

Energy Tidbits

Nov 17, 2024

Produced by: Dan Tsubouchi

Trump Sets Up US for Higher for Longer Oil & Natural Gas Production as he Appoints Chris Wright and Doug Burgum

Welcome to new Energy Tidbits memo readers. We are continuing to add new readers to our Energy Tidbits memo, energy blogs and tweets. The focus and concept for the memo was set in 1998 with input from PMs, who were looking for research (both positive and negative items) that helped them shape their investment thesis to the energy space, and not just focusing on daily trading. My priority was and still is to not just report on events, but also try to interpret and point out implications therefrom. The best example is the review of investor days, conferences and earnings calls focusing on sector developments that are relevant to the sector. My target is to write on 50 weekends per year and to post by noon MT on Sunday. The Sunday noon timing was because PMs said they didn't have research to read on Sundays and Sundays are a day when they start to think about the investing week ahead.

This week's memo highlights:

1. Trump sets up US for higher for longer oil and gas production by appointing Liberty Energy CEO Chris Wright as Energy Secretary and North Dakota Governor Doug Burgum as Interior Secretary to lead energy. [\[click here\]](#)
2. Exxon and other oil companies like the changed oil environment under Trump but do not see any big increase in drilling and near-term production. [\[click here\]](#)
3. If NY times report is accurate that Elon Musk met with Iran Ambassador to UN how to diffuse tensions, it sets up the wildcard question if Trump can get Iran onside without first hammering their oil exports and revenues. [\[click here\]](#)
4. Ukraine says Russia attacked with around 120 missiles and 90 drones targeting their energy infrastructure and approx. 1/3 go thru the air defense. [\[click here\]](#)
5. COP29 is scheduled to end Nov 22, we have to believe any final signed document will be full of qualifiers and outs such that countries will effectively agree to do what they can or want to do. [\[click here\]](#)
6. Thank you to all the brave men and women who serve in the armed forces. I had the honor to have friends who come back from fighting in Vietnam in the 70s and it left lasting appreciation for their service and sacrifices.
7. Please follow us on Twitter at [\[LINK\]](#) for breaking news that ultimately ends up in the weekly Energy Tidbits memo that doesn't get posted until Sunday noon MT.
8. For new readers to our Energy Tidbits and our blogs, you will need to sign up at our blog sign up to receive future Energy Tidbits memos. The sign up is available at [\[LINK\]](#)

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Natural Gas: +42 bcf build in US gas storage; now +158 bcf YoY

Last week's (Nov 10, 2024) Energy Tidbits memo highlighted US gas storage started the traditional winter gas withdraw season at 3,932 bcf, which was +157 bcf YoY and +215 bcf above the 5-yr average. And this would have been way higher if producers hadn't shut in production in Q2 and Q3 due to low prices. This is the first week of the traditional winter withdraw season. For the week ending November 8, 2024, the EIA reported a +42 bcf build [\[LINK\]](#). Total storage is now 3,974 tcf, representing a surplus of +158 bcf YoY compared to a surplus of +157 bcf last week. Since February, total storage had remained above the top end of the 5-yr range, until 1 month ago when storage dipped into the 5-yr range but last week saw the storage once again rise above the max, and this week continued this trend. The week of November 8, 2024, saw storage come in +97 bcf above the previous 5-yr maximum of 3,877 tcf. Total storage is now +228 bcf above the 5-year average, above last week's +215 bcf surplus. Below is the EIA's storage table from its Weekly Natural Gas Storage report and a table showing the US gas storage over the last 8 weeks.

**+42 bcf build in US
gas storage**

Figure 1: US Natural Gas Storage

Region	Stocks billion cubic feet (Bcf)				Historical Comparisons			
	11/08/24	11/01/24	net change	implied flow	Year ago (11/08/23)		5-year average (2019-23)	
					Bcf	% change	Bcf	% change
East	942	934	8	8	929	1.4	916	2.8
Midwest	1,143	1,130	13	13	1,113	2.7	1,101	3.8
Mountain	290	290	0	0	255	13.7	225	28.9
Pacific	312	310	2	2	290	7.6	281	11.0
South Central	1,286	1,267	19	19	1,229	4.6	1,223	5.2
Salt	349	341	8	8	327	6.7	327	6.7
Nonsalt	937	926	11	11	902	3.9	897	4.5
Total	3,974	3,932	42	42	3,816	4.1	3,746	6.1

Source: EIA

Figure 2: Previous US Natural Gas Storage

Previous 8 weeks (Bcf)				
Week Ended	Gas in Storage	Weekly Change	Y/Y Diff	Diff to 5 yr Avg
Sep/20	3,492	47	159	233
Sep/27	3,547	55	127	190
Oct/04	3,629	82	124	176
Oct/11	3,705	76	107	163
Oct/18	3,785	80	106	167
Oct/25	3,863	78	107	178
Nov/01	3,932	69	157	215
Nov/08	3,974	42	158	228

Source: EIA

Natural Gas: Storage would have been full if producers hadn't shut in production

As we have been highlighting for months, US gas storage would have been way higher if producers hadn't shut in production in Q2 and Q3 due to low prices. In early May, gas storage was +444 bcf YoY on May 3 and there was a real risk that gas storage would have been full early. But a hot summer, some hurricane supply interruptions and producers shutting in natural gas due low prices meant that storage did not get full early. Storage would be way worse if EQT, Coterra, etc didn't shut-in production in Q2 and Q3. And the fact that storage was up YoY even with the shut-in production was the big holdback to Henry Hub

**Producers shut in
natural gas**

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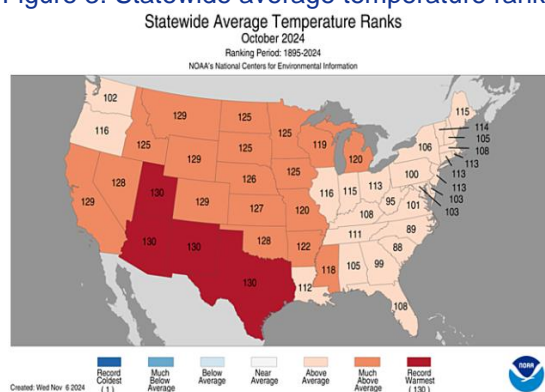
prices in Q2 and Q3. Rather all it resulted in was higher YoY gas storage. As a result, last week's (Nov 10, 2024) Energy Tidbits memo highlighted US gas storage started the traditional winter gas withdraw season at 3,932 bcf on Nov 1, which was +157 bcf YoY and +215 bcf above the 5-yr average. There were various estimates for voluntary shut-in total that seemed to be around 2 bcf/d or higher for the industry.

Natural Gas: NOAA reported US Oct temperature was 2nd hottest in last 130 years

October is shoulder season for natural gas and that means weather driven natural gas demand is low. It isn't normally hot enough to drive big A/C demand or cold enough to drive big furnace demand. It is what we have always called leave your windows open temperatures for the most part. And NOAA's recap of October temperatures saw an average daytime high of 73.2F. On Thursday, the NOAA posted their October temperature recap for the U.S., which came in as the second warmest October in the 130 year record [\[LINK\]](#). The NOAA wrote "*The contiguous U.S. average temperature during October was 59.0°F, 4.9°F above average, ranking second warmest in the 130-year record... The contiguous U.S. average maximum (daytime) temperature during October was 73.2°F, 6.4°F above the 20th century average, ranking second warmest for daytime temperatures in the historical record. Maximum temperatures were record warm across portions of the Deep South and in pockets across the West and above average across much of the remaining Lower 48. Arizona, Wyoming, and Texas each ranked warmest October for daytime temperatures while 29 additional states ranked among their top-10 warmest October for daytime temperatures.*" Below is a map of statewide average temperature ranks.

**Oct was 2nd
hottest US on
record**

Figure 3: Statewide average temperature ranks



Source: NOAA

Natural Gas: NOAA forecasts warmer-than normal temps to end Nov

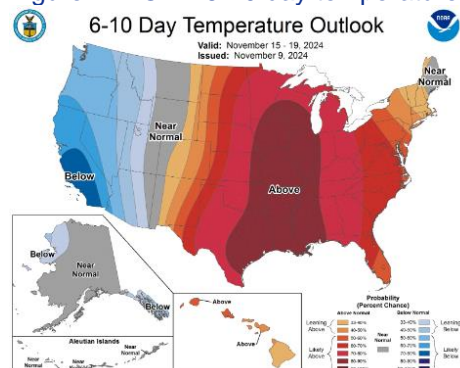
It's now halfway thru November and that means warmer than normal temperatures minimize demand for heating ie. no need to crank up the furnace. Yesterday, we tweeted [\[LINK\]](#) "A warm start to winter is never a positive to HH #NatGas prices. concern is @NOA updated 6-10 & 8-14 day temp outlook for Nov 22-30 calls for warmer than normal temperatures for most of east 1/2 of Lower 48 to end Nov. #OOTT." There is always demand for natural gas especially at nighttime in November, but our reminder is that warmer than normal in Nov temperatures generally mean much less weather driven natural gas demand. Below are

**NOAA updated 6-
10 and 8-14 day
temp outlook**

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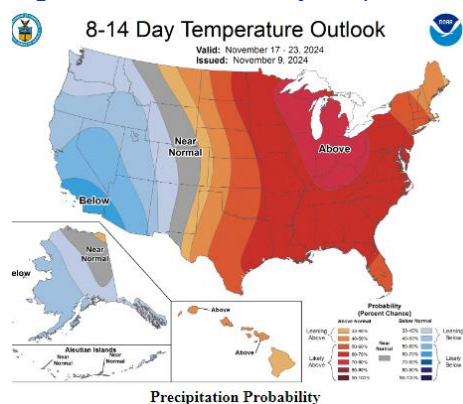
NOAA's updated, as of yesterday, 6-10 day and 8-14 day temperature outlook maps covering Nov 22-30.

