s tangible achievements and a misrepresentation of our position and successes to date.”

The spokesperson said the presidency had operationalised the loss and damage fund with more than $700m, launched a $30bn private market climate vehicle, and brought 51 oil companies to agree decarbonisation targets and 119 countries to sign a pledge to triple renewable energy. “This is just the beginning,” the spokesperson said.

Al Jaber is also head of Masdar, the UAE’s renewable energy company, but his appointment as Cop28 president has been controversial. Shortly before the summit, leaked documents showed that the UAE had planned to use climate meetings with governments to promote oil and gas deals. Al Jaber denied having seen or used the talking points in the documents. Adnoc also has the largest net-zero-busting expansion plans for oil and gas, according to independent analysis.

The issue of a phase-out or phase-down is complicated by the terms not having agreed definitions and by the highly uncertain role of technologies to “abate” emissions, such as carbon capture and storage. “Keeping the Paris agreement targets alive will require a full fossil fuel phase-out, not a vague phase-down relying on unproven technologies,” said Otto.

More than 100 African, European, Pacific and Caribbean countries back a phase-out of unabated fossil fuels. The US, the world’s biggest oil and gas producer, also backs a phase-out. Others, such as Russia, Saudi Arabia and China, reject the call. Both options are on the table at Cop28, as well as proposals to only mention coal, or to not say anything at all about fossil fuels.
Cop26 in Glasgow in 2021 agreed for the first time to “phase down” coal use, but this had been watered down from “phase out” at the last minute, bringing the Cop26 president, Alok Sharma, to tears.
In his conversation with Robinson, Al Jaber also said: “A phase-down and a phase-out of fossil fuel in my view is inevitable. That is essential. But we need to be real serious and pragmatic about it.”

“Hold on. Let me just explain,” he said. “The world will continue to need energy sources. We [UAE] are the only ones in the world today that have been decarbonising the oil and gas resources. We have the lowest carbon intensity.”

This refers to the emissions from the energy used to extract fossil fuels, not the far larger emissions from burning the fuels. “There is no such thing as ‘low carbon’ or ‘lower carbon’ oil and gas,” said Otto.

Numerous commentators have said that negative or embarrassing revelations about Al Jaber and Adnoc increase the pressure on him to deliver a strong Cop28 deal. The Guardian reported recently that state-run UAE oil and gas fields had been flaring gas almost daily despite having committed 20 years ago to a policy of zero routine flaring.
The Guardian previously reported that Adnoc had been able to read emails to and from the Cop28 office until the Guardian raised the issue in June and that the UAE had also failed to report its oil industry’s emissions of the powerful greenhouse gas methane.
Harjeet Singh, at Climate Action Network, said: “Cop28 must deliver a decision on phasing out fossil fuels in a just and equitable manner, without any loopholes or escape routes for the industry to continue expanding and exacerbating the climate crisis.”

Cop28: Can fossil fuel companies transition to clean energy?
On Tuesday 5 December, 8pm-9.15pm GMT, join Damian Carrington, Christiana Figueres, Tessa Khan and Mike Coffin for a livestreamed discussion on whether fossil fuel companies can transition to clean energy. Book tickets here or at theguardian.live

Excerpts From:

Russia Calling! Investment Forum

Vladimir Putin attended the plenary session of the 11th VTB Capital Russia Calling! Investment Forum that focused on building bridges over the waves of de-globalisation.
November 20, 2019
15:20
Moscow

http://en.kremlin.ru/events/president/transcripts/62073

Emma Marcegaglia (ENI): Mr President, thank you very much for this opportunity.

I would like to understand what is your assessment of the energy transition that is going on. In ENI we believe that, of course, you have to be compliant with the Paris Agreement, so we are reducing our CO2 emission, our fugitives; we are also investing in the renewables, in all the technology, but we think that of course gas and oil – mainly, gas – will continue to have a very strong role.

As you know, there is this idea in Europe and in some NGOs that gas will not be there in the future. I am sure we share the idea that this is not good and this is not also what is happening. So, I would like to know what is your assessment on this and also would like to know what is your assessment on the geopolitical situation, mainly in the Middle East. You had a great role in having a better situation. Do you think it is now fixed? Or how do you see the situation in the near future? Thank you.

Vladimir Putin: Our civilisation is making rather good progress, and no one wants us to end up in caves as a result of such progress, either as a result of an environmental collapse or some other unexpected developments.

So, as responsible people, and we in Russia consider ourselves as such, we will strive to ensure that the balance of our energy sector, at least in Russia, is as green as possible. In fact, Russia's energy balance is one of the world's greenest. I have several considerations in mind. If you look at the structure of our energy industry, you will see a significant portion of hydroelectric power, nuclear energy and natural gas generation.

Please note that the environment in many countries is largely affected by coal fuel, which is the world's most widely used primary energy product. Most coal is burned to produce heat. In this sense, neglecting a pure hydrocarbon such as natural gas is, in my opinion, uncalled for, because it is the purest hydrocarbon out there.

When ideas like this are promoted, it sounds like humanity will once again end up in caves, but this time because it will consume nothing, if all energy is reduced to zero, or if we rely solely on solar energy or wind energy or tidal energy. Today's technology is such that without hydrocarbons, nuclear energy or hydropower, humanity will not be able to survive or preserve its civilisation. This must be taken seriously or, as people say, in an adult-like manner.

When ideas like the one you just mentioned are promoted, it seems to me that it's not even the interests of the overwhelming majority of countries in their quest to preserve the environment that come into play here, but the competitive interests of those who promote corresponding ideas on the global energy market. These people deftly blend in with today's trends in the public consciousness in an effort to mislead us.

To reiterate, we must proceed from reality. Of course, it is imperative to concentrate resources on developing renewable resources such as hydrogen and other clean sources which will preserve nature for many thousands of years to come and for future generations

Cristopher Granville: Thank you, Mr Kostin.

My name is Christopher Granville, I work for the TS Lombard investment analytics company. I am also a board member of Baring Emerging Europe. This British investment company invests tens of millions of dollars in stocks of Russian companies.

With my question, I would like to expand on the previous questions about the disturbing phenomenon of global climate change. By the way, all the previous questions on this issue came from female members of our audience so I want to give it a male voice as well. I want to ask you about macroeconomic aspects of this problem.

The growth of demand for hydrocarbons is slowing down. In the long term we can expect an absolute diminution in this demand and, as a result, a landslide in the prices of oil and natural gas. In these circumstances, does it make sense to spend resources of Russia's sovereign fund, the National Welfare Fund, since the priorities are to diversify the economy and increase non-commodity exports, as was stated today? This holds back any real strengthening of the ruble because it is essentially contingent on increasing the National Welfare Fund expenditure. Wouldn't it be better to maximise the safety margin and not to spend this money, as it was announced by the Government?

Vladimir Putin: We did not invent anything new here either. And practically all the countries that have sufficient resources in their funds, whatever they are called (ours is called the National Welfare Fund), once these resources have reached a certain level, they are used. The question is how?

You mentioned non-commodity exports. This is exactly what we are going to do. It is one of our tasks. We are not going to spend the National Welfare Fund money on developing the oil and gas industry. We are going to spend it on infrastructure or perhaps on developing high-tech industries.

It could be oil and gas but we have no decisions along these lines. The only reason why we might be considering this type of spending is that we are just forced to do certain things. For example, we have been restricted in buying modern oil and gas equipment, which means we have to simply think about producing it here in Russia, obviously. Although here, too, we do not have any decisions yet regarding the use of the National Welfare Fund resources. We do not even plan to do it.

The colleague sitting on my right just mentioned macroeconomic policy, the policy of the Bank of Russia. What was he hinting at? It was that the containment of the money supply in the economy restrains economic development. So, we rely on the assumption that all these actions will be balanced, timely and will promote faster economic growth.

Your remark that the demand for hydrocarbons will be falling with the decrease in global GDP does not hold water, and I will tell you why. Last year, indeed, growth targets were lower than expected, and even lower this year. Next year, it is assumed – according to forecasts by all global economic institutions – that global GDP will top this year's, but will still be below the year before last, but the growth rates will remain at the same level. I would say the growth rate of global GDP will increase despite all the problems associated with trade wars, restrictions for political reasons, and things like that.

You must certainly be aware of the forecasts from world experts regarding the growth in the consumption of energy resources. True, if such locomotives as the Chinese and Indian economies cut their growth rates, the volume of energy resources needed in the market will probably decrease. Theoretically, yes. But growth still continues. Growth continues, and fast enough. China has adjusted growth rates, but they are still very high. And in India, they are also high. Global GDP is still growing and will continue to grow, it is a safe bet. This is an absolutely obvious fact. It is unlikely that the global economy will go into recession any time soon, even despite the trade wars between China and the United States.

Moreover, I think that in the near future, even taking into account the domestic political calendar in the United States, no one there is really interested in aggravating trade and economic relations between the United States and China. No one is interested, and they will need to stabilise their politics in the run-up to the elections. So in the medium term, at least the growth rate will be ensured, and the energy demand will be undeniable.

And we are not going to spend NWF money on oil and gas.

Nicolas Tjandramaga: Hi, my name is Nick Tjandramaga; I work for Total, the French energy company.

Russia has become a major decider in the oil price, a swing producer as important as OPEC. Oil price remains very important for Russia. Russia also sits on, technically, as big shale reserves as the US. Now if you… economically, probably not feasible to explore, but if you conceptually would be able to apply the technology and a lower cost curve that the US shale producers are having now, you could potentially develop yourself into the largest oil producer by far. It will require effort. Do you think this is desirable, because I mean, you are already quite commodity exposed, independent of ESG. Environmental. Thank you.

Vladimir Putin: Firstly, Russia has a major influence on the global energy market. But the greatest effect comes from working in conjunction with other major producers. Only coordinated efforts bring the best results for global energy markets. In this sense, we will continue working with Saudi Arabia and the Gulf and OPEC countries as part of the OPEC+ system created in recent years. This is my first point.

We may have differences over minor issues, but we share one common goal. The challenge is to build a balanced market that is acceptable for producers and consumers alike. Most importantly – I would like to emphasise this – it must be a predictable market.

With regard to production volumes, Russia was number one in the world not so very long ago. Output is not an end in itself. Incidentally, despite certain restrictions, the total production volume in Russia has slightly increased.

If we are speaking about shale oil, let us wait for the Americans to spend their money on developing innovative technology for the production of shale oil, and then we can walk off with it. We have to see if we are interested in this technology at all and then buy it inexpensively. We are working on it ourselves as well. We really do not have to walk off with anything (I am just joking, or they will blare it out for the entire world to hear); so, we are closely following this.

The fact is that today's technologies of shale oil and shale gas production are, without any exaggeration, barbaric and bad for the environment. In some areas of shale oil production people get black slurry instead of tap water in their homes. We will never use such production technology no matter how lucrative it may be. We can produce oil off the shale and on land, so we do not have such an urgent need to use the shale technology. Most importantly, there is no need to increase supply on the global market.

With regard to production in the United States, it is becoming an exporter, indeed, and we are well aware of it. We realise that it is taking up certain niches, but these are not our niches. That is my first point.

Secondly, their manufacturing output is up, their GDP is growing, and consumption will follow.

Thirdly, there are growth restrictions in the United States as well. I am not going to list the reasons behind such restrictions. Our analysts believe that US production has reached, as the oil people say, “a plateau.” We do not predict any serious growth.

With everything that I mentioned now and several other considerations that I did not mention, we feel comfortable and confident, and we will continue to grow. We will expand our own energy industry, production of oil and gas, and we will improve the production technology. We will also work on reducing consumption and improving energy efficiency of our economy.

Thus, we are keeping busy, but we are closely following what is happening in the world as well. Of course, you can rest assured that Russia will always be a responsible participant of the global energy market.

http://en.kremlin.ru/events/president/transcripts/72863

Plenary session of the World Russian People's Council

Vladimir Putin addressed, via videoconference, the plenary session of the World Russian People's Council. The key topic of the forum, dedicated to the 30th anniversary of the organisation's establishment, is the Present and Future of the Russian World.

November 28, 202317:55Sochi

During the plenary session of the World Russian People's Council (via videoconference).

3 of 11

During the plenary session of the World Russian People's Council (via videoconference).

Patriarch Kirill of Moscow and All Russia, as well as representatives of the Russian Orthodox Church and other centralised religious organisations of Russia, government bodies, public associations, prominent academic and cultural figures took part in the event.

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President of Russia Vladimir Putin: Your Holiness, friends,

I would like to welcome all the participants in the World Russian People's Council.

The Council was established in 1993. We remember that time as a very difficult turning point for the country. The Council managed to unite around a common set of goals representatives of the Russian Orthodox Church and other religious organisations, political parties and movements, cultural workers, scholars and scientists, entrepreneurs and people of different beliefs, views and ethnicities who were nonetheless united in one important respect, in their firmly rooted patriotism.

First of all, I want to thank you for your support and contribution to strengthening the Russian state, civil peace and accord, and consolidating society, and for the help you always offer to your compatriots and everybody who is part of the big Russian world.

I know that many representatives of the World Russian People's Council are currently in Donbass and Novorossiya as volunteers and members of military units, protecting our brothers and sisters, millions of people in the Donetsk and Lugansk people's republics, the Kherson and Zaporozhye regions, alongside their brothers-in-arms. I sincerely value the help that the World Russian People's Council provides to the front and the families of our fallen heroes. They fought for us and for our Motherland. They will rest in peace and remain in our memory for eternity. Let us observe a moment of silence.

(A moment of silence.)

Friends, our fight for sovereignty and justice is, without exaggeration, one of national liberation, because we are upholding the security and well-being of our people, and our supreme historical right to be Russia – a strong independent power, a civilisation state. It is our country, it is the Russian world that has blocked the way of those who aspired to world domination and exceptionalism, as it has happened many times in history.

We are now fighting not just for Russia's freedom but for the freedom of the whole world. We can frankly say that the dictatorship of one hegemon is becoming decrepit. We see it, and everyone sees it now. It is getting out of control and is simply dangerous for others. This is now clear to the global majority. But again, it is our country that is now at the forefront of building a fairer world order. And I would like to stress this: without a sovereign and strong Russia, no lasting and stable international system is possible.

We know the threat we are opposing. Russophobia and other forms of racism and neo-Nazism have almost become the official ideology of Western ruling elites. They are directed not only against ethnic Russians, but against all groups living in Russia: Tatars, Chechens, Avars, Tuvinians, Bashkirs, Buryats, Yakuts, Ossetians, Jews, Ingush, Mari and Altai. There are many of us, I might not be able to name every group now, but again, the threat is directed against all the peoples of Russia.

The West has no need for such a large and multi-ethnic country as Russia as a matter of principle. Our diversity and unity of cultures, traditions, languages, and ethnicities simply do not fit into the logic of Western racists and colonisers, into their cruel plans for total depersonalisation, separation, suppression, and exploitation. That is why they have started their old rant again: they say that Russia is a “prison of nations” and that Russians are a “nation of slaves.” We have heard this many times throughout the centuries. Now we have also heard that Russia apparently needs to be “decolonised.” But what do they really want? They want to dismember and plunder Russia. If they cannot do it by force, they sow discord.

I would like to emphasise that we view any outside interference or provocations to incite ethnic or religious conflict as acts of aggression against our country, and an attempt to once again wield terrorism and extremism as a weapon against us, and we will respond accordingly.

We have a large and diverse country. This diversity of cultures, traditions and customs creates greater strength, a tremendous competitive advantage and potential. We must continuously strengthen it, treasure this diverse accord, which is our common asset. I would like all the regional governors to focus on this, and I count on the authority of the pastors in our traditional religions and the responsibility of all political forces and public organisations.

I believe we all remember, and must remember, the lessons of the 1917 revolution, the subsequent Civil War, and the disintegration of the USSR in 1991. It may seem like many years have passed since then, but people of all ethnicities living today, even those born in the 21st century are still paying now, decades later, for the miscalculations made at that time – indulgences in separatist illusions, the weakness of the central authority, and a policy of artificial, forced division in this large Russian nation, a triune of Russians, Belarusians and Ukrainians. The bloody conflicts that emerged after the

Russian Empire and the Soviet Union not only continue to smoulder but sometimes flare up with renewed energy. These wounds will not be healed for a long time.

We will never forget these mistakes and should not repeat them. I would like to emphasise once again – any attempt to sow ethnic or religious discord, to split our society is betrayal, a crime against all of Russia. We will never allow anyone to divide Russia – the only country we have. Our prayers are for this, our homeland, and they are expressed in different languages.

I would like to recall for this audience the words of St Gregory of Nazianzus: "Honouring your mother is a sacred thing. But everyone has their own mother, whereas the Motherland is our common mother."

Your Holiness, colleagues. The theme of this Council session is "The Present and Future of the Russian World." The Russian world embraces all generations of our predecessors and our descendants that will live after us. The Russian world means Ancient Rus, the Tsardom of Muscovy, the Russian Empire, the Soviet Union, and modern Russia that is reclaiming, consolidating, and augmenting its sovereignty as a global power. The Russian World unites all those who feel a spiritual affinity with our Motherland, who consider themselves Russian speakers, and carriers of Russian history and culture regardless of their ethnicity or religion.

But I would like to emphasise that the Russian world and Russia itself do not and cannot exist without Russians as an ethnicity, without the Russian people. This statement does not contain any claim to superiority, exclusivity or chosenness. This is simply a fact just like our Constitution's clear definition of the status of the Russian language as the language of a state-forming nation.

Being Russian is more than a nationality. By the way, this has always been the case throughout our country's history. Among other things, it includes cultural, spiritual, and historical identity. Being Russian is, above all, a responsibility. To reiterate, it is about the enormous responsibility to safeguard Russia, and this is what true patriotism is all about. As a Russian, I am here to say that only a united, strong, and sovereign Russia can guarantee the future and independent development of the Russian people and all other peoples who have lived within the borders of our country for centuries and are united by a common historical destiny.

What does sovereignty mean for our state, for each family, and for each person? What is its value and true essence? Primarily, it is freedom. Freedom for Russia and our people and, therefore, for each one of us, because in our tradition, a person cannot feel free unless his loved ones, his children and his Fatherland are free. Our soldiers and officers, men and women of our country, are defending this genuine freedom.

A free nation that understands its responsibility before current and future generations is the only source of power, sovereign power, which is called upon to serve all people, rather than someone's private, corporate, class, or even foreign interests.

A truly free person is a creator. We will support everyone's aspiration to be useful to the country, society, and people. This is what sovereign development in the national interests is made of.

We are faced with the daunting task of developing vast areas from the Pacific to the Baltic Sea and the Black Sea. Our economy, industry, agriculture, innovative industries, creative industries, and national businesses must increase their capacity multiple times over.

I am now reaching out to entrepreneurs who I know are many in this audience. I would like to thank you, friends, for your coordinated efforts. We have thwarted the unprecedented economic aggression of the West by uniting the efforts of the state and business. Its sanctions Blitzkrieg has failed.

Russia will step up support for sovereign national entrepreneurship. We have fundamentally new tools being developed for that right now. Invest in Russia, create new jobs, expand production, and participate in personnel training. If you do that, the national economy will grow, creating more success and opportunities for your companies. By focusing on strengthening sovereignty, national businesses are growing stronger and more sovereign themselves as they shed dependence on the components of the current world order.

The sovereign development of the country, its economy, business, the social sector should bring well-being to all people, all Russian families, and, thus, be fair. This is not about a primitive one-size-fits-all approach. Justice means primarily decent living conditions, modern facilities for culture, healthcare and sports in all regions of the country. This means a qualified and well-paid job and high public prestige for workers, engineers, teachers, doctors, artists, cultural figures, entrepreneurs, every responsible specialist and master. Justice means equal, broad opportunities for study, for a start in life and self-fulfilment for youth.

The West is now pursuing a “cancel culture” policy, but this is, in fact, a renunciation of humanitarian education. As a result, both culture and education are becoming primitive. Many traditional subjects are simply being thrown out of Western academic programmes and replaced by some gender or other similar sciences – pseudo sciences, of course. In the meantime, we need a real breakthrough in cultural life. And we have a lot to learn in this respect from our predecessors that set the tone for the entire world in both traditional and, by the way, avant-garde art. I am convinced that the country’s sovereignty and strengthening its role in the world are impossible without a flourishing, distinctive culture in all of its manifestations.

And, of course, we should take all the best achievements made by the domestic and global systems of traditional education. Importantly, our schools and universities must be modern and open to all advanced ideas.

We need an integral holistic approach to education with family, education, national culture, children’s, youth, sports and military-patriotic organisations, large-scale mentoring movements; and let me add, the wise word of our spiritual clergy harmoniously supplement each other. The latter is simply essential.

Yes, the Church is separate from the state and the Patriarch [Kirill] has told me more than once that despite this fact we have developed unique relations between the Church and the state. I would like to note in this context that the Church cannot be separated from society or from people. I fully agree with this. And this is why I would like to emphasise again the importance of the participation of representatives of all traditional Russian religions in the education and upbringing of our youth, and of course, in the consolidation of spiritual, moral, and family values. The involvement of the clergy from all traditional religions is an enduring value.

Your Holiness, friends,

You know that the Executive Order declaring next year – 2024 – the Year of the Family in Russia has already been signed. And I would like to say that this decision is indeed based on the position of the absolute majority of our society. I am sure the World Russian People's Council unanimously supports it as well.

Here is what I would like to say and make clear. We will not overcome the daunting demographic challenges facing us solely with money, social benefits, allowances, privileges, or dedicated programmes. True, the amount of the budget's demographic spending is extremely important, but that is not all there is to it. A person's points of reference in life matter more. Love, trust, and a solid moral foundation are what the family and the birth of a child are built on. We must never forget this.

Thankfully, many of our ethnic groups have preserved the tradition of having strong multigenerational families with four, five, or even more children. Let us remember that Russian families, many of our grandmothers and great-grandmothers had seven, eight, or even more children.

Let us preserve and revive these excellent traditions. Large families must become the norm, a way of life for all Russia's peoples. The family is not just the foundation of the state and society, it is a spiritual phenomenon, a source of morality.

All levels of government, our economic, social and infrastructure policies, education and awareness-raising, and healthcare should be engaged without exception in the work of supporting families, mothers and children. All public organisations and our traditional religions should focus on strengthening families as well. Preserving and increasing the population of Russia is our goal for the coming decades and even generations ahead. This is the future of the Russian world, the millennium-old, eternal Russia.

Your Holiness, friends, we have many ambitious goals before us, and fulfilling them requires a truly concerted effort, which we are ready for. We have become stronger. Our historical regions have returned to Russia. Society is rejecting everything superficial and turning to true and genuine values.

Pyotr Stolypin emphasised that law based on national power takes precedence. Together, we have shown such national strength and national will, the determination to uphold our fundamental interests, the fundamental interests of the people of Russia, to be guided not by someone else's borrowed views, but by our own sovereign worldviews, our understanding of how the family and the entire country should live, and to build Russia for ourselves and our children.

I would like to thank you again for your support and patriotism and, of course, to congratulate you on the occasion of the 30th anniversary of the World Russian People's Council.

I would like to address special words of thanks to its head, Patriarch Kirill of Moscow and All Russia.

I am aware of your tireless work, Your Holiness, to bring about the spiritual revival of Russia and of the importance and influence of your position. I want to emphasise this. Under your leadership, the Russian Orthodox Church, clergy, and laity do much to implement social, charitable, and volunteer projects. I am also aware of the support provided to our servicemen and their families and how eagerly our soldiers and officers on the frontlines seek out the Patriarch's words.

I am pleased today, at the World Russian People's Council, to congratulate you on being awarded the 2023 Presidential Prize for your contribution to strengthening the unity of the Russian nation. You have my deepest respect. I wish the Council every success in its work.

Thank you.

<…>

Vladimir Putin: Your Holiness, friends.

If I may, just two or three words about what has just been said.

Firstly, I agree that we still need to do a lot to improve the living conditions of large families and families with children in general. As you can probably see, the government is constantly focusing on this. It is no coincidence that we are declaring next year the Year of the Family: to look for the most effective, relevant, important and feasible measures for the state to support families with children in today’s conditions, at events like this and during discussions with deputies and representatives of various factions in the State Duma and public organisations.

This also includes, of course, preferential mortgages and more; but also unifying or focusing on the most effective ways of support in the form of various benefits, or combining various things. But I will not repeat this now; we have an entire big programme built, which probably has no precedent in the history of Russia. Of course, there is always something to work on; I understand perfectly what my colleague meant.

Of course, a large family with a large number of members needs separate housing, and housing construction needs to be improved. That is what we are doing. The point is that all this, everything that is being done, must be more accessible than today. This is obvious. This also applies to various options for supporting families.

But, let me say this again, I am very thankful to His Holiness the Patriarch for organising events like this one, because this provides us with the opportunity to talk, discuss, and hear each other. We will certainly work on this.