Figure 4: NOAA 6-10 day temperature outlook for Nov 15-19



Source: NOAA

Figure 5: NOAA 8-14 day temperature outlook for Nov 17-23



Source: NOAA

Natural Gas: Tough for HH prices to catch up from a warm start to winter

For years, we have warned on the risk to HH gas prices unless it's cold to start winter ie. in Nov/Dec. Yesterday, we tweeted [\[LINK\]](#) "Reason to be cautious on #NatGas with 📢 @NOAA forecast warmer than normal temp to end Nov. Other than 2022 when global #NatGas prices were driven up post RUS 02/24/22 UKR invasion, seasonal HH prices show weakening in Nov/Dec with warm or even normal temps in Nov/Dec. #OOTT." Our tweet included the below graph showing the seasonal HH price moves. Russian invaded Ukraine on Feb 24, 2022 and that drove up global natural gas and LNG prices with Europe cutting off cheap Russia natural gas pipeline gas. Putting 2022 aside, all the other years have seen HH gas prices weaken in Nov/Dec even when temperatures were normal. And our weekly memos have been highlighting US gas storage is up YoY and would have been full if producers hadn't shut in natural gas production due to low prices. And @NOAA's updated next 2-week temperature forecast calls for warmer than normal temperatures to end Nov.

**Risk to HH prices
going into winter**

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Our concern is that the graphs remind it is tough for HH gas prices to catch up with a weak start to winter. So, there is risk going into the winter unless it starts off cold."

Figure 6: HH gas prices seasonal comparison to Nov 15, 2024 close



Source: Bloomberg

Natural Gas: NOAA sees weak La Nina conditions for winter 2024-25

On Thursday, NOAA posted the updated monthly El Niño/La Niña outlook, which is issued on the 2nd Thurs of every month [\[LINK\]](#). NOAA continues to forecast La Niña/Normal conditions in the Northern Hemisphere Winter 2024-25. The takeaway from the November update is that there has been a slightly lowered probability of a La Niña emergence this winter; the La Niña expected to begin in October-December and persist through January 2025-March 2025. The probability forecast for Dec/Jan/Feb is 99% expectation for La Niña or normal conditions; NOAA wrote: *"The IRI plume predicts a weak and a short duration La Niña, as indicated by the Niño-3.4 index values less than -0.5°C. The latest North American Multi-Model Ensemble (NMME) forecasts are cooler than the IRI plume and predict a weak La Niña. Due to this guidance and La Niña-like atmospheric circulation anomalies over the tropics, the team still favors onset of La Niña, but it is likely to remain weak and have shorter duration than other historical episodes. A weak La Niña would be less likely to result in conventional winter impacts, though predictable signals could still influence the forecast guidance (e.g., CPC's seasonal outlooks). In summary, La Niña is most likely to emerge in October-December 2024 (57% chance) and is expected to persist through January-March 2025"*.

**La Niña/Normal
forecast for winter
2024/25**

Figure 7: NOAA El Niño probabilities

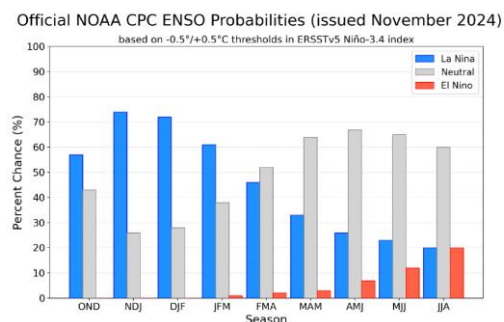


Figure 7. Official ENSO probabilities for the Niño 3.4 sea surface temperature index (5°N-5°S, 120°W-170°W). Figure updated 14 November 2024.

Source: NOAA

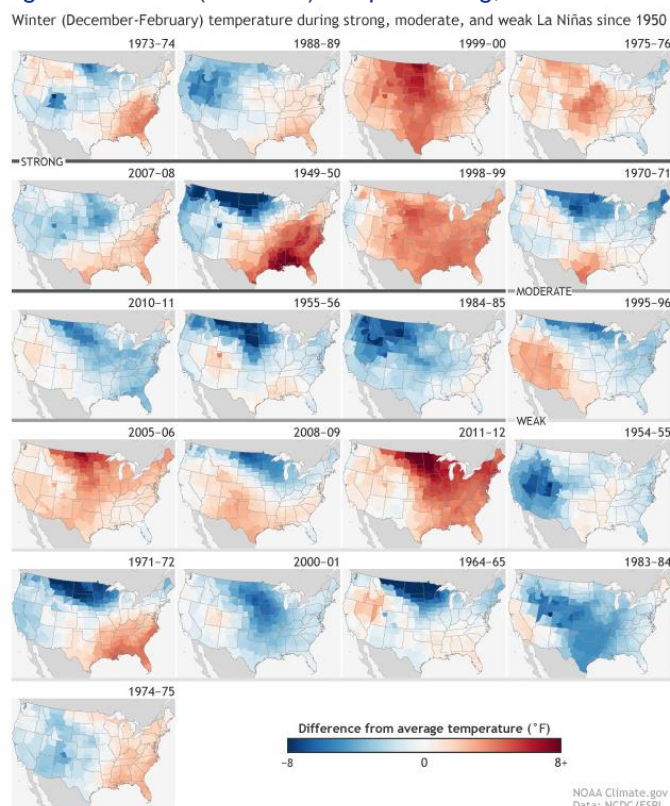
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La Nina correlations to colder winters aren't perfect

La Nina winters are typically colder than normal in the northern U.S., but we remind of an October 6, 2017 NOAA brief: *"Temperature patterns during every La Niña winter since 1950". In this brief the NOAA looked at all El Nina winters since 1950, and classified them as strong, moderate or weak La Ninas while also showing the average winter (Dec thru Feb) temperature map. We checked this weekend and the link still works [\[LINK\]](#). NOAA wrote: "[the following] series of maps shows temperature patterns across the continental United States compared to the 1981-2010 average for every winter season—December through February—since 1950 that coincided with La Niña conditions in the equatorial Pacific Ocean. The years are ranked by how far below average the temperatures were in the central/eastern tropical Pacific: strong (at least -1.5° Celsius colder than average), moderate (between -1° and -1.5°C), and weak (between -0.5° and -1°C colder-than-average... In general, the stronger the La Niña, the more reliable the impacts on the United States. The typical U.S. impacts are warmer- and drier-than-average conditions across the southern tier of the United States, colder-than-average conditions across the north-central Plains, and wetter-than-average conditions in the Pacific Northwest stretching into northern California... However, as is evident in these maps, there is a great deal of variability even among strong La Niña events. For example, 8 of the 11 strong and moderate events show the cool conditions in the Northern Great Plains, which is most winters, but not all. This "failure" of the typical pattern occurs because La Niña is never the only thing that influences the climate over the United States during the winter. Other climate phenomena, such as the Arctic Oscillation or the Madden Julian Oscillation, as well as the random nature of weather can also play a large part in how a winter turns out". It is important to note that in current forecast is for a weak and brief La Nina, which the NOAA notes above, is less correlated with significant impacts on conditions. Below are the La Nina maps from the NOAA brief.*

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Figure 8: Winter (Dec-Feb) temp in strong, moderate and weak La Ninas since 1950



Source: NOAA

Natural Gas: EIA, Shale/tight gas production been flat at ~83 bcf/d for last 4 months

June marked the first month that the EIA stopped releasing its Drilling Productivity Report and began releasing shale/tight oil and natural gas data with the monthly Short Term Energy Outlook. (i) Please note this came with some major reporting changes, namely there are no longer monthly forecasts for tight gas production by basin. Previously, the EIA would provide an estimate of the current month tight/shale production (in this case November) and a forecast for the next month (in this case December). But now, the EIA only provides estimates for the just finished month for tight/shale. So, in the case of the new November report, there is only shale/tight for the just finished month, i.e., October. (ii) On Wednesday, the EIA released its monthly STEO for November 2024 [\[LINK\]](#). (iii) The key takeaway is that US shale/tight natural gas has been strong the last four months at ~83 bcf/d. July was 82.76 bcf/d, Aug was 83.12 bcf/d, Sept was 83.20 bcf/d and now Oct was 83.11 bcf/d. (iv) Note that the EIA revised their data for shale/tight gas production back to 2020 from September's STEO, and we have adjusted our table to reflect the updated data. For the last 12 months November 2023 thru December 2024, the EIA revises production figures each month, and the average revision for during the November STEO is +0.211 bcf/d. The two areas with the

Shale/tight gas production

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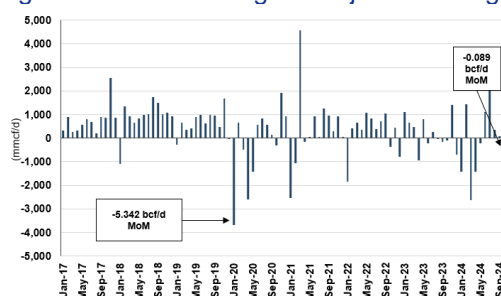
most revisions are Marcellus and Utica. Our Supplemental Documents package includes excerpts from the EIA STEO.