Now, concerning the fact that, 12 years after the Great Patriotic War, the entire world learned the Russian word "sputnik," it signifies the progress that the country was able to achieve even during the most difficult times. I want to emphasise that it became possible because, even during the most critical moments of the Great Patriotic War, our nuclear physicists and missile developers continued to work on those technologies, on what was strategically important and necessary, even though at that time, there was nothing more important than, say, guarding the front or achieving another victory on the battlefield. However, the country always thought about the future.

Of course, we must do the same. We must always, regardless of circumstances, think about the future of our people and our state. We do so and we will in the future.

(Applause)

Thank you for your applause.

Finally, I would like to draw your attention to certain things that the Holy Patriarch mentioned. He quoted a Soviet song, "We will destroy the old world…" and so on. As His Holiness said, we will create a new building on the debris. That was what the Soviet government planned after the 1917 Socialist revolution. Everything seemed to be debris. But I believe that it was not debris but seeds from which a new Russian and Soviet statehood grew. Because only 24 years later, despite all the attempts to root out both the religious mindset and our cultural roots… Still, 24 years later… Let me just remind you, the Great Patriotic War started – and what happened? Remember how Molotov addressed the Soviet people with news about the war breaking out? How did he address them? "Citizens." And, a few days later, Stalin addressed them as "brothers and sisters." They immediately remembered about God, church and our eternal traditions.

The same continues today. It is not possible to root it out. It is the very essence of Russia and our nation. We will always look forward and move forward while relying on our centuries-long traditions and spiritual roots.

Thank you for doing this. Thank you and all the best.

https://futurism.com/sports-illustrated-ai-generated-writers

Sports Illustrated Published Articles by Fake, AI-Generated Writers

We asked them about it — and they deleted everything.

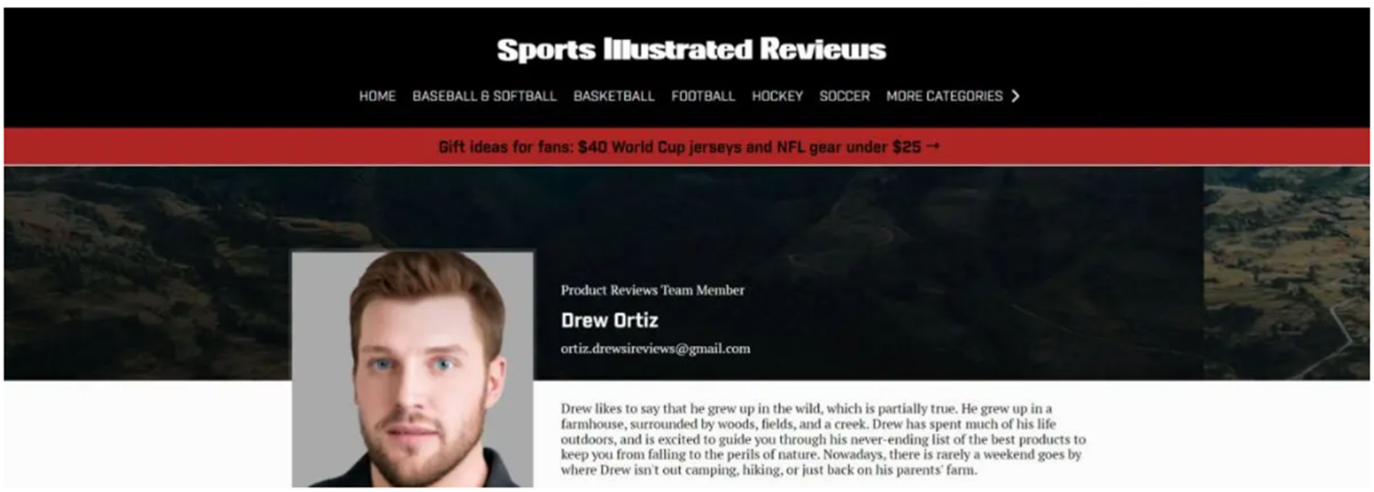
/ Artificial Intelligence/ Ai/ Artificial Intelligence/ Journalism

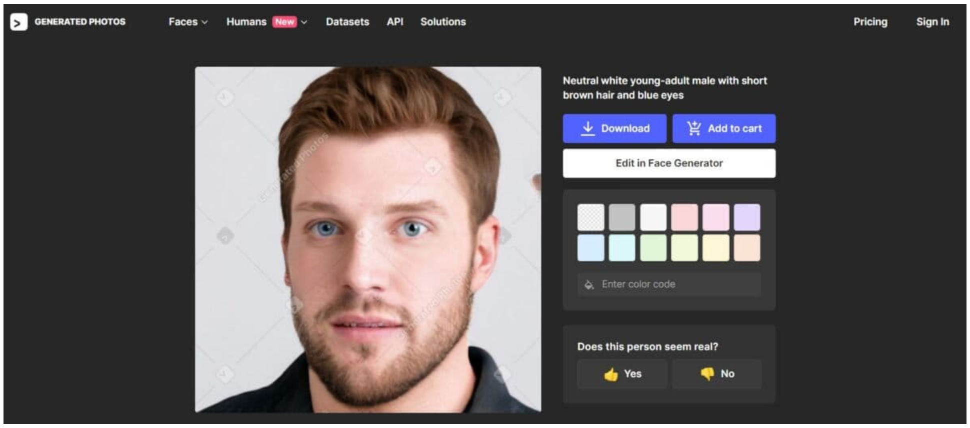
Image by Joe Raedle via Getty / Futurism

There was nothing in Drew Ortiz's author biography at *Sports Illustrated* to suggest that he was anything other than human.

"Drew has spent much of his life outdoors, and is excited to guide you through his never-ending list of the best products to keep you from falling to the perils of nature," it read. "Nowadays, there is rarely a weekend that goes by where Drew isn't out camping, hiking, or just back on his parents' farm."

The only problem? Outside of *Sports Illustrated*, Drew Ortiz doesn't seem to exist. He has no social media presence and no publishing history. And even more strangely, his profile photo on *Sports Illustrated* is for sale on a website that sells AI-generated headshots, where he's described as "neutral white young-adult male with short brown hair and blue eyes."





Ortiz isn't the only AI-generated author published by *Sports Illustrated*, according to a person involved with the creation of the content who asked to be kept anonymous to protect them from professional repercussions.

"There's a lot," they told us of the fake authors. "I was like, what are they? This is ridiculous. This person does not exist."

"At the bottom [of the page] there would be a photo of a person and some fake description of them like, 'oh, John lives in Houston, Texas. He loves yard games and hanging out with his dog, Sam.' Stuff like that," they continued. "It's just crazy."

The AI authors' writing often sounds like it was written by an alien; one Ortiz article, for instance, warns that volleyball "can be a little tricky to get into, especially without an actual ball to practice with."

According to a second person involved in the creation of the *Sports Illustrated* content who also asked to be kept anonymous, that's because it's not just the authors' headshots that are AI-generated. At least some of the articles themselves, they said, were churned out using AI as well.

"The content is absolutely AI-generated," the second source said, "no matter how much they say that it's not."

After we reached out with questions to the magazine's publisher, The Arena Group, all the AI-generated authors disappeared from *Sports Illustrated*'s site without explanation.

Initially, our questions received no response. But after we published this story, an Arena Group spokesperson provided the following statement that blamed a contractor for the content:

Today, an article was published alleging that Sports Illustrated published AI-generated articles. According to our initial investigation, this is not accurate. The articles in question were product reviews and were licensed content from an external, third-party company, AdVon Commerce. A number of AdVon's e-commerce articles ran on certain Arena websites. We continually monitor our partners and were in the midst of a review when these allegations were raised. AdVon has assured us that all of the articles in question were written and edited by humans. According to AdVon, their writers, editors, and researchers create and curate content and follow a policy that involves using both counter-plagiarism and counter-AI software on all content. However, we have learned that AdVon had writers use a pen or pseudo name in certain articles to protect author privacy — actions we don't condone — and we are removing the content while our internal investigation continues and have since ended the partnership.

It sounds like The Arena Group's investigation pretty much just involved asking AdVon whether the content was AI-generated, and taking them at their word when they said it wasn't. Our sources familiar with the creation of the content disagree.

The statement also never addresses the core allegation of our story: that *Sports Illustrated* published content from nonexistent writers with AI-generated headshots. The implication seems to be that AdVon invented fake writers, assigned them fake biographies and AI-generated headshots, and then stopped right there, only publishing content written by old-fashioned humans. Maybe that's true, but we doubt it.

Regardless, the AI content marks a staggering fall from grace for *Sports Illustrated*, which in past decades won numerous National Magazine Awards for its sports journalism and published work by literary giants ranging from William Faulkner to John Updike.

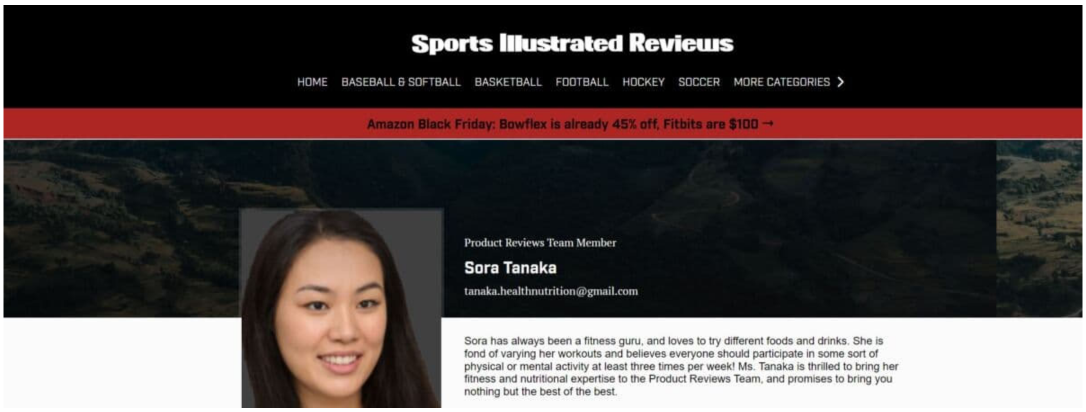
But now that it's under the management of The Arena Group, parts of the magazine seem to have devolved into a Potemkin Village in which phony writers are cooked up out of thin air, outfitted with equally bogus biographies and expertise to win readers' trust, and used to pump out AI-generated buying guides that are monetized by affiliate links to products that provide a financial kickback when readers click them.

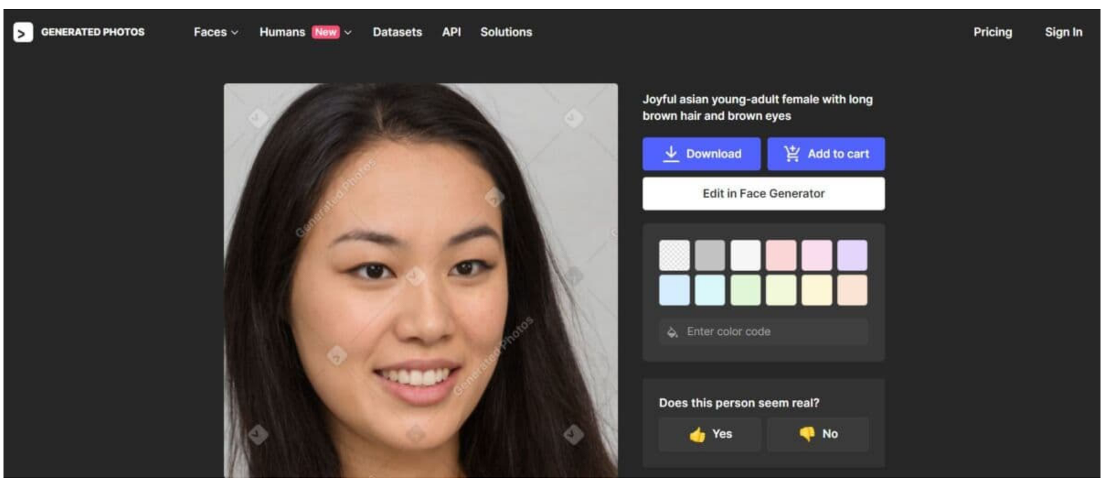
Do you know anything about The Arena Group's use of AI-generated content? Shoot us an email at tips@futurism.com. We can keep you anonymous.

Making the whole thing even more dubious, these AI-generated personas are periodically scrubbed from existence in favor of new ones.

Sometime this summer, for example, Ortiz disappeared from *Sports Illustrated*'s site entirely, his profile page instead redirecting to that of a "Sora Tanaka." Again, there's no online record of a writer by that name — but Tanaka's profile picture is for sale on the same AI headshot marketplace as Ortiz, where she's listed as "joyful asian young-adult female with long brown hair and brown eyes."