Figure 9: EIA Major Shale/Tight Natural Gas Production

bcfd	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Oct MoM%	Oct YoY%
Permian	17,118	17,421	16,691	17,388	17,811	17,915	17,794	18,121	18,232	18,315	18,392	18,561	18,561	0.0%	8.4%
Haynesville	14,415	14,320	13,856	13,774	13,891	13,249	12,462	11,864	12,297	12,618	13,037	12,805	12,783	-0.2%	-11.3%
Marcellus	25,360	26,316	26,458	25,844	25,665	23,850	23,773	23,424	24,009	25,956	25,809	25,890	25,971	0.3%	2.4%
Utica	5,940	6,089	6,220	6,032	6,162	6,146	5,991	6,017	6,063	6,302	6,329	6,378	6,217	-2.5%	4.7%
Engle Ford	4,497	4,478	4,459	4,344	4,408	4,432	4,319	4,479	4,472	4,475	4,478	4,481	4,494	0.1%	-0.3%
Bakken	2,530	2,571	2,616	2,221	2,495	2,509	2,570	2,598	2,583	2,563	2,604	2,615	2,627	0.5%	3.8%
Barnett	1,779	1,784	1,766	1,680	1,716	1,703	1,577	1,564	1,704	1,671	1,659	1,650	1,640	-0.6%	-7.8%
Fayetteville	878	872	862	774	846	844	777	832	816	811	816	819	822	0.4%	-6.4%
Mississippian	2,335	2,313	2,397	2,331	2,466	2,316	2,332	2,304	2,304	2,305	2,305	2,306	2,306	0.0%	-1.2%
Niobrara-Codell	2,730	2,780	2,811	2,671	2,825	2,864	2,762	2,790	2,778	2,790	2,802	2,814	2,825	0.4%	3.5%
Woodford	2,864	2,836	2,891	2,688	2,823	2,734	2,771	2,838	2,798	2,797	2,795	2,794	2,793	0.0%	-2.5%
Rest of U.S.	2,216	2,287	2,329	2,176	2,245	2,174	2,089	2,169	2,158	2,160	2,094	2,089	2,084	-0.2%	-6.0%
Total	82,662	84,067	83,356	81,923	83,353	80,736	79,317	79,100	80,214	82,763	83,120	83,202	83,113	-0.1%	0.5%

Source: EIA

Figure 10: MoM Change – Major Shale/Tight Natural Gas Production



Source: EIA

Natural Gas: EIA STEO immaterial decreases to 2024-25 gas production forecast

On Wednesday, the EIA released its monthly Short Term Energy Outlook for November 2024 [\[LINK\]](#). (i) The EIA made an immaterial decrease to its 2024 US natural gas production estimate by -0.1 bcf/d to 103.4 bcf/d, which, on a full year average basis, now gives a YoY decline of -0.3 bcf/d from 2023. The key reason for the YoY decline is the decision by some major natural gas producers such as EQT to shut-in natural gas due to low prices. (ii) The EIA lowered its 2024 HH price forecast -\$0.11/mcf to \$2.26/mcf (was \$2.37/mcf) and decreased their 2025 forecast -\$0.16/mcf to \$3.01/mcf (from \$3.17/mcf). The EIA wrote “We expect the Henry Hub natural gas spot price to rise in the coming months to average \$2.80 per million British thermal units (MMBtu) in 1Q25, following seasonal patterns during which prices typically rise during the winter. The monthly average Henry Hub daily spot price fell to \$2.20/MMBtu in October and below \$2.00/MMBtu in early November. Low prices reflected warm temperatures, which could delay the beginning of withdrawals of natural gas from storage until mid-November. We expect the Henry Hub price to average around \$2.90/MMBtu in 2025, as global demand for U.S. liquefied natural gas exports, a component of U.S. natural gas demand, continues to increase.” (iii) The quarterly changes in Natural Gas production are as follows: Q1/24 down -0.1 bcf/d to 104.0 bcf/d, Q2/24 flat at 102.0 bcf/d, Q3/24 -0.4 bcf/d to 103.5 bcf/d, and Q4/24 -0.2 bcf/d to 103.8 bcf/d. (iv) The EIA decreased its 2025 forecast -0.1 bcf/d to 104.5 bcf/d, which, on a full year average basis, would be up +1.1 bcf/d YoY. The EIA says the reasons for the YoY increase are driven by their increased HH gas price assumption. The quarterly changes to 2025 are as follows: Q1/25 flat at 104.2 bcf/d,

**EIA US natural gas
production
forecast**

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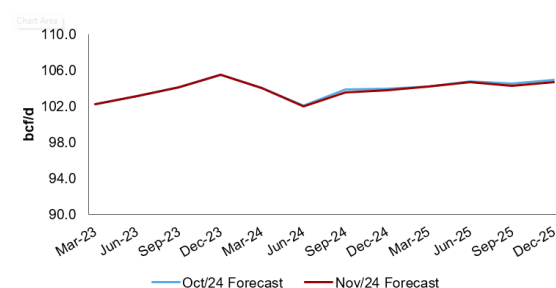
Q2/25 -0.1 bcf/d to 104.7 bcf/d, Q3/25 -0.2 bcf/d at 104.3 bcf/d, and Q4/25 -0.3 bcf/d 104.7 bcf/d.

Figure 11: EIA STEO Dry Natural Gas Production Forecasts

bcfd	Q1/23	Q2/23	Q3/23	Q4/23	2023	Q1/24	Q2/24	Q3/24	Q4/24	2024	Q1/25	Q2/25	Q3/25	Q4/25	2025
Nov-24	102.2	103.2	104.1	105.5	103.7	104	102.0	103.5	103.8	103.4	104.2	104.7	104.3	104.7	104.5
Oct-24	102.2	103.2	104.1	105.5	103.7	104.1	102.0	103.9	104.0	103.5	104.2	104.8	104.5	105.0	104.6
Sep-24	102.2	103.2	104.1	105.5	103.7	104.1	102.1	103.3	104.0	103.4	103.8	104.5	104.8	105.9	104.7
Aug-24	102.2	103.2	104.1	105.5	103.8	104.0	101.7	103.6	103.8	103.3	103.5	104.4	104.8	105.9	104.6
July-24	102.3	103.2	104.1	105.6	103.8	104.1	102.4	103.4	104.1	103.5	104.0	104.7	105.3	106.7	105.2
June-24	102.3	103.2	104.1	105.6	103.8	103.9	100.4	101.4	102.5	102.1	102.9	104.3	104.7	105.7	104.4
May-24	102.3	103.2	104.1	105.6	103.8	104.0	102.3	102.4	103.3	103.0	103.8	104.9	105.0	105.5	104.8
Apr-24	102.3	103.2	104.1	105.6	103.8	103.9	103.0	103.4	104.0	103.6	103.9	105.0	105.0	105.7	104.9
Mar-24	102.3	103.2	104.1	105.6	103.8	103.2	103.8	103.3	103.2	103.4	103.5	104.7	104.5	104.9	104.4
Feb-24	102.3	103.2	104.1	105.4	103.8	103.5	105.0	104.4	104.7	104.4	105.5	106.7	106.5	107.2	106.5
Jan-24	102.3	103.2	104.2	104.6	103.6	105.1	105.0	104.6	105.5	105.0	106.6	106.7	106.1	106.2	106.4
Dec-23	102.3	103.2	104.0	105.1	103.7	104.8	104.8	104.7	105.3	104.9					
Nov-23	102.3	103.2	104.1	105.1	103.7	105.1	104.8	104.7	105.9	105.1					
Oct-23	102.4	103.2	104.4	104.9	103.7	104.7	104.8	104.8	106.1	105.1					
Sep-23	102.1	102.8	102.7	103.1	102.7	104.3	104.7	104.9	105.9	104.9					
Aug-23	102.1	102.8	103.4	103.6	103.0	104.0	103.9	104.0	104.6	104.1					
July-23	102.0	102.2	103.0	102.2	102.4	101.8	101.5	102.5	103.7	102.4					
June-23	102.0	103.7	103.4	101.9	102.7	102.8	102.8	103.0	103.6	103.0					
May-23	102.1	101.9	99.9	100.4	101.1	100.7	101.1	101.4	101.8	101.2					
Apr-23	101.6	100.5	100.5	100.9	100.9	101.2	101.5	101.8	101.8	101.6					
Mar-23	101.0	100.2	100.6	101.0	100.7	101.4	101.4	102.0	102.0	101.7					
Feb-23	99.9	100.0	100.3	100.9	100.3	101.2	101.6	102.0	101.9	101.7					
Jan-23	100.8	99.9	100.1	100.6	100.3	101.1	101.8	102.7	103.6	102.3					

Source: EIA, STEO

Figure 12: EIA STEO Natural Gas Production Forecasts by Month



Source: EIA, STEO

Natural Gas: EIA STEO est. storage 3.947 tcf at Nov 1/24, +204.6 bcf YoY

The EIA STEO also includes its forecast for US gas storage. (i) Please note that our bias is to not pay much attention to gas storage forecasts past the start of winter 2024-25 until we get to late Nov/early Dec, and there is some better near-term certainty to the start of winter temperatures. This is because winter temperatures are the primary driving force for natural gas demand and it is hard to have confidence on a winter 2024/25 temperature forecasts when we just entered November. (Oii) EIA estimates US gas storage ended winter 2023/24 at 2.562 tcf at April 1, 2024, which was up +0.446 tcf YoY. (iii) As noted earlier, we remind that US gas storage would be a lot worse if producers like EQT hadn't shut-in natural gas production in response to low prices. The EIA forecasts gas storage to start winter 2024/25 at 3.947 tcf at Nov 1, 2024, which is an increase of +204.6 bcf YoY. [Note this is slightly different than our 3.932 tcf noted earlier based on the EIA weekly gas storage report last week.] The November STEO is up vs the October STEO forecast of storage at 3.813 tcf at Nov 1, 2024. (iv) Ultimately winter temperatures will determine if storage is high or low. But, for now, the EIA forecasts gas storage to end winter 2024/25 in April at 2.242 tcf, which would be -320.1 bcf lower YoY. The key reason for less storage to end winter is that the EIA

**EIA November
STEO storage
forecast**

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is assuming this winter is colder than last year's hot winter. The EIA assumes heating degree days will be +3% higher YoY during the upcoming winter. (v) There is even more uncertainty as you look out to winter 2025/26. The October STEO forecasts winter 2025/26 storage to be 3.734 tcf at Nov 1, 2025, which would be a little lower than its forecast for Nov 1, 2024, at 3.947 tcf. Below is a table tracking the working gas inventory forecasts and actuals since 2016.

Figure 13: EIA STEO US Natural Gas in Storage (2016-2025)

US Working Natural Gas in Storage (billion cubic feet)						
Storage Level	2016-2025					
	Low	High	Range	Average	Deviation	
Mar 2016	2,486.3	1,184.9	2,562.4	1,377.6	1,873.7	32.7%
Oct 2016	4,012.7	3,236.3	4,012.7	776.4	3,624.5	10.7%
Mar 2017	2,062.5	1,184.9	2,562.4	1,377.6	1,873.7	10.1%
Oct 2017	3,816.5	3,236.3	4,012.7	776.4	3,624.5	5.3%
Mar 2018	1,184.9	1,184.9	2,029.4	844.5	1,653.4	(28.3%)
Oct 2018	3,236.3	3,236.3	4,012.7	776.4	3,624.5	(10.7%)
Mar 2019	1,559.4	1,559.4	2,332.5	773.1	1,919.0	(18.7%)
Oct 2019	3,610.0	3,501.1	3,931.6	430.6	3,663.5	(1.5%)
Mar 2020	2,332.5	1,559.4	2,332.5	773.1	1,919.0	21.5%
Oct 2020	3,931.6	3,501.1	3,931.6	430.6	3,663.5	7.3%
Mar 2021	1,975.0	1,559.4	2,332.5	773.1	1,919.0	2.9%
Oct 2021	3,532.8	3,501.1	3,931.6	430.6	3,663.5	(3.6%)
Mar 2022	1,611.8	1,559.4	2,332.5	773.1	1,919.0	(16.0%)
Oct 2022	3,501.1	3,501.1	3,931.6	430.6	3,663.5	(4.4%)
Mar 2023	2,116.5	1,559.4	2,332.5	773.1	1,919.0	10.3%
Oct 2023	3,742.2	3,501.1	3,931.6	430.6	3,663.5	2.1%
Mar 2024	2,562.4	1,559.4	2,332.5	773.1	1,919.0	33.5%
Oct 2024	3,946.8	3,501.1	3,931.6	430.6	3,663.5	7.7%
Mar 2025	2,242.4	1,559.4	2,332.5	773.1	1,919.0	16.8%
Oct 2025	3,734.1	3,501.1	3,931.6	430.6	3,663.5	1.9%

Source: EIA, STEO

Natural Gas: ADNOC signs 10-year 0.07 bcf/d LNG deal with India's GAIL

On Thursday, ADNOC announced that the company signed a long-term 10-year LNG sales agreement with India's GAIL for 0.07 bcf/d for 10 years beginning in 2026 [\[LINK\]](#). This LNG deal is aimed to meet the needs of India's rising natural gas demand, and will be supplied from ADNOC Gas' Das Island liquefaction facility, which has an LNG production capacity of 0.79 bcf/d. The press release reported Rashid Khalfan Al Mazrouei, ADNOC Gas Senior Vice President, Marketing, said: *"This agreement strengthens ADNOC Gas' role as a reliable and responsible global natural gas provider and reflects our ambition to capture future growth opportunities in gas demand. It also reinforces our position as a preferred partner for energy solutions in India"*. Sanjay Kumar, Director of Marketing at GAIL, said: *"India is witnessing a growing demand for LNG to meet its increasing natural gas demand in a diversified sectoral pattern. GAIL plans to significantly increase its term LNG portfolio in the coming years to meet this rising demand. This SPA with ADNOC Gas is a crucial step in this direction, enabling GAIL to augment its existing LNG portfolio to better serve its diverse consumer base"*. Our Supplemental Documents Package includes the ADNOC press release.

**ADNOC / GAIL
sign 10-yr LNG
supply deal**

There have been 26.99 bcf/d of long-term LNG supply deals since July 1, 2021

It's been a busy last five years of long-term LNG deals and, even though high profile calls such as the IEA are for peak natural gas consumption by 2030, buyers continue to lock up long-term LNG supply. This 5-year big wave of LNG deals started in July 2021, and we highlighted this in our July 14, 2021, 8-pg "Asian LNG Buyers Abruptly Change and Lock in Long Term Supply – Validates Supply Gap, Provides Support for