"Sora has always been a fitness guru, and loves to try different foods and drinks," read Tanaka's bio. "Ms. Tanaka is thrilled to bring her fitness and nutritional expertise to the Product Reviews Team, and promises to bring you nothing but the best of the best."





But Tanaka didn't last, either. Eventually she also disappeared, replaced by yet another profile that carried no headshot at all, which *Sports Illustrated* deleted along with the other AI-generated content after we reached out.

It wasn't just author profiles that the magazine repeatedly replaced. Each time an author was switched out, the posts they supposedly penned would be reattributed to the new persona, with no editor's note explaining the change in byline.

None of the articles credited to Ortiz or the other names contained any disclosure about the use of AI or that the writer wasn't real, though they did eventually gain a disclaimer explaining that the content was "created by a 3rd party," and that the "*Sports Illustrated* editorial staff are not involved in the creation of this content."

Do you know anything about that "3rd party," or how the content was created? Email us at tips@futurism.com. We can keep you anonymous.

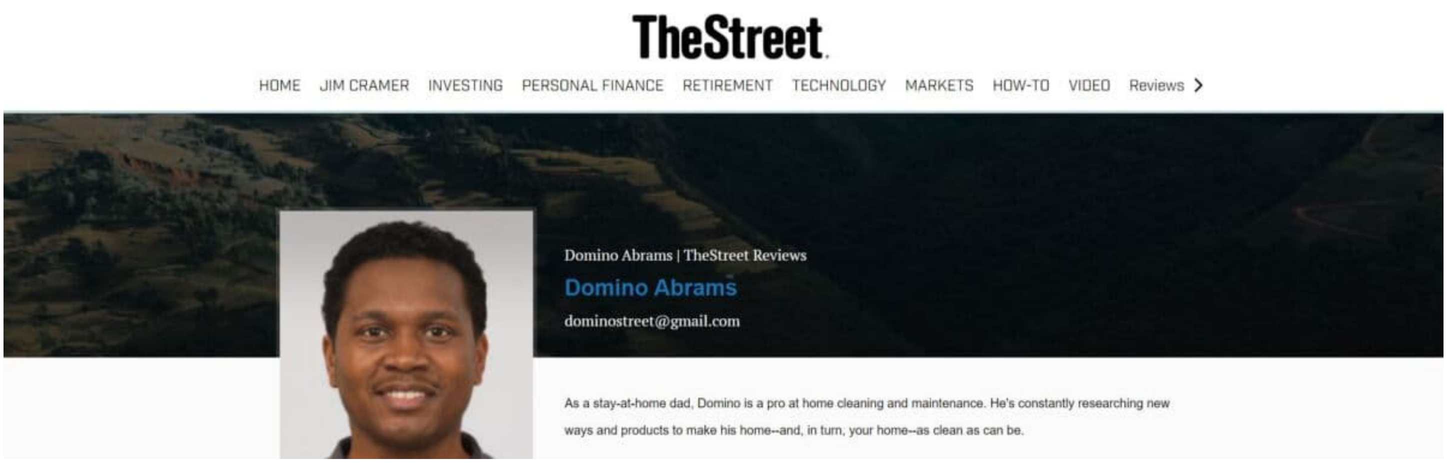
Though *Sports Illustrated*'s AI-generated authors and their articles disappeared after we asked about them, similar operations appear to be alive and well elsewhere in The Arena Group's portfolio.

Take *TheStreet*, a financial publication cofounded by Jim Cramer in 1996 that The Arena Group bought for $16.5 million in 2019. Like at *Sports Illustrated*, we found authors at *TheStreet* with highly specific biographies detailing seemingly flesh-and-blood humans with specific areas of expertise — but with profile photos traceable to that same AI face website. And like at *Sports Illustrated*, these fake writers are periodically wiped from existence and their articles reattributed to new names, with no disclosure about the use of AI.

Sometimes *TheStreet*'s efforts to remove the fake writers can be sloppy. On its review section's title page, for instance, the site still proudly flaunts the expertise of AI-generated contributors who have since been deleted, linking to writer profiles it describes as ranging "from stay-at-home dads to computer and information analysts." This team, the site continues, "is comprised of a well-rounded group of people who bring varying backgrounds and experiences to the table."

People? We're not so sure.

The "stay-at-home dad" linked in that sentence above, for instance, is a so-called "Domino Abrams" — "a pro at home cleaning and maintenance," at least until he was expunged from the site — whose profile picture can again be found on that same site that sells AI-generated headshots.



Or look at "Denise McNamara," the "information analyst" that *TheStreet* boasted about — "her extensive personal experience with electronics allows her to share her findings with others online" — whose profile picture is once again listed on the same AI headshot marketplace. Or "Nicole Merrifield," an alleged "first grade teacher" who "loves helping people," but whose profile is again from that AI headshot site. (At some point this year, Abrams, McNamara, and Merrifield were replaced by bylines whose profile pictures aren't for sale on the AI headshot site.)

Basic scrutiny shows that the quality of the AI authors' posts is often poor, with bizarre-sounding language and glaring formatting discrepancies.

This article about personal finance by the AI-generated Merrifield, for example, starts off with the sweeping libertarian claim that "your financial status translates to your value in society."

After that bold premise, the article explains that "people with strong financial status are revered and given special advantages everywhere around the world," and launches into a numbered list of how you can "improve your finance status" for yourself. Each number on what should be a five-point list, though, is just number one. Mistakes happen, but we can't imagine that anyone who can't count to five would give stellar financial advice.

Here are the five simple and practically doable steps you can take to improve your financial status in a limited time:

1.

Educate yourself

If you don't understand how the money game is played, you can never improve your financial status. Educating yourself doesn't mean becoming a finance expert, you only need to understand the basics of finance and its associated terms like debt, interests, etc. When you'll get different options to lift your financial status, the understanding will help you choose what's best. Plus, you should also educate yourself about beneficial expensing, investment options, and trading in crypto, forex, and stocks. Once you know, you can easily differentiate between good and bad financial decisions.

1.

Set and achieve goals

We all set goals like buying a car, a home, or some other luxury, but have you ever set a goal to double your savings or to get a higher return on investment? If not, then you've never tried to improve your financial status. Your financial status improves when you spend more on things that have appreciating value. If you're still struggling to achieve your desired financial status, then spending on depreciating luxuries and goods is wasteful. So, set goals that are achievable, say clearing off your debt or increasing your savings in a fixed time. These goals increase your urge to work, and ultimately improve your financial status.

1.

Use your time wisely

No doubt, time is of great importance, but you should never make financial decisions in haste. Many people think of themselves as finance gurus after reading one or two investing books or personal finance books, and quickly make investment decisions without knowing the consequences. Leveling up your financial status isn't a race; you must take every step carefully. One mistake can even lead you to bankruptcy and severe debt. Always take your time when making an investment, taking financial decisions, and using your savings. You will at least not run into any problems or face financial constraints later.

Abysmal-quality AI content, though, shouldn't be surprising at The Arena Group.

Back in February, when the company first started publishing AI-generated health advice at its magazine *Men's Journal*, we found that its first story was riddled with errors, prompting it to issue a massive correction.

Before that, when The Arena Group first announced its foray into AI, its CEO Ross Levinsohn promised in an interview with *The Wall Street Journal* that its quality would be outstanding.

"It's not about 'crank out AI content and do as much as you can,'" he told the newspaper early this year. "Google will penalize you for that and more isn't better; better is better."

Needless to say, neither fake authors who are suddenly replaced with different names nor deplorable-quality AI-generated content with no disclosure amount to anything resembling good journalism, and to see it published by a once-iconic magazine like *Sports Illustrated* is disheartening. Bylines exist for a reason: they give credit where it's due, and just as importantly, they let readers hold writers accountable.

The undisclosed AI content is a direct affront to the fabric of media ethics, in other words, not to mention a perfect recipe for eroding reader trust. And at the end of the day, it's just remarkably irresponsible behavior that we shouldn't see anywhere — let alone normalized by a high-visibility publisher.

The Arena Group is also hardly alone, either. As powerful generative AI tools have debuted over the past few years, many publishers have quickly attempted to use the tech to churn out monetizable content.

In almost every case, though, these efforts to cut out human journalists have backfired embarrassingly.

We caught *CNET* and *Bankrate*, both owned by Red Ventures, publishing barely-disclosed AI content that was filled with factual mistakes and even plagiarism; in the ensuing storm of criticism, *CNET* issued corrections to more than half its AI-generated articles. G/O Media also published AI-generated material on its portfolio of sites, resulting in embarrassing bungles at *Gizmodo* and *The A.V. Club*. We caught *BuzzFeed* publishing slapdash AI-generated travel guides. And *USA Today* and other Gannett newspapers were busted publishing hilariously garbled AI-generated sports roundups that one of the company's own sports journalists described as "embarrassing," saying they "shouldn't ever" have been published.

If any media organization finds a way to engage with generative AI in a way that isn't either woefully ill-advised or actively unethical, we're all ears. In the meantime, forgive us if we don't hold our breath.

Disclosure: Futurism's parent company, Recurrent Ventures, previously worked with AdVon in 2022 via its partnership to distribute select content on third-party e-commerce platforms. This content was written by Recurrent's contributors. Presently, Recurrent maintains a business relationship with them to test Commerce content internationally for select brands (of which Futurism is not one). AdVon content has never been published on Futurism or any of Recurrent's websites.

More on AI-generated journalism: *USA Today* Updates Every AI-Generated Sports Article to Correct "Errors"

Dan Tsubouchi @Energy_Tidbits · 1h

Enbridge Line 5 moves 1 step closer.

Michigan Public Service Commission okay's ENB's tunnel for Line 5.

US Army Corps of Engineers review not expected until late 2025.

MI Gov Whitmer reviewing

Thx @DNBethLeBlanc!
#OOTT

> **Beth LeBlanc** @DNBethLeBlanc · Dec 1
> Enbridge wins state panel's OK to move Line 5 oil pipeline into straits tunnel detroitnews.com/story/news/loc... via @detroitnews

1 6 1K

Dan Tsubouchi @Energy_Tidbits · 1h

Breaking

UKMTO received a report of drone activity "*including a potential explosion in the vicinity of the Bab el Mandeb origination from the direction of Yemen*". ukmto.org/indian-ocean/r...

See 👇 Suez Canal 101, all tankers/ships go thru Red Sea/Bab el Mandeb.

#OOTT #Oil

> **Dan Tsubouchi** @Energy_Tidbits · Oct 28
> Suez Canal 101
>
> Tanker/cargo ships thru the Suez have to go thru Red Sea & Bab el Mandeb.
> ...
> Show more

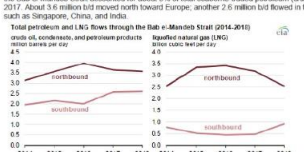
https://www.eia.gov/todayinenergy/detail.php?id=41073
AUGUST 27, 2019
The Bab el-Mandeb Strait is a strategic route for oil and natural gas shipments

Source: U.S. Energy Information Administration

The Bab el-Mandeb Strait is a sea route chokepoint between the Horn of Africa and the Middle East, connecting the Red Sea to the Gulf of Aden and Arabian Sea. Most exports of petroleum and natural gas from the Persian Gulf that transit the Suez Canal or the SUMED Pipeline pass through both the Bab el-Mandeb and the Strait of Hormuz.

Chokepoints are narrow channels along widely used global sea routes that are critical to global energy security. The Bab el-Mandeb Strait is 18 miles wide at its narrowest point, limiting tanker traffic to two 2-mile-wide channels for inbound and outbound shipments. Closure of the Bab el-Mandeb Strait could keep tankers originating in the Persian Gulf from transiting the Suez Canal or reaching the SUMED Pipeline, forcing them to divert around the southern tip of Africa, which would increase transit time and shipping costs.

In 2018, an estimated 6.2 million barrels per day (b/d) of crude oil, condensate, and refined petroleum products flowed through the Bab el-Mandeb Strait toward Europe, the United States, and Asia, an increase from 5.1 million b/d in 2014. Total petroleum flows through the Bab el-Mandeb Strait accounted for about 9% of total seaborne-traded petroleum (crude oil and refined petroleum products) in 2017. About 3.6 million b/d moved north toward Europe; another 2.6 million b/d flowed in the opposite direction mainly to Asian markets such as Singapore, China, and India.



Note: CSV data

Before 2015, volumes of liquefied natural gas (LNG) passing through the Bab el-Mandeb Strait matched those passing through the Suez Canal because the Red Sea did not have any LNG infrastructure. In 2015, both Jordan and Egypt began importing small volumes of LNG into Red Sea ports, and these countries' imports of LNG peaked in 2016 at 1.4 billion cubic feet per day, 80% of which was delivered through the Bab el-Mandeb Strait.