Figure 14: Long-Term LNG Buyer Deals Since July 1, 2021

Long-Term LNG Buyer Deals Since July 1, 2021								Long-Term LNG Buyer Deals Since July 1, 2021							
	Buyer	Seller	Country	Volume	Duration	Start	End	Date	Buyer	Seller	Country	Volume	Duration	Start	End
	Buyer / Seller	Buyer / Seller	Buyer / Seller	(bcfd)	Years				Buyer / Seller	Buyer / Seller	Buyer / Seller	(bcfd)			
Asian LNG Deals								Non-Asian LNG Deals							
Jul 1, 2021	CNOOC	Petronas	China / Canada	0.30	10.0	2022	2032	Jul 29, 2021	PCNG	Venture Global LNG	Poland / US	0.26	20.0	2023	2043
Jul 9, 2021	CPC	QatarEnergy	Taiwan / Qatar	0.16	15.0	2022	2037	Nov 12, 2021	Engie	Cheniere	France / US	0.11	20.0	2021	2041
Jul 9, 2021	Guangzhou Gas	BP	China / Qatar	0.13	12.0	2022	2034	Mar 7, 2022	Shell	Venture Global LNG	US / US	0.26	20.0	2024	2044
Jul 12, 2021	Korea Gas	QatarEnergy	Korea / Qatar	0.25	20.0	2025	2045	Aug 16, 2022	Shell	Venture Global LNG	US / US	0.13	20.0	2023	2043
Sep 16, 2021	CNOOC	QatarEnergy	China / Qatar	0.50	15.0	2022	2037	Mar 29, 2022	WFE	Venture Global LNG	US / US	0.13	20.0	2023	2043
Oct 7, 2021	Shenzhen	BP	China / US	0.04	10.0	2023	2032	May 2, 2022	Engie	NextDecade	France / US	0.23	15.0	2026	2046
Oct 11, 2021	ENN	Cheniere	China / US	0.12	13.0	2022	2035	May 17, 2022	PGNG	Sempra Infrastructure	Poland / US	0.40	20.0	n.a.	n.a.
Nov 4, 2021	Vipac	Venture Global LNG	China / US	0.46	20.0	2022	2042	May 25, 2022	Energy Supply & Trading	Sempra Infrastructure	US / US	0.26	20.0	n.a.	n.a.
Nov 4, 2021	Sinopek	Venture Global LNG	China / US	0.53	20.0	2023	2043	Jun 9, 2022	Equinor	Cheniere	Norway / US	0.23	15.0	2026	2046
Nov 5, 2021	Sinohem	Cheniere	China / US	0.12	17.5	2022	2040	Jun 21, 2022	ENBW	Venture Global LNG	US / US	0.20	20.0	2026	2046
Nov 22, 2021	Foran	Cheniere	China / US	0.04	20.0	2023	2043	Jun 22, 2022	INEOS Energy	Sempra Infrastructure	UK / US	0.21	20.0	2027	2047
Dec 6, 2021	Guangdong Energy	QatarEnergy	China / Qatar	0.13	10.0	2022	2037	Dec 6, 2022	Shell	Venture Global LNG	US / US	0.26	20.0	n.a.	n.a.
Dec 8, 2021	SAT International	QatarEnergy	China / Qatar	0.13	15.0	2022	2037	Jun 22, 2022	Chevron	Cheniere	US / US	0.26	15.0	2027	2042
Dec 10, 2021	Sunrun Green Energy	BP	China / US	0.13	15.0	2022	2037	Jul 12, 2022	Shell	Mexico Pacific Ltd	US / Mexico	0.34	20.0	2026	2046
Dec 15, 2021	SFC Guangdong	BP	China / US	0.03	10.0	2023	2033	Jul 13, 2022	Vitol	Defini Midstream	US / US	0.07	15.0	n.a.	n.a.
Dec 20, 2021	CNOOC Gas & Power	Venture Global LNG	China / US	0.26	20.0	n.a.	n.a.	Aug 9, 2022	Centrica	Defini Midstream	UK / US	0.13	15.0	2026	2041
Dec 29, 2021	SPIC	BP	China / US	0.01	10.0	2023	2032	Aug 24, 2022	Enbridge	Energy Transfer	US / US	0.28	20.0	2026	2046
Jan 11, 2022	ENN	Novatek	China / Russia	0.08	11.0	2024	2035	Oct 6, 2022	ENBW	Venture Global LNG	Germany / US	0.26	20.0	2022	2042
Jan 11, 2022	Zhejiang Energy	Novatek	China / Russia	0.13	15.0	2024	2035	Dec 6, 2022	ENGIE	Sempra Infrastructure	France / US	0.12	15.0	n.a.	n.a.
Feb 2, 2022	Gaspro	Gaspro	Russia / Russia	0.98	30.0	2023	2053	Dec 20, 2022	NextDecade	NextDecade	Portugal / US	0.13	20.0	n.a.	n.a.
Mar 24, 2022	Guangdong Energy	NextDecade	China / US	0.20	20.0	2026	2046	Dec 20, 2022	Shell	UK / Oman	US / US	0.11	10.0	2025	2035
Mar 29, 2022	ENN	Energy Transfer	China / US	0.36	20.0	2028	2048	Jan 25, 2023	PKN ORLEN	Sempra Infrastructure	EU/US	0.13	20.0	2027	2047
Apr 1, 2022	Guangzhou Gas	NextDecade	China / Mexico	0.26	20.0	n.a.	n.a.	Jan 30, 2023	BOTAS	Oman	Turkey / US	0.13	10.0	2025	2035
Apr 8, 2022	ENN	NextDecade	China / US	0.26	20.0	2026	2026	Mar 27, 2023	Shell	Mexico Pacific Ltd	UK / Mexico	0.15	20.0	2026	2046
Apr 22, 2022	Kogas	BP	Korea / US	0.20	18.0	2025	2043	Apr 24, 2023	Hartree Partners LP	Defini Midstream	US / US	0.08	20.0	n.a.	n.a.
May 2, 2022	Guangxi Singapore Pte	Energy Transfer LNG	Singapore / US	0.26	20.0	2026	2046	Jun 21, 2023	Equinor	Cheniere	Norway / US	0.23	15.0	2027	2047
May 3, 2022	OK Gas Trading LLC	Energy Transfer	US / US	0.08	18.0	2026	2046	Jul 22, 2023	SEFE	Venture Global LNG	EU/US	0.30	20.0	2026	2046
May 10, 2022	Exxon Asia Pacific	Venture Global LNG	Singapore / US	0.26	n.a.	n.a.	n.a.	Jul 14, 2023	ONEE (Morocco)	Shell	Africa/US	0.05	12.0	2024	2038
May 11, 2022	Petronas LNG	Venture Global LNG	Malaysia / US	0.13	20.0	n.a.	n.a.	Jul 18, 2023	IOCL	Adnoc	India/UAE	0.16	14.0	2026	2046
May 24, 2022	Hanwha Energy	TotalEnergies	Korea / France	0.08	15.0	2024	2039	Jul 28, 2023	OMV	BP	Austria/UK	0.13	10.0	2026	2036
May 25, 2022	OCISO2 International	Energy Transfer	Korea / US	0.26	20.0	n.a.	n.a.	Aug 4, 2023	ConocoPhillips	Mexico Pacific Ltd	US/Mexico	0.29	20.0	2025	2045
June 5, 2022	China Gas Holdings	Energy Transfer	China / US	0.09	25.0	2026	2051	Aug 22, 2023	BASF	Cheniere	Germany / US	0.10	17.0	2026	2046
June 5, 2022	China Gas Holdings	NextDecade	China / US	0.13	20.0	2027	2047	Aug 30, 2023	Shell	US / Oman	US / Oman	0.11	10.0	2025	2035
Jul 20, 2022	Cheniere	Cheniere	France / France	0.24	20.0	2026	2046	Oct 11, 2023	TotalEnergies	QatarEnergy	France / Qatar	0.46	17.0	2025	2053
Jul 26, 2022	PTT Global	Cheniere	Thailand / US	0.13	20.0	2026	2046	Oct 18, 2023	Shell	QatarEnergy	Netherlands / Qatar	0.46	27.0	2026	2053
Jul 27, 2022	Exxon Asia Pacific	NextDecade	Singapore / US	0.13	20.0	2026	2046	Oct 23, 2023	ENI	Italy / Qatar	Italy / Qatar	0.13	27.0	2026	2053
Sep 2, 2022	Woodside Singapore	Commonwealth	Singapore / US	0.33	20.0	2026	2046	Oct 31, 2023	Vitol	Cheapeake Energy	Sweden / US	0.13	15.0	2028	2043
Sept 21, 2022	Cheniere	Cheniere	France / France	0.53	27.0	2026	2056	Nov 29, 2023	OMV	Cheniere	Netherlands / US	0.11	15.0	2029	2049
Dec 26, 2022	INPEX	Venture Global LNG	Japan / US	0.13	20.0	n.a.	n.a.	Dec 5, 2023	Woodside Energy	Mexico Pacific Ltd	Australia / Mexico	0.17	20.0	2024	2044
Dec 27, 2022	JERA	Oman LNG	Japan / Oman	0.11	10.0	2025	2035	Mar 18, 2024	SEFE	ADNOC	Germany / UAE	0.13	20.0	2024	2044
Jan 19, 2023	TOCHU	NextDecade	Mexico Pacific Ltd	0.13	15.0	n.a.	n.a.	Apr 17, 2024	Shell	Oman LNG	US / Oman	0.21	10.0	2025	2035
Feb 1, 2023	Exxon Asia Pacific	NextDecade	Singapore / Mexico	0.26	20.0	n.a.	n.a.	Apr 22, 2024	TotalEnergies	France / Oman	US / Oman	0.11	10.0	2026	2046
Feb 23, 2023	China Gas Holdings	Venture Global LNG	China / US	0.26	20.0	n.a.	n.a.	May 13, 2024	ENBW	ADNOC	Germany / UAE	0.08	15.0	2028	2043
Mar 6, 2023	Guangxi Singapore Pte	Cheapeake Energy	Singapore / US	0.26	15.0	2027	2042	June 13, 2024	Satco Atamco	NextDecade	Saudi Arabia / US	0.16	20.0	2028	2048
Apr 28, 2023	JERA	Venture Global LNG	Japan / Japan	0.13	20.0	n.a.	n.a.	June 26, 2024	Satco Atamco	Sempra Infrastructure	Saudi Arabia / US	0.66	20.0	2029	2049
May 15, 2023	OCISO2	Commonwealth	Malaysia / US	0.05	15.0	n.a.	n.a.	Jul 23, 2024	SEFE	Sempra Infrastructure	Belgium / US	0.17	28.0	2027	2045
Jun 1, 2023	Bangladesh Oil	QatarEnergy	Bangladesh / Qatar	0.24	15.0	2026	2031	Aug 5, 2024	Gaip	Cheniere	Portugal / US	0.07	20.0	2030	2040
Jun 21, 2023	Petra Bangle	Oman	Bangladesh / Oman	0.20	10.0	2026	2036	Sep 19, 2024	Uniper	ConocoPhillips	Germany / US	0.10	10.0	2026	2036
Jun 21, 2023	CNPC	Energy Transfer	China / US	0.53	27.0	2026	2056	Sep 24, 2024	Glencore	ConocoPhillips	Switzerland / US	0.06	20.0	2026	2046
Jun 28, 2023	ENN	Singapore / US	Singapore / US	0.26	20.0	2026	2046	Sep 24, 2024	Uniper	ConocoPhillips	US / Azerbaijan	0.09	20.0	2025	2035
Jul 5, 2023	Zhejiang Energy	Mexico Pacific Ltd	China / Mexico	0.13	10.0	2027	2047	Total Non-Asian LNG Buyers New Long Term Contracts Since Jul/21 9.69							
Aug 3, 2023	LNG Japan	Woodside	Japan / Australia	0.12	10.0	2026	2036	Total New Long Term LNG Contracts since Jul/21 26.99							
Sep 7, 2023	Arctura	ADNOC	China / UAE	n.a.	n.a.	n.a.	n.a.	*Excludes Asian short term/spot deals							
Nov 4, 2023	Sinopek	Cheniere	China / US	0.12	20.0	n.a.	n.a.	**On Dec 20, 2021 CNOOC agreed to buy an additional 0.13 bcfd from Venture Global for an undisclosed shorter period							
Nov 27, 2023	Guangxi Singapore Pte	Defini Midstream	India / Singapore	0.10	15.0	n.a.	n.a.	Source: Bloomberg Company Reports							
Dec 20, 2023	ENN	Cheniere	Singapore / US	0.13	15.0	2028	2043	Source: by SAIG Group							
Jan 8, 2024	GAIL	Vitol	India / Singapore	0.13	10.0	2026	2036								
Jan 8, 2024	Shell	Kai Lisins LNG	Singapore / Canada	0.16	20.0	2027	2047								
Jan 16, 2024	ExxonMobil	Mexico Pacific Ltd	Singapore / Mexico	0.16	20.0	2024	2044								
Jan 29, 2024	Shell	Cuxareira	Bangladesh / India	0.13	15.0	2026	2036								
Jan 30, 2024	ADNOC	GAIL India	UAE / India	0.07	10.0	2024	2034								
Feb 6, 2024	Petronet LNG	QatarEnergy	India / Qatar	0.99	20.0	2028	2048								
Feb 19, 2024	Oilfield Fertilisers	India / Norway	India / Norway	0.09	15.0	2026	2041								
Feb 28, 2024	Kogas	Woodside	Korea / Australia	0.07	15.0	2025	2037								
Feb 29, 2024	Sembcorp	TotalEnergies	Singapore / France	0.11	16.0	2027	2043								
Apr 29, 2024	Kogas	BP	Korea / Singapore	0.12	11.0	2026	2037								
May 25, 2024	Shell	India / Canada	India / Canada	0.05	10.0	2027	2037								
May 28, 2024	Hokkaido	Santos	Japan / Australia	0.05	10.0	2027	2037								
Jun 1, 2024	IOC	TotalEnergies	India / France	0.11	10.0	2026	2036								
Jun 4, 2024	CPL	QatarEnergy	Taiwan / Qatar	0.53	27.0	2025	2052								
Jul 1, 2024	PTC	Woodside	Taiwan / Australia	0.79	10.0	2024	2034								
Aug 6, 2024	Okita Gas	ADNOC	Japan / UAE	0.11	10.0	2028	2038								
Aug 26, 2024	KPCA	QatarEnergy	Kuwait / Qatar	0.39	15.0	2025	2040								
Aug 26, 2024	POSCO International	Mexico Pacific Ltd	Korea / Mexico	0.09	20.0	2027	2047								
Sep 2, 2024	INPEX	Shell	Turkey / UAE	0.10	20.0	2027	2037								
Sep 2, 2024	India Oil	ADNOC	Turkey / UAE	0.13	15.0	2028	2043								
Sep 17, 2024	JERA	Woodside Energy	JERA / Woodside	0.05	10.0	2026	2036								
Sep 18, 2024	TotalEnergies	Turkey / France	Turkey / France	0.15	10.0	2027	2037								
Nov 4, 2024	TotalEnergies	China / France	China / France	0.26	15.0	2028	2043								
Nov 4, 2024	Sinopek	TotalEnergies	China / France	0.26	15.0	2028	2043								
Nov 14, 2024	GAIL	ADNOC	India / UAE	0.07	10.0	2025	2035								