More recently, as new natural gas fields in Egypt have come online, the need for Egypt to import LNG has decreased. Like flows to Egypt, total northbound flows of LNG via the Bab el-Mandeb have also decreased since 2016 as northbound flows to other destinations have remained fairly constant.

4 11 4.2K

SAF GROUP

Dan Tsubouchi @Energy_Tidbits · 2h

Reminds of Putin's back to caves

"*neglecting a pure hydrocarbon such as* #natgas *is, in my opinion, uncalled for, because it is the purest hydrocarbon out there. When ideas like this are promoted, it sounds like humanity will once again end up in caves.*"

Thx @ARaj_Energy #OOTT

***".. neglecting a pure hydrocarbon such as natural gas is, in my opinion, uncalled for, because it is the purest hydrocarbon out there. When ideas like this are promoted, it sounds like humanity will once again end up in caves."* Russia President Putin 11/20/2019**

Excerpt SAF Group Nov 24, 2019 Energy Tidbits memo

Natural Gas – Putin: abandoning natural gas may put humans back in caves

Last week's (Nov 17, 2019) Energy Tidbits memo noted the FT report [LINK] the European Investment Bank was phasing out lending to fossil fuel projects by 2021 including natural gas. We tend to agree with Putin that if the environmental push means puts natural gas at risk along with coal, then there is a real risk to the future reliability of the electricity supply around the world. We just wouldn't describe the way he did. On Wed, we tweeted [LINK] "*How could i not note Putin's comments "discarding the purest hydrocarbon like gas seems utterly bizarre", re the complete abandonment of hydrocarbons "it seems to me that the human race may find itself again in caves". Hope not!*" Putin had a lengthy Q&A at the Russian Investment Forum on Wed. And he jumped in on the potential abandonment of natural gas. Putin said "*In this sense, neglecting a pure hydrocarbon such as natural gas is, in my opinion, uncalled for, because it is the purest hydrocarbon out there. When ideas like this are promoted, it sounds like humanity will once again end up in caves, but this time because it will consume nothing, if all energy is reduced to zero, or if we rely solely on solar energy or wind energy or tidal energy. Today's technology is such that without hydrocarbons, nuclear energy or hydropower, humanity will not be able to survive or preserve its civilisation. This must be taken seriously or, as people say, in an adult-like manner.*" Later in the memo, we note his comments on US oil production and Russia not going to use technologies that drive fracking. Our Supplemental Documents package includes Putin's energy references from his long Q&A session. [LINK]

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

Abhi Rajendran @ARaj_Energy · 3h

There is DEFINITELY no economics behind such demands

#netzero #Cop28 #OOTT #ONGT twitter.com/disclosetv/sta...

4 · 2K

SAF GROUP

Dan Tsubouchi @Energy_Tidbits · 12h

Negative to China recovery - Looks like less Chinese will be out and about.

China National Health Commission briefing "*In addition, the NHC suggested reducing large gatherings in public places.*" "*high incidence of respiratory diseases in children and the significant increase in...*"

Show more

https://www.globaltimes.cn/page/202312/1302897.shtml

No new infectious diseases or pathogens detected in China's prevalent acute respiratory diseases: NHC

By Global Times Published: Dec 02, 2023 08:43 PM

The acute respiratory diseases that are currently prevalent in China are all caused by known pathogens, with no new infectious diseases caused by new virus or bacteria have been detected, according to the National Health Commission (NHC) during a press conference held on Saturday.

At the same time, China has been in close communication with the World Health Organization regarding the prevalence of respiratory diseases. Officials stated that there are mature treatment methods available for the currently prevalent diseases.

In addition, the health authorities have actively responded to the high incidence of respiratory diseases in children and the significant increase in visits to medical institutions. They have coordinated necessary measures and required all types of medical institutions at all levels to fully open pediatric outpatient services.

The medical institutions are also required to increase the number of midday, evening, and weekend outpatient services, extend service hours, expand hospital bed capacity, and continuously optimize registration, examination, payment, and other medical processes to facilitate people's seeking medical treatment.

Furthermore, the National Influenza Center under the Chinese Centre for Disease Control and Prevention (China CDC) has been continuously conducting monitoring of the sensitivity of influenza viruses to antiviral drugs. The monitoring results show that the current antiviral drugs are effective against influenza viruses.

Wang Dayan, the director of the National Influenza Centre, said that the China CDC has been conducting surveillance of mutations, including the sensitivity of viruses to antiviral drugs and whether the viruses have developed drug resistance.

The National Influenza Centre, along with multiple laboratories worldwide, has been monitoring the sensitivity of influenza viruses to antiviral drugs. "The monitoring results show that influenza viruses are sensitive to several antiviral drugs currently available, which means that the drugs are effective against influenza viruses," Wang said.

Another aspect of surveillance is the compatibility between circulating viruses and vaccines, specifically whether the viruses have undergone antigenic changes. Wang stated that the components of the influenza vaccine administered this winter are consistent with those of the previous winter.

Currently prevalent subtypes of influenza viruses have not undergone any changes and are consistent with the main branches circulating in most regions globally, she said.

Regarding the public response to the current situation, the NHC emphasized the need to strengthen the ventilation and disinfection of public venues. In addition to opening windows and ventilating regularly, indoor venues should also increase the frequency of cleaning and disinfecting public supplies and facilities that are frequently touched to ensure that the environment in public areas is clean and hygienic.

In addition, the NHC suggested reducing large gatherings in public places. The public cultural venues, museums, and indoor tourist attractions could require reservation and dynamically divert passenger flow in a timely manner to avoid high levels of people gathering.

Officials from the China CDC also emphasized the need to ensure the supply of influenza and other vaccines and vaccination services remain sufficient. They urged key populations such as the elderly and children to receive vaccines as early as possible to reduce the risk of illness.

On Friday, the Chinese health authorities and the WHO held another teleconference regarding ongoing respiratory diseases. During the conference, Chinese experts provided an update on the national monitoring and clinical diagnosis since the previous teleconference on November 23, led by China's NHC.

In-depth technical exchanges took place between both parties, focusing on multiple pathogen monitoring and mycoplasma pneumoniae infection. Both sides expressed their intention to continue communication on these matters.

Global Times

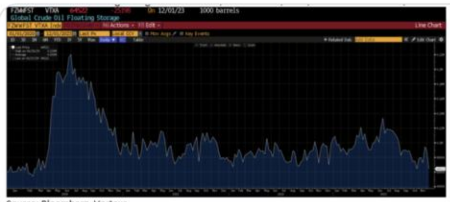
2 · 2 · 5 · 2.5K

Dan Tsubouchi @Energy_Tidbits · 23h

Are tankers repositioning but stiil looking for place to unload? And/or, will we see upward revisions?

If not & are unloading, #Oil floating storage of 64.52 mmb at 12/01 is 1 of only 5 wks since Covid less than 70 mmb & the lowest since Covid.

Thx @Vortexa @business
#OOTT



Source: Bloomberg, Vortexa

Posted Dec 2, 9am MT | Nov 25, 9am MT | Nov 18, 9am MT

FZWWFST VTXA Inde 01/01/2020 - 12/01/2023 Date	Last Px	FZWWFST VTXA Inde 01/01/2020 - 11/24/2023 Date	Last Px	FZWWFST VTXA Inde 01/01/2020 - 11/17/2023 Date	Last Px
Fr 12/01/2023	64522	Fr 11/24/2023	86969	Fr 11/17/2023	84101
Fr 11/24/2023	89720	Fr 11/17/2023	89557	Fr 11/10/2023	70228
Fr 11/17/2023	94198	Fr 11/10/2023	69970	Fr 11/03/2023	79175
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Fr 11/03/2023	79527	Fr 10/27/2023	77387	Fr 10/20/2023	63582
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Fr 10/06/2023	74243	Fr 09/29/2023	86287	Fr 09/22/2023	89165
Fr 09/29/2023	83049	Fr 09/22/2023	90733	Fr 09/15/2023	89655
Fr 09/22/2023	89151	Fr 09/15/2023	90608	Fr 09/08/2023	89374

Source: Bloomberg, Vortexa

Vortexa Crude Oil Floating Storage by Region (mmb)				Original Posted	Recent Peak	
Region	Dec 1/23	Nov 24/23	WoW	Nov 24/23	Jun 23/23	Dec 1 vs Jun 23
Asia	27.77	43.85	-16.08	42.50	73.6	-45.83
Europe	4.97	6.83	-1.86	6.81	6.47	-1.50
Middle East	8.17	9.65	-1.48	9.02	7.17	1.00
West Africa	4.54	6.61	-2.07	6.77	7.62	-3.08
US Gulf Coast	0.52	6.33	-5.81	5.71	0.97	-0.45
Other	18.55	16.45	2.10	16.16	37.56	-19.01
Global Total	64.52	89.72	-25.20	86.97	133.39	-68.87
Vortexa crude oil floating storage posted on Bloomberg 9am MT on Dec 2						
Source: Vortexa, Bloomberg						

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

3 | 6 | 21 | 4K

Dan Tsubouchi @Energy_Tidbits · 17h

1st Israel air strike in Yemen at arms depot in Sana'a. Houthis say gas station @TimesofIsrael

Red Sea getting busier, add Israel jets to both US and Israel shooting down Houthi drones.

Wonder if Iran can stay on sidelines while another proxy gets hit?

#OOTT

Source: Google Maps

https://www.timesofisrael.com/israeli-strike-behind-blast-at-houthi-weapons-depot-in-yemens-capital-report/

Israeli strike behind blast at Houthi weapons depot in Yemen's capital — report

Saudi outlet says missiles target precision rockets, drones in Sana'a; Iran-backed group denies claim, says explosion occurred at gas station

An Israeli strike was behind an explosion at an arms depot in Yemen's capital Sana'a, controlled by the Iran-backed Houthi rebels, Saudi media reported Friday.

Missiles targeted the site Thursday, where drones and precision missiles are stored, the Saudi-owned Al-Hadath news network reported. The Israel Defense Forces have not commented on the matter.

Houthi officals denied the report, claiming that the blast occurred at a gas station, while Hezam al-Asad, a member of the Iran-backed Houthi's political bureau, tweeted that it was caused by remnants of a bomb left over from the civil war.

Al-Asad occasionally posts Hebrew-language taunts at Israel.

The Houthis, who control much of Yemen and are part of an "axis of resistance" arrayed against Israel, have launched a series of drone and missile strikes targeting Israel since thousands of Hamas terrorists poured over the border into Israel on October 7, killing 1,200 people, mostly civilians, and kidnapping some 240.

The projectiles have all been intercepted or missed their targets.

Houthis also seized an Israeli-linked cargo vessel, the Galaxy Leader, in the Red Sea on November 19, and have vowed to target others.
On Thursday, the United Kingdom said it was sending one of its most advanced naval ships, the HMS Diamond, a Type 45 destroyer, to conduct operations to ensure freedom of navigation, reassure merchant vessels, and ensure the safe flow of trade in the area. The vessel will join the frigate HMS Lancaster which deployed to the region last year, as well as three mine hunters and a support ship.

The United States has also bolstered its naval presence in the Middle East, deploying two carrier groups to the region.

On Wednesday, a US Navy warship shot down a drone over the South Red Sea launched from a part of Yemen controlled by Houthis, the American military's Central Command said.
The US Navy downed multiple drones launched from Yemen on November 23, one drone on November 15, and both missiles and drones on October 19, while the Houthis shot down an American drone earlier this month.

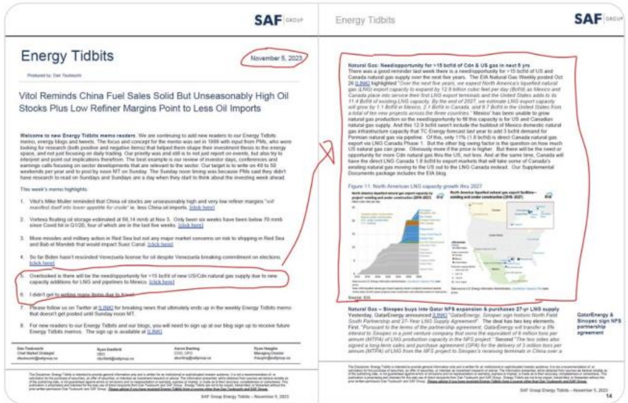
1 | 5 | 13 | 4K

Dan Tsubouchi @Energy_Tidbits · 23h

Will any #NatGas price & shares pull back with a warm winter open up opportunity for strategic M&A incl in CAN.

See 👇 SAF 11/5/23 Energy Tidbits. Need/opportunity for >15 bcfd of US/CAN supply by 2030, incl #LNGCanada 1.8 bcfd Phase 1 startup in a yr or so.

#OOTT


Energy Tidbits

November 5, 2023

Vitol Reminds China Fuel Sales Solid But Unseasonably High Oil Stocks Plus Low Refiner Margins Point to Less Oil Imports

Energy Tidbits

> **Dan Tsubouchi** @Energy_Tidbits · Dec 1
>
> 
>
>
> Never a positive for #NatGas prices when forecasts are warmer than normal temps for Dec
>
> Today's @NOAA Dec outlook calls for warmer than normal temps across US....
>
> Show more

3 · 4 · 3.6K

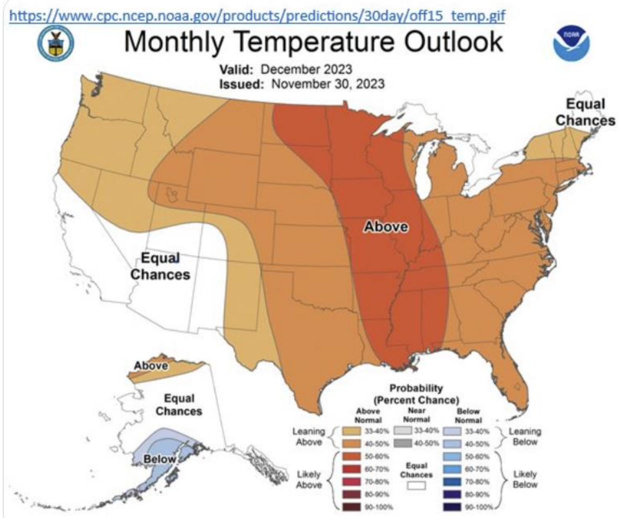
Dan Tsubouchi @Energy_Tidbits · Dec 1

Never a positive for #NatGas prices when forecasts are warmer than normal temps for Dec

Today's @NOAA Dec outlook calls for warmer than normal temps across US.

A warm start to peak winter demand is never good & will keep many on sidelines until see cold temps in Jan.

#OOTT



> **Howling Coyote** @HowlingCoyote · Nov 27
> Replying to @Energy_Tidbits and @NOAA
> Figures I live in the one area expected to be below!

3 · 2 · 6.6K

Dan Tsubouchi @Energy_Tidbits · Nov 30

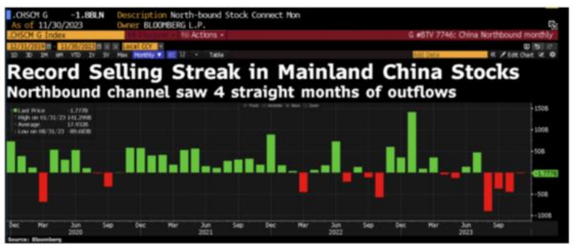
China stalled recovery!

2 continuing key negative indicators for China economy

"*China new home prices: prices drop the most since 2015*" in Nov

"*record selling streak in mainland China stocks: northbound channel saw 4 straight months of outflows*" in Nov.

Thx @business...
Show more



Source: Bloomberg

1 1 5 1.5K

Dan Tsubouchi @Energy_Tidbits · Nov 30

Had to read it twice to make sure"

China Caixin Manufacturing PMI Nov 50.7 (est 49.8), vs Oct 49.5, Sep 50.6, Aug 51.0, Jul 49.2.

See 👇 lookahead ".. *sustained and quicker rise in overall new business received by Chinese goods producers in November*".

Thx @SPGlobalPMI #OOTT

2 3 1.3K

Dan Tsubouchi @Energy_Tidbits · Nov 30

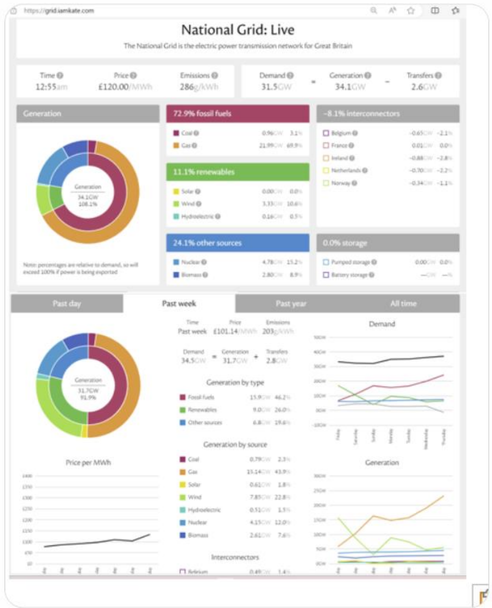
UK needs #NatGas for longer.

Yes, National Grid is warning on #Electricity supply tomorrow.

Fortunately, it's only Dec 1 in UK so not full winter cold

And more importantly, UK still has #NatGas to fill in when #Wind power is low.

#OOTT



> **National Grid ESO** @NationalGridESO · Nov 30
>
> Our forecasts show electricity supply margins are expected to be tighter than normal on Friday evening. We are activating a Live Demand Flexibility Service event between 16:30-18.00 tomorrow.

2 · 7 · 3.6K

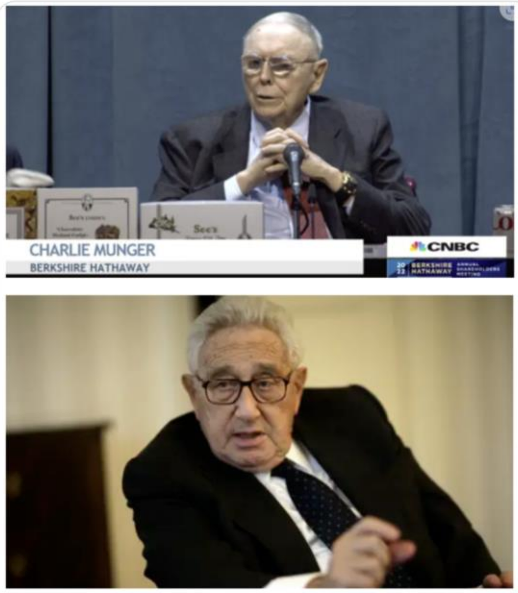
Dan Tsubouchi @Energy_Tidbits · Nov 30

Don't retire your brain!

Charlie Munger 99 yrs old
Henry Kissinger 100 yrs old.

Surely not just good genes, but both gentlemen never stopped learning and using their brain power.

Lesson for us baby boomers. You can retire from work but don't retire your brain.



Source: CNBC

2 · 11 · 1.2K

Dan Tsubouchi @Energy_Tidbits · Nov 30

Brent at $82.90 is almost $2 off today's high of $84.74.

Would have been a brutal day for #Oil if Saudi Energy Minister Abdulaziz hadn't been able to rope up an additional 896,000 of cuts.

#OOTT #OPEC

roduction and exports post 11/30 meeting
IT post OPEC Secretariat release

Before 11/30 meetiung	Added at 11/30 meeting	increas
b/d	b/d	
0	51,000	
0	223,000	
0	82,000	
0	135,000	
0	42,000	
1,000,000	1,000,000	
0	163,000	
1,000,000	1,696,000	
	b/d	
300,000	300,000	
0	200,000	
300,000	500,000	
1,300,000	2,196,000	

gence, Platts, UBS
roup https://safgroup.ca/news-insights/

3 · 18 · 2.1K

Dan Tsubouchi @Energy_Tidbits · Nov 30

Here is final #OPEC+ cuts post 2nd OPEC release.

Final 2.196 mmb/d so +896,000 b/d over prior voluntary Saudi/Russia cuts

See 👇 SAF Group table

Thx @Amena__Bakr @HermsTheWord @staunovo
#OOTT

OPEC+ cuts to production and exports post 11/30 meeting

Updated 11:30am MT post OPEC Secretariat release

Production Cuts	Before 11/30 meetiung	Added at 11/30 meeting	increased cut thru q1/24
	b/d	b/d	b/d
Algeria	0	51,000	51,000
Iraq	0	223,000	223,000
Kazakhstan	0	82,000	82,000
Kuwait	0	135,000	135,000
Oman	0	42,000	42,000
Saudi Arabia	1,000,000	1,000,000	0
UAE	0	163,000	163,000
	1,000,000	1,696,000	696,000
Cuts to exports		b/d	b/d
Russia - oil	300,000	300,000	0
Russia - fuel oil	0	200,000	200,000
	300,000	500,000	200,000
Total cuts	1,300,000	2,196,000	896,000

Source: OPEC, Energy Intelligence, Platts, UBS

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

3 22 58 6K

Dan Tsubouchi @Energy_Tidbits · Nov 30

Incremental OPEC+ cuts as of 10:45am MT

See 👇 SAF Group table

Thx @Amena__Bakr @HermsTheWord @staunovo
#OOTT

OPEC+ cuts to production and exports post 11/30 meeting

Updated as of 10:45am MT 11/30

Production Cuts	Before 11/30 meetiung	Added at 11/30 meeting	increased cut thru q1/24
	b/d	b/d	b/d
Algeria	0	51,000	51,000
Iraq	0	220,000	220,000
Kazakhstan	0	82,000	82,000
Kuwait	0	135,000	135,000
Oman	0	42,000	42,000
Saudi Arabia	1,000,000	1,000,000	0
UAE	0	160,000	160,000
	1,000,000	1,690,000	690,000
Cuts to exports		b/d	b/d
Russia - oil	300,000	300,000	0
Russia - fuel oil	0	200,000	200,000
	300,000	500,000	200,000
Total cuts	1,300,000	2,190,000	890,000

Source: Energy Intelligence, Platts, UBS

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

1 14 47 5.1K

Dan Tsubouchi @Energy_Tidbits · Nov 30

Makes sense for same reason why Saudi was expected to continue to keep its 1 mmb/d thru Q1/24

oil demand is always seasonally lower Q1 vs the preceding Q4. before seasonally increasing in Q2 and then the big seasonal ramp up in Q3.

Thx @Amena__Bakr for updates
#OOTT

> **Amena Bakr** @Amena__Bakr · Nov 30
> The additional cuts that will be announced today from Saudi Arabia and others are due to last for Q1 2024- sources #OOTT #Opec

1 1 7 2.5K

Dan Tsubouchi @Energy_Tidbits · Nov 30 ·

the #1 challenge for western leaders is non-OECD don't have the huge amount of capital needed for the west expectations of them in the energy transition

kudos to UAE dr. al Jaber for getting the ball rolling and challenging western leadera to step up with real dollars!

#OOTT

> **COP28 UAE** @COP28_UAE · Nov 30
> BREAKING: The UAE is committing $100 million to Loss and Damage, an important milestone in delivering for vulnerable communities and building resilience for people suffering the devastating impacts of climate change.
> We encourage leaders to raise ambition and unlock the crucial...
> Show more

1 4 2.1K

Dan Tsubouchi @Energy_Tidbits · Nov 30

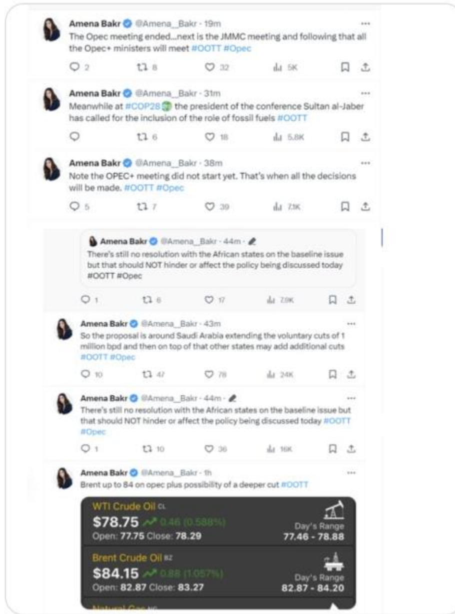
Brent +$0.68 to $83.78.

As usual @Amena__Bakr is giving OPEC+ live updates.

Moving to JMMC meet next.

Need to wait till final announcement but pointing to Saudi extending 1 mmb/d voluntary cut and others chipping in for additional cuts.