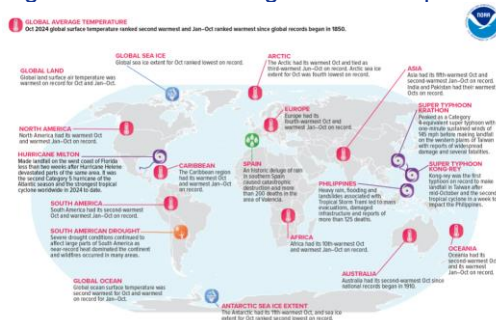
Natural Gas: NOAA, second warmest October globally in the last 175 years
October is shoulder season in the northern hemisphere so it is generally not a big weather

Second warmest October on record globally

17

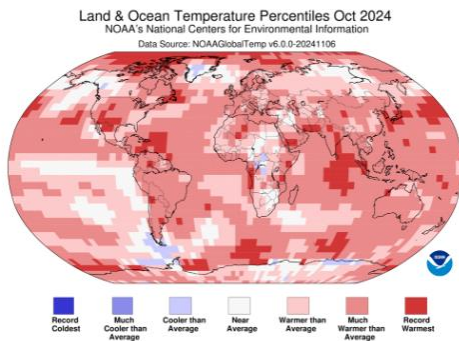
driven natural gas demand season. On Wednesday, the NOAA posted their October recap for the global climate, which came in as the second warmest October in the last 175 years [\[LINK\]](#). The NOAA wrote “the October global surface temperature was 1.32°C (2.38°F) above the 20th-century average of 14.0°C (57.2°F). This is 0.05°C (0.09°F) less than the record warm October of 2023. October 2024 marked the 48th consecutive October with global temperatures, at least nominally, above the 20th-century average. The global land-only October temperature was the warmest on record at 2.18°C (3.92°F) above average, 0.03°C (0.05°F) warmer than the previous record set in 2023.” Below is a map of selected significant climate anomalies and events from October, as well as the land & ocean temperature percentiles for October 2024.

Figure 15: Selected Significant Temperature Anomalies for October 2024



Source: NOAA

Figure 16: Land & Ocean Temperature Percentiles for October 2024



Source: NOAA

Natural Gas: India September natural gas production up +1.1% MoM, down -1.6% YoY

India domestic natural gas production peaked in 2010 at 4.60 bcf/d, and then ultimately declined to average 2.80 bcf/d in 2020-2021. India returned to modest growth in 2021/2022, which was followed by several months of relatively flat production but modest production growth returned in 2023. Recently it has been back from flat to modestly down in 2024. On Thursday, November 14, India's Petroleum Planning and Analysis Cell released their monthly report for October's natural gas and oil statistics [\[LINK\]](#). India's domestic natural gas production for October was 3.54 bcf/d, which was up +1.1% MoM from 3.50 bcf/d in September. On a YoY basis, natural gas production was down -1.6% from 3.60 bcf/d in

**India natural gas
production up
MoM, down YoY**

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October 2023. Our Supplemental Documents package includes excerpts from the PPAC monthly.

Natural Gas: India LNG imports down -2.3% MoM to 3.34 bcf/d in Sept, up +25.5% YoY

For the past several years, India has increased LNG imports whenever domestic natural gas production was flat or decreased. The overriding factor for India tends to be price; if price is high, India pulls back on LNG imports and will normally turn to coal. If prices are low, like was seen this year, then India tends to pick up spot cargoes. India is an opportunistic LNG spot buyer. On Thursday, November 14, 2024, India's Petroleum Planning and Analysis Cell released their monthly report for October's natural gas and oil statistics [\[LINK\]](#). Over the past 3 years, India's LNG imports have declined from a 2020-2021 peak of 3.84 bcf/d in Oct 2020 to just 2.85 bcf/d in Jan 2021 and lower in 2022. October's 2024 LNG imports were 3.34 bcf/d, which is down -2.3% MoM from 3.42 bcf/d in September. LNG imports are now up +25.5% YoY from 2.66 bcf/d in October 2023. Our Supplemental Documents package includes excerpts from the PPAC monthly.