#OOTT


Amena Bakr @Amena__Bakr · 19m

The Opec meeting ended...next is the JMMC meeting and following that all the Opec+ ministers will meet #OOTT #Opec

2 · 8 · 32 · 5K

Amena Bakr @Amena__Bakr · 31m

Meanwhile at #COP28 the president of the conference Sultan al-Jaber has called for the inclusion of the role of fossil fuels #OOTT

6 · 18 · 5.8K

Amena Bakr @Amena__Bakr · 38m

Note the OPEC+ meeting did not start yet. That's when all the decisions will be made. #OOTT #Opec

5 · 7 · 39 · 7.1K

> **Amena Bakr** @Amena__Bakr · 44m
>
> There's still no resolution with the African states on the baseline issue but that should NOT hinder or affect the policy being discussed today #OOTT #Opec

1 · 6 · 17 · 7.9K

Amena Bakr @Amena__Bakr · 43m

So the proposal is around Saudi Arabia extending the voluntary cuts of 1 million bpd and then on top of that other states may add additional cuts #OOTT #Opec

10 · 47 · 78 · 24K

Amena Bakr @Amena__Bakr · 44m

There's still no resolution with the African states on the baseline issue but that should NOT hinder or affect the policy being discussed today #OOTT #Opec

1 · 10 · 36 · 16K

Amena Bakr @Amena__Bakr · 1h

Brent up to 84 on opec plus possibility of a deeper cut #OOTT

WTI Crude Oil CL
$78.75 0.46 (0.588%)
Open: 77.75 Close: 78.29
Day's Range 77.46 - 78.88

Brent Crude Oil BZ
$84.15 0.88 (1.057%)
Open: 82.87 Close: 83.27
Day's Range 82.87 - 84.20

1 · 6 · 2K

Dan Tsubouchi @Energy_Tidbits · Nov 30

Stalled China recovery, increasing respiratory infections or some of both?

China Baidu city-level road congestion -3.5% WoW for 11/29 wk, after -5.9% WoW for 11/22 wk.

Top 15 cities up big YoY & vs Nov/21 BUT Covid restrictions weren't lifted till 2023

Thx @BloombergNEF. #OOTT

1 · 2 · 2 · 2.3K

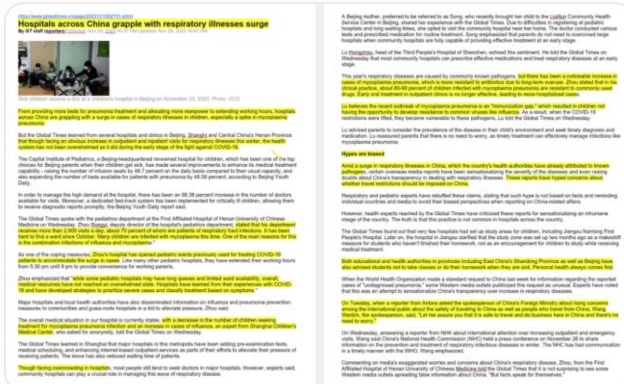
Dan Tsubouchi @Energy_Tidbits · Nov 29

"*hospitals* ***across*** *China grapple with respiratory illnesses surge*".

If this is a positive Chinese communist party media spin, surely this will cause some to go out less, travel less until things settle down a bit

ie. holdback to China #Oil recovery.

#OOTT


Hospitals across China grapple with respiratory illnesses surge

> **Dan Tsubouchi** @Energy_Tidbits · Nov 27
>
> 
>
> Holdback to China recovery.
>
> Surely this will cause some people to go out less
>
> *"there is a* ***rapid increase i****n influenza infections, ...*
> Show more

3 · 8 · 4.1K

Dan Tsubouchi @Energy_Tidbits · Nov 29

For those not near their laptops. @EIAgov just released at 8:30am MT its #Oil #Gasoline #Distillates inventory as of Nov 24. Table below compares EIA data vs @business expectations and vs @APIenergy yesterday. Prior to release, WTI was $75.80 #OOTT

Oil/Products Inventory Nov 24: EIA, Bloomberg Survey Expectations, API

(million barrels)	EIA	Expectations	API
Oil	1.61	-0.05	-0.87
Gasoline	1.76	-0.70	-0.90
Distillates	5.22	-1.34	2.80
	8.59	-2.09	1.03

Note: Oil is commercial so builds in a build of +0.3 mmb in SPR for the Nov 24 week
Note: Included in the oil data, Cushing had a 1.85 mmb build for Nov 24 week
Source EIA, Bloomberg
Prepared by SAF Group https://safgroup.ca/news-insights/

1 · 3 · 5 · 1.6K

Dan Tsubouchi @Energy_Tidbits · 3m

How can you not love #CharlieMunger shale #Oil zinger even though $OXY is a big position.

"it really dies fast, those shale wells. if you like quick death in your wells, we have them for you". See 👇 05/09/23 SAF Group transcript.

He will be missed!

#OOTT

> **Dan Tsubouchi** @Energy_Tidbits · May 9
>
> Is this what #WarrenBuffett & #CharlieMunger wanted?
>
> Reason to not like #Shale? Huge initial production but 1 1/2 yrs, "it becomes practically nothing. "it really dies fast, those shale wells, if you like quick death in your wells, we have them for you", "it's not a ... Show more

2 | 92

Dan Tsubouchi @Energy_Tidbits · 1h

Who didn't love #CharlieMunger zingers.

"*lot of people who are geniuses on IQ tests think they are a lot smarter than they are and what they are is dangerous.*" See 👇 05/08/23 SAF Group transcript.

Never had the honor of meeting him but will certainly miss him!

#OOTT

> **Dan Tsubouchi** @Energy_Tidbits · May 8
>
> #Berkshire2023
>
> Lots in this one short #CharlieMunger answer. See 👇 SAF transcript
>
> not easy to have a vast plethora of good opportunities that are easily ...
> Show more

Watch Warren Buffett and Charlie Munger preside over full 2023 Berkshire Hathaway annual meeting

SAF Group created transcript of comments by Warren Buffet and Charlie Munger in the Q&A of the 2023 Berkshire Hathaway annual meeting from CNBC 5hr 16 min video. https://www.cnbc.com/video/2023/05/06/watch-warren-buffett-and-charlie-munger-preside-over-full-2023-berkshire-hathaway-annual-meeting.html?&qsearchterm=berkshire

Items in "italics" are SAF Group created transcript

At 2hr 6:10 min mark, Munger "*I think one of the inane things that is taught in modern university education is that a vast diversification is absolutely mandatory in investing in common stocks. That is an insane idea. It's not that easy to have a vast plethora of good opportunities that are easily identified. If you only got three, I'd rather it be invest in my best idea not my worst. Now some people can't tell their best ideas from their worst and in deciding that an investment idea is already good, they get to thinking it's better than it is. I think we make fewer mistakes like that than other people. And that is a blessing to us. We're not so smart but we kind of know where the edge of our smartness is. That is a very important part of practical intelligence. A lot of people who are geniuses on IQ tests think they are a lot smarter than they are and what they are is dangerous. But if you know the edge of your own ability pretty well, you should ignore most of the notions of our experts about what I call de-worseification of portfolios*".

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

1 · 1 · 13 · 2.1K

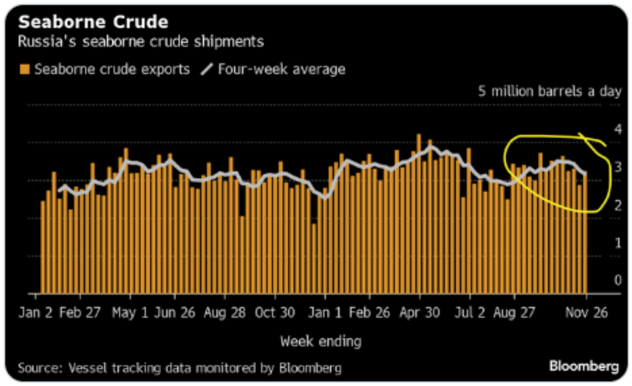
Dan Tsubouchi @Energy_Tidbits · 6h

RUS #Oil shipments +370 kbd to 3.24 mmbd in Nov 19-26 wk yet RUS oil refineries processed +100 kbd in Nov 16-22 wk

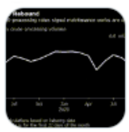
Not exact match but normally refineries crude up = oil exports down

But 4-wk down to 3.16 mmbd, below RUS commitment 3.28 mm/d

Thx @JLeeEnergy @ja_herron
#OOTT



Dan Tsubouchi @Energy_Tidbits · Nov 27



More oil processed by Russian oil refineries = Russian #Oil shipments should be down again.

Russian refineries processed 5.65 mmb/d in Nov 16-22, over 100,000 b/d more vs prior week. ...
Show more

2 6 2.5K

Dan Tsubouchi @Energy_Tidbits · 6h

#Oil co's should be glad saudi energy min abdulaziz is at the helm

this wk's challenge - get an #OPEC deal. think he does!

one of this yr's challenge Iran's 👇 continued ramp up on production & exports as US doesn't enforce sanctions.

#OOTT

> **Dan Tsubouchi** @Energy_Tidbits · Nov 21
>
> Negative to #Oil.
>
> Friday, Iran said at 3.3 mmb/d, adding 300,000 b/d to hit 3.6 mmb/d by end of winter.
>
> ...
>
> Show more

https://en.shana.ir/news/633158/Iran-oil-output-up-50-despite-sanctions-will-hit-3-6m-bpd-by
17 November 2023 - 23:22 News ID: 633158

Iran oil output up 50% despite sanctions, to hit 3.6m bpd by next March: Owji

SHANA (Tehran) – Iran's oil production has increased 50 percent since the 13th administration took office two years ago, said Oil Minister Javad Owji on Friday.

The minister, who made the announcement in a meeting with some religious sources of imitation, including Ayatollah Seyyed Hashem Hosseini Bushehri and Ayatollah Abdollah Javadi Amoli, in the holy city of Qom, north-central Iran, added the country's oil production stood at 2.2 million barrels per day (bpd) when the incumbent government took over in August 2021 while the output has now soared to 3.3m bpd and will hit 3.6m bpd by the end of the upcoming winter.

The country's oil production has witnessed a 50 percent hike and crude exports have increased 2.5 times under the 13th administration in spite of intensified sanctions, he pointed out.

Iran's oil industry was controlled by foreign advisers before the Islamic Revolution and they plundered the country's products, said Owji, adding, "The oil industry has witnessed great events after the victory of the Islamic Revolution and over the past 44 years. No foreign advisers are now present in the country's oil and gas industry and Iranian oil experts are developing domestic industry."

In the pre-revolution era, he continued, one gas refinery and one petrochemical plant had been built while 23 refineries and 68 petrochemical complexes are operating now, said the oil minister, adding $14 billion revenues earned from petrochemical exports in the previous year were deposited into Iran's Integrated Forex Deals System (NIMA).

A few cities and villages were supplied with gas before the revolution, recalled Owji, adding 98 percent of urban population and around 84 percent of rural population have been now connected to the gas grid as 5,700 villages and 40 towns, mainly underprivileged and cold areas, have been provided with gas since two years ago.

The country is currently making 80 percent of products and equipment needed by domestic oil industry, mentioned the minister, underlining that the 13th administration has accelerated the implementation of oil projects.

"We have become self-sufficient oil and gas industry and are exporting technical and engineering services to countries sanctioned by the U.S.," said Owji, explaining Iran started exporting technical and engineering services to refineries in Venezuela and Latin America under the 13th administration and reactivated their oil industry, which had come to a standstill due to sanctions.

The incumbent administration has given top priority to the completing of partly-finished projects and the launching of new projects such as the newly-inaugurated Phase 11 of the South Pars (SP) gas field, he pointed out.

Qom Province's gas consumption in all sectors is between 4 and 5 million cubic meters per day (mcm/d), said Owji, adding SP Phase 11 produces some 14 mcm/d and its production will increase by drilling more wells.

Under the 13th administration, he said, domestic gas output has jumped 50 mcm/d and the country faced no problem with gas supply during the severe winter last year.

Shifting to projects for reducing air pollution, the oil minister referred to the collecting of associated petroleum gas (APG), stating 11.5 mcm of flare gas has been gathered a day since the 13th administration took office and the volume of APG to be captured by the end of the year (March 19, 2024) will be equal to the amount produced by one phase of the SP field.

He also pointed to the impacts of the oil industry on the country's economic growth, concluding that the oil and gas sectors' economic growth stood at 10.5 percent in the year to March 20, 2023 and rose to 19.6 percent in spring 2023.

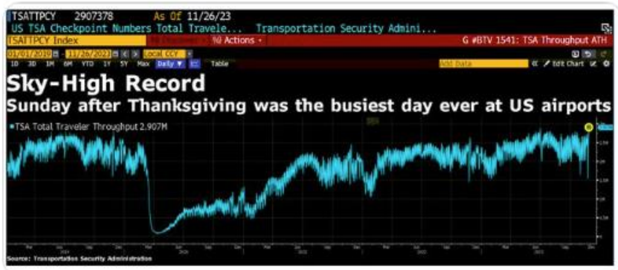
Dan Tsubouchi @Energy_Tidbits · 16h

Americans doing their bit to boost #JetFuel consumption.