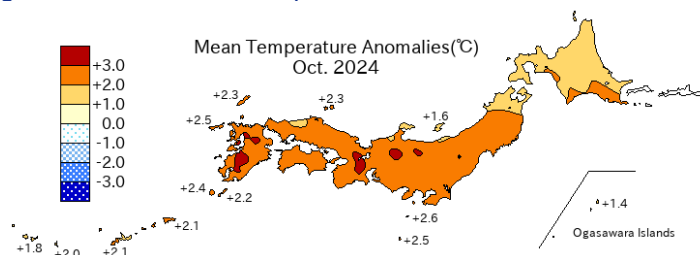
**India LNG imports
down MoM, up
YoY**

Natural Gas: It was one of the hottest Octobers ever in Japan

October is also shoulder season in Japan for weather driven natural gas and electricity demand, which means it generally not hot enough to drive significant weather driven natural gas demand. It was hot in Japan in October, but we remind that a hot October does not drive the same electricity demand as a hot July or August. Plus, we remind that Japan has ongoing electricity conservation practices that reduce electricity demand compared to what might be expected in the US. For example, Japanese office buildings will set their air conditioning at much higher temperatures to minimize A/C demand. On Thursday, the Japan Meteorological Agency posted its climate recap for October [\[LINK\]](#). The JMA noted that the October anomaly of the average temperature over Japan was +2.21 °C, which was the warmest for October since 1898. The JMA included the below mean temperature anomalies map which shows that mean temperatures were the highest in northern/eastern/western Japan. The JMA wrote "Monthly mean temperatures were significantly above normal nationwide, because warm air covered Japan. The monthly anomaly of the average temperature over Japan was +2.21 °C (the warmest for October since 1898). Monthly mean temperatures were the highest in northern/eastern/western Japan on record for October since 1946". Below is a temperature map of Japan for October.

**October's
temperature
recap in Japan**

Figure 17: JMA Mean Temperature Anomalies October 2024



Source: Japan Meteorological Agency

Natural Gas: Japan expects warmer than normal temp to end Nov and first half of Dec.

It was a hot summer in Japan and the warmer than normal temperatures continued through

**JMA temperature
forecast for the
next 30 days**

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the end of October and November and are expected to continue at least through to the first half of December. On Thursday, the Japan Meteorological Agency updated its temperature forecast for the next 30 days, Nov 16 thru Dec 15, in Japan [\[LINK\]](#). There is no JMA commentary on the forecast. JMA is calling for above normal temperatures for the rest of November and the first half of December. There is a +70% probability of above normal temperature occurrence in the majority of Japan during the period, with a +60% probability of above normal temperature occurrence Hokuriku, Tohoku, Tokai, Kanto Koshin; and a +50% probability of above normal temperature occurrence in Hokkaido. It is important to note there is a 40% and 50% probability of above average temperatures expected during the first two weeks of December to start winter. We checked AccuWeather for Tokyo and, for November, there are forecasted daily highs in the 14-17C range and overnight lows from 7-9C. This will be pleasant daytime weather but potentially a little bit of electricity heating demand at night. Below is the JMA temperature forecast for the first two weeks of December.

Figure 18: JMA Average Temperature Outlook for Nov 30 – Dec 13



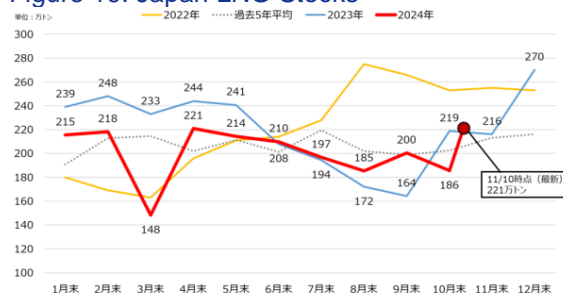
Source: Japan Meteorological Agency

Natural Gas: Japan LNG stocks up WoW, and up YoY; also, up against to 5-yr average

It's been a warm fall in Japan, which means no significant weather driven electricity demand. Japan's LNG stocks are up WoW, up YoY, and are up when compared to the 5-year average. On Wednesdays, Japan's METI releases its weekly LNG stocks data [\[LINK\]](#). LNG stocks on November 10 were 106.1 bcf, up +4.2% WoW from November 3 of 101.8 bcf, and up +2.3% from 103.7 bcf from a year ago. Stocks are up compared to the 5-year average of 102.3 bcf. Below is the Japanese LNG stocks graph from the METI weekly report.

**Japan LNG stocks
up WoW**

Figure 19: Japan LNG Stocks



Source: METI

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Natural Gas: China domestic natural gas production +8.4% YoY +1.8 bcf/d YoY in Oct

For years, we have warned that China's LNG imports would move from strong YoY increases and the driving force for global LNG markets to flat or small growth. And that this wasn't due to reducing demand. Rather it was due to the increasing China imports of cheaper natural gas pipeline imports from the Power of Siberia and their return to increasing domestic natural gas production. And we have highlighted how LNG is the highest price, by far, source of natural gas so it gets squeezed first. China continues to increase its domestic natural gas production. On Friday, Bloomberg reported China domestic natural gas production for Oct was +8.4% YoY, +1.8 bcf/d YoY to 23.7 bcf/d in Oct 2024 vs 21.9 bcf/d in Oct 2023. And China domestic natural gas production for YTD Oct 31 was +6.7% YoY, +1.5 bcf/d YoY to 23.6 bcf/d for YTD Oct 31, 2024 vs 22.1 bcf/d for YTD Oct 31, 2023.

**China NatGas
production +1.8
bcf/d YoY in Oct**

Natural Gas: Gazprom loses arbitration award, cuts natural gas to Austria

Earlier this morning, Bloomberg reported on Gazprom confirming unchanged natural gas supply via the Sudzha gas pumping station into Ukraine was the same ~1.5 bcf/d. Yesterday OMV (Austria) and Gazprom confirmed Gazprom's separate natural gas flows to OMV were stopped at 6am local time on Friday after OMV was awarded an arbitration award against Gazprom on Wednesday. On Wed, OMV announced [\[LINK\]](#) "OMV's arbitration proceedings against Gazprom Export under ICC rules concluded with an award on November 13, 2024 OMV is taking steps to recover damages from Gazprom Export based on this arbitral award of EUR 230 mn plus interest and costs. The arbitral award will be set off with immediate effect against payments to be made by OMV to Gazprom Export under its Austrian gas supply contract. It is expected that there may be a deterioration of the contractual relationship under the Austrian supply contract of OGMT with Gazprom Export, including a potential halt of gas supply." Gazprom did cut off the natural gas flow on Friday morning. It isn't clear what happens next but "OMV confirms that it can deliver the full contracted volumes of gas to its customers in case of a potential supply disruption by Gazprom Export." Our Supplemental Documents package includes the OMV release.

**Gazprom cuts
natural gas to
Austria**

Natural Gas: Russia continues to ship NatGas despite Ukraine control of Sudzha

It's been over a few months since Ukraine invaded the Russian region of Kursk and took over control of the Sudzha natural gas intake station in Russia for transport on the last remaining open natural gas intake station in Russia for transport on the last remaining open natural gas pipeline allowed to export Russian natural gas to central European countries. Europe TTF gas prices were up 5% when Ukraine took over Sudzha on fears of supply interruption. However, since then Gazprom has confirmed almost daily, if not daily, that there has been no interruption in natural gas supplies. Bloomberg reports on the Gazprom volumes most days and the latest confirmation we saw earlier this morning (Sun Nov 17) that Gazprom continues to ship the same volume of natural gas of 1.50 bcf/d via Sudzha. Also earlier this morning, TASS reported [\[LINK\]](#) "Gazprom supplies Russian gas for transit through Ukrainian territory in the volume confirmed by the Ukrainian side via the Sudzha gas pumping station of 42.4 mln cubic meters as of November 17." [Note 42.4 mcm is 1.5 bcf/d] That shouldn't surprise because if Gazprom stops natural gas from entering the pipeline at Sudzha, they will be forsaking any export natural gas revenues and Russia needs every dollar it can get. And, at the same time, Ukraine continues to take the transit fees revenue. So, for now at least, it

**Ukraine captures
key Russian gas
infrastructure**

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looks like a reminder from Ukraine to Russia that they can cut off Russian natural gas at any time. Below is a 2018 map from Oxford Institute for Energy Studies showing Sudzha.

Figure 20: The Ukrainian pipeline system



Source: Oxford Institute for Energy Studies

Natural Gas: Massive Russian air attack target Ukraine energy infra last night

We shouldn't be surprised that Russia is hammering Ukraine to hit them hard going into the winter and to try to set the stage for a deal early in Trump Administration. This is the time when any hits to the grid will hurt Ukraine citizens the most. As of our 7am MT news cut off (4pm Kyiv time), we haven't seen damage assessments of Russia's massive air attack against Ukraine energy infrastructure last night. Earlier this morning, we tweeted [\[LINK\]](#) "Last thing Ukraine needs as winter approaches. Huge attack at UKR energy infra and 1/3 got got thru air defense. Zelensky: "In total, around 120 missiles and 90 drones""Our air defenses destroyed more than 140 aerial targets.." Too early for damage assessment. [\[LINK\]](#) #OOTT #NatGas." Our tweet forwarded the Kyiv Independent report update as of 4:27am MT. Note they highlight the report is regularly updated as they receive more news. They wrote "Russia targeted "power generation and transmission facilities throughout Ukraine," according to Energy Minister Herman Halushchenko." And then quoted Zelensky on how Ukraine shot down more than 140 aerial targets but, that means 1/3 or about 70 missiles/drones got thru. That's a lot of missiles/drones that hit but we don't know the extent of the damage. They wrote ""Cruise, ballistic, and air-launched ballistic missiles, Zirkons, Iskanders, Kinzhals. In total, around 120 missiles and 90 drones (were launched by Russia)," President Volodymyr Zelensky said following the attack. This makes it one of the most massive strikes launched on Ukraine throughout the full-scale war. "Our air defenses destroyed more than 140 aerial targets... We are grateful to our air defense forces involved in the attack, our aviation – F-16, Sukhoi, and MiG pilots – mobile fire groups, electronic warfare units, everybody worked in an organized manner," Zelensky said."

Massive Russia air attack last night

ECMWF forecasts normal temperatures in Ukraine in Dec

Weather forecasts are far from 100% but the negative for Ukrainians is that the current ECMWF (European Centre for Medium-Term Weather Forecasts) temperature forecast, as of yesterday, for Ukraine are for normal to slightly lower than normal temperature for Dec. Below are the ECMWF temperatures maps for the Dec 2-9 week and Dec 9-16 week. The other two weeks of Dec are similar.

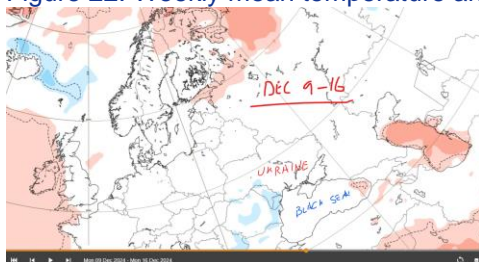
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Figure 21: Weekly mean temperature anomalies for Dec 2-9



Source: ECMWF

Figure 22: Weekly mean temperature anomalies for Dec 9-16



Source: ECMWF

Natural Gas: Could Russian natural gas return in 2023 with a Ukraine deal?

It sounds like Zelensky is resigning himself that Trump taking over will lead to a deal in the near term. On Saturday, Kyiv Independent reported [\[LINK\]](#) "In the interview with Suspilne, Zelensky said that as president, he would only be able to negotiate seriously with the President of the United States, which Donald Trump does not become until he is inaugurated in January. A necessary condition for negotiations, he added, is that Ukraine would not be "alone" with Russia, as just speaking with Putin was a "losing position." He also said that the United States could not take a neutral position as a mediator: "America must maintain the position that Russia is an aggressor, that it has violated our territorial integrity and international law." Regardless, the war in Ukraine will "end faster" under a Trump administration, Zelensky believes." The problem is that Putin's terms are tougher today. Later in the memo, we highlight the unexpected Putin/Scholz call on Friday that was done at Germany's request. Putin said it a little different but reiterated that any deal would have to deal with the reality of new territories ie. Russian captured land. But we continue to highlight that a potential risk to 2025 LNG and natural gas is what could happen with a Russia/Ukraine deal. Here is what we wrote in last week's (Nov 10, 2024) Energy Tidbits memo. "We don't know if it's all, but it must very close to all commentators expecting Trump's election will force/convince Zelensky to do a deal with Putin and do so quickly ie. likely within days of Trump's inauguration on Mon Jan 20, 2025. And the consensus is that any deal, on a territory basis, is likely to be more in line with Putin's acceptable deal. Zelensky was widely reported to say, post his Thursday meeting with European leaders, that any concessions by Ukraine would be unacceptable to Ukraine and suicidal for all of Europe. And "we would like a fair ending to the war" and "A quick ending would be a loss." Territorial issues aside, the energy

Could Russian
natural gas
return?

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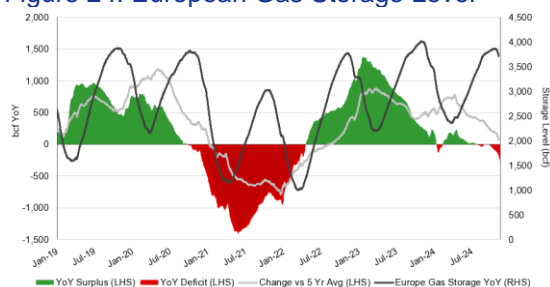
Europe LNG imports down big in 2024

YTD NOV 10/24 NW EUROPE LNG IMPORTS
-501 BCF YOY, -1.59 BCF/D YOY



24

Figure 24: European Gas Storage Level

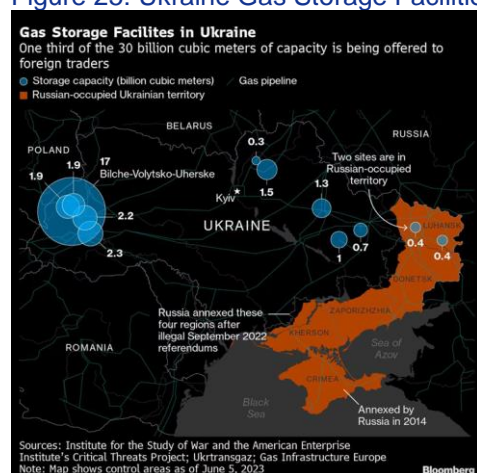


Source: Bloomberg, SAF

Ukraine storage is currently ~8% of total Europe gas storage volume

We have been breaking out Ukraine gas storage levels since the Mar/Apr Russian bombing of the Ukraine natural gas storage, which only impacted some above ground natural gas infrastructure. But it also reminded of the risk to Europe gas storage from Russia attacks. We broke out the Ukraine storage data from the above Europe data we monitor weekly from the GIE AGSI website [\[LINK\]](#), and, on November 13, 2024, natural gas in Ukraine storage was at 26.8% of its total capacity, flat compared to 27.7% of its total capacity on November 6. Last year, Ukraine storage started the winter on Nov 1, 2023, at 39.38%. Right now, Ukraine makes up ~8% of Europe's natural gas in storage and, at the beginning of winter 2023/24, it was ~10% of Europe's natural gas in storage. Below is a map of Ukraine's major gas storage facilities.

Figure 25: Ukraine Gas Storage Facilities as of June 2023



Source: Bloomberg

Oil: U.S. oil rigs down -1 rigs WoW and down -22 rigs YoY to 478 oil rigs

On Friday, Baker Hughes released its weekly North American drilling rig data. (i) Note Baker Hughes no longer breaks out the basin changes by oil vs gas rig type. (ii) Total U.S. oil rigs were down -1 rig WoW to 478 oil rigs as of November 15, 2024. Typically rigs begin to

**US oil rigs
down WoW**

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decline into U.S. Thanksgiving and continue this decline until just past X-Mas. U.S. oil rigs are now only down -22 oil rigs YoY. The smaller YoY difference is because, in 2023, US oil rigs went below 520 rigs on Aug 25, 2023 and then were lower in the 490-510 rigs for several months. But then dropped down to 477 on July 19, 2024, which was the lowest oil rig count since December 2021. U.S. Oil rigs are currently down -22 YoY, and nearing the recent lows in July 2024 (iii) Note we can see the basin changes but not by type of rig; the WoW basin changes were, Arkoma Woodford down -1 rig WoW to 1 rig, Cana Woodford down -1 rig WoW to 20 rigs, and Marcellus +1 rig to 25 rigs. (iv) The overlooked U.S. rig theme is the YoY declines, which have begun to taper as Q4 2023 saw activity leveling off, however, it is still important to note the YoY change. Total U.S. gas and oil rigs are down -35 rigs YoY to 579 rigs including US oil rigs -22 oil rigs YoY to 478 oil rigs. And for the key basins, the Permian is -8 rigs YoY, Haynesville is -6 rigs YoY, DJ Niobrara is -8 rigs YoY, Marcellus -2 rigs YoY, Williston up +2 rigs YoY, Arkoma Woodford up +1 YoY, Granite Wash is down -3 rigs YoY, Eagle Ford is down -2 rigs YoY, Barnett up +1 rigs YoY, Ardmore Woodford +1 rig YoY, and Cana Woodford +6 rigs YoY. (v) US gas rigs were down -1 rig this week to 101 gas rigs. It is important to note that U.S. gas rigs will need to increase over the next several months as more U.S. LNG capacity comes onstream in 2025. Lastly, U.S. miscellaneous rigs are flat WoW, and flat YoY.

Figure 26: Baker Hughes Total US Oil Rigs



Source