TSA says yesterday saw 2.907 million people, the largest single-day number of travelers ever seen in US airport as Americans fly after Thanksgiving weekend.

Thx @business.

#OOTT



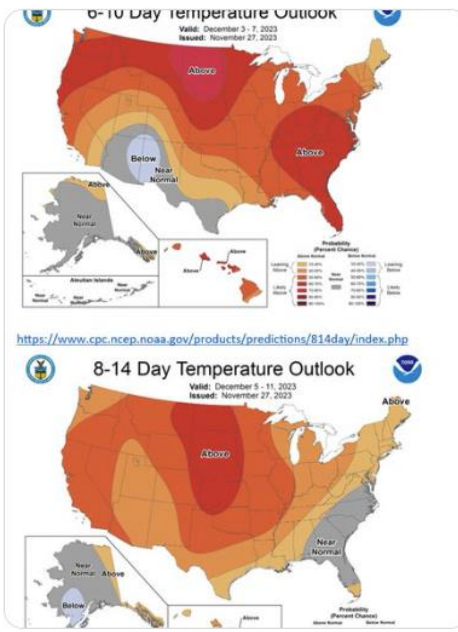
1 4 12 2.1K

Dan Tsubouchi @Energy_Tidbits · 22h

Never a positive for #NatGas prices when forecasts are to start Dec warmer than normal.

Today's @NOAA 6-10 & 8-14 day temp outlook stills call for warmer than normal temps.

No surprise, HH #NatGas prices were $0.07 to $2.79.
#OOTT



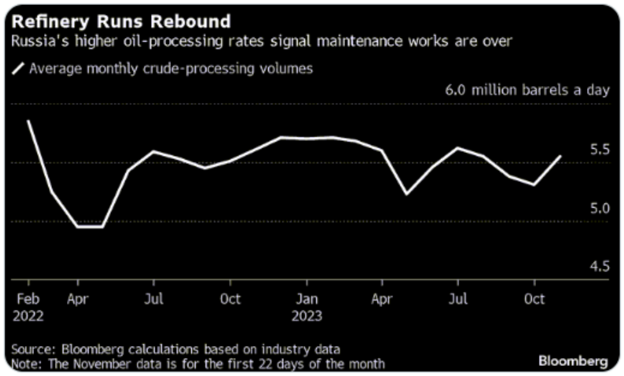
2 5 15 4.4K

Dan Tsubouchi @Energy_Tidbits · 23h

More oil processed by Russian oil refineries = Russian #Oil shipments should be down again.

Russian refineries processed 5.65 mmb/d in Nov 16-22, over 100,000 b/d more vs prior week.

Nov to date is 5.55 mmb/d, +236,000 b/d vs most of Oct.
Thx @ja_herron #OOTT



> Dan Tsubouchi @Energy_Tidbits · Nov 21
>
> 
>
> It's just math.
>
> Russia refinery runs up = Less #Oil for export.
>
> 11/19 wk: RUS oil shipments -580,000 b/d WoW to ...
> Show more

4 · 4 · 4.4K

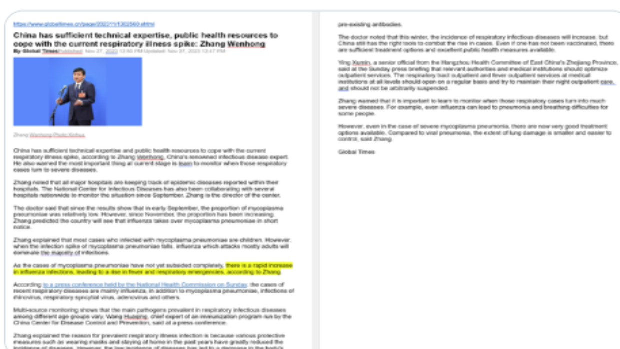
Dan Tsubouchi @Energy_Tidbits · 5h

Holdback to China recovery.

Surely this will cause some people to go out less

*"there is a **rapid increase i**n influenza infections, leading to a rise in fever and r**espiratory emergencies**"* reports China state media.

#OOTT #Oil



China has sufficient technical expertise, public health resources to cope with the current respiratory illness spike: Zhang Wenhong

4 · 4 · 2K

Dan Tsubouchi @Energy_Tidbits · 6h

Stalled China recovery

China scheduled domestic flights +0.4% WoW to 89,916 flights. 3rd consecutive wk <90,000, back to Mar 21-27 levels.

Domestic flights to increase for more feeder flights for increasing international flights.

Thx @BloombergNEF Claudio Lubis #OOTT

Oct 3-9: +4.2% WoW to 101,120
Sept 26-Oct 2: +1.3% WoW to 97,009
Sept 19-25: essentially flat WoW to 95,742
Sept 12-18: -2.7% WoW to 95,853
Sept 5-11: -5.0% WoW to 98,469
Aug 29-Sep 4: -1.2% WoW to 103,637
Aug 22-28: +0.2% WoW to 104,932
Aug 15-21: -0.1% WoW to 104,716
Aug 8-14: +0.8% WoW to 104,823
Aug 1-7: -0.4% WoW to 104,000
July 25-31: +0.4% WoW to 104,436
July 18-24: +1.3% WoW to 104,011
July 11-17: +2.8% WoW to 102,709
Jul 4-10: +2.4% WoW to 99,904
Jun 27-Jul 3: +1.9% WoW to 97,572
Jun 20-26: +3.4% WoW to 95,724
Jun 13-19: -0.9% WoW to 92,568
June 6-12: -1.2% WoW to 93,328

Apr 25-May 1: +0.04% to 94,471
Apr 18-24: +2.1% WoW to 94,138
Apr 11-17: +0.7% WoW to 92,231
Apr 3-10: -4.2% WoW to 91,567
Mar 28-apr 3: +6.8% WoW to 95,624
Mar 21-27: +1.5% WoW to 89,513
Mar 14-20: -0.6% WoW to 88,166
Mar 7-13 week: -0.8% WoW to 88,675
Feb 27-Mar 3 week: -2.6% WoW to 89,430
Feb 21-27 week: +0.0% WoW to 91,828
Feb 14-20 week -0.5% WoW to 91,561
Feb 7-13 week -0.7% WoW to 92,007
Jan 31- Feb 6 week +10.9% WoW
Jan 24-30 week -9.2% WoW to 83,500
Jan 17-23 week +7% WoW to 91,959
Jan 10-16 week +20% WoW to 85,910
Jan 3-9 week: -5.3% WoW to 71,642
Dec 27-Jan 2 week: -5.6% WoW to 75,652

BNEF Aviation Indicators Weekly Nov 27

4 · 6 · 2.5K

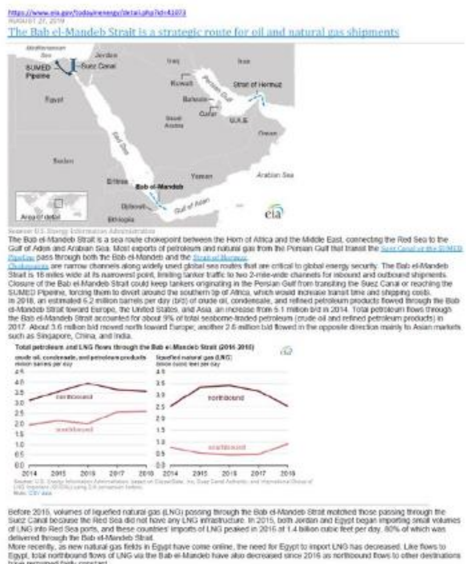
Dan Tsubouchi @Energy_Tidbits · 7h

Good news, USS MASON led recapture of Houthi seized tanker.
twitter.com/CENTCOM/status...

@CENTCOM: Houthis then fired 2 ballistic missiles at USS MASON but landed 10 miles away.

Suez Canal 101: all tankers/cargo ships have to go thru Suez go thru Red Sea & Bab el Mandeb.
#OOTT

> **Dan Tsubouchi** @Energy_Tidbits · Nov 26
>
> "Israeli-linked chemical tanker seized in Gulf of Aden, US official, vessel company say" reports @Elyaakoubi.
>
> Reminder Suez Canal 101: all tankers/cargo ships thru Suez have to go thru Red Sea and Bab el Mandeb....
> Show more



The Bab el-Mandeb Strait is a strategic route for oil and natural gas shipments

The Bab el-Mandeb Strait is a sea route chokepoint between the Horn of Africa and the Middle East, connecting the Red Sea to the Gulf of Aden and Arabian Sea. Most exports of petroleum and natural gas from the Persian Gulf that transit the Suez Canal or the SUMED Pipeline pass through both the Bab el-Mandeb and the Strait of Hormuz.
Chokepoints are narrow channels along widely used global sea routes that are critical to global energy security. The Bab el-Mandeb Strait is 18 miles wide at its narrowest point, limiting tanker traffic to two 2-mile-wide channels for inbound and outbound shipments. Closure of the Bab el-Mandeb Strait could keep tankers originating in the Persian Gulf from transiting the Suez Canal or reaching the SUMED Pipeline, forcing them to divert around the southern tip of Africa, which would increase transit time and shipping costs.
In 2018, an estimated 6.2 million barrels per day (b/d) of crude oil, condensate, and refined petroleum products flowed through the Bab el-Mandeb Strait toward Europe, the United States, and Asia, an increase from 5.1 million b/d in 2014. Total petroleum flows through the Bab el-Mandeb Strait accounted for about 9% of total seaborne-traded petroleum (crude oil and refined petroleum products) in 2017. About 3.6 million b/d moved north toward Europe; another 2.6 million b/d flowed in the opposite direction mainly to Asian markets such as Singapore, China, and India.

Total petroleum and LNG flows through the Bab el-Mandeb Strait (2014-2018)

Before 2015, volumes of liquefied natural gas (LNG) passing through the Bab el-Mandeb Strait matched those passing through the Suez Canal because the Red Sea did not have any LNG infrastructure. In 2015, both Jordan and Egypt began importing small volumes of LNG into Red Sea ports, and these countries' imports of LNG peaked in 2016 at 1.4 billion cubic feet per day, 80% of which was delivered through the Bab el-Mandeb Strait.
More recently, as new natural gas fields in Egypt have come online, the need for Egypt to import LNG has decreased. Like flows to Egypt, total northbound flows of LNG via the Bab el-Mandeb have also decreased since 2016 as northbound flows to other destinations have remained fairly constant.

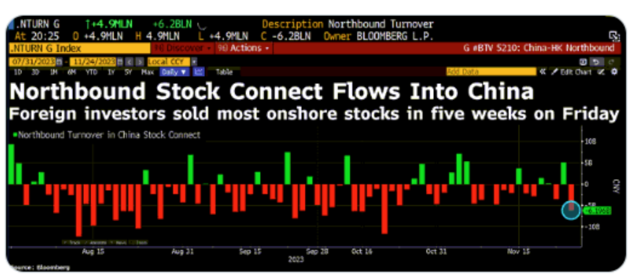
1 · 1.2K

Dan Tsubouchi @Energy_Tidbits · 16h

More sellers than buyers is never a good thing!.

"*foreign investors sold most onshore* [China] *stocks in five weeks on Friday*" @business.

#OOTT



2 · 5 · 2K

Dan Tsubouchi @Energy_Tidbits · Nov 26

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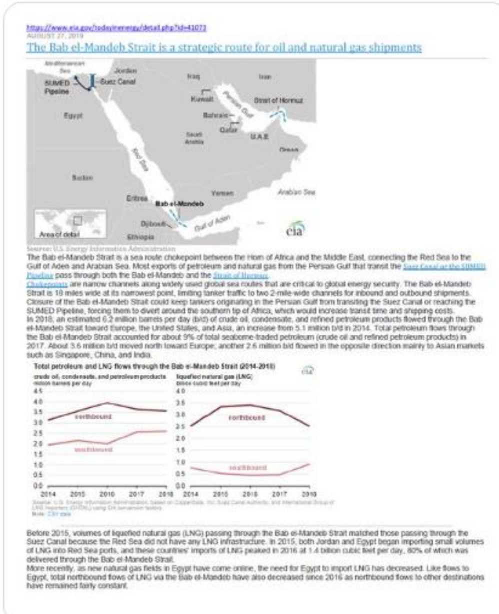
#OOTT

reuters.com/world/middle-e...



https://www.eia.gov/todayinenergy/detail.php?id=41073

AUGUST 27, 2019

The Bab el-Mandeb Strait is a strategic route for oil and natural gas shipments

Source: U.S. Energy Information Administration

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3 5 3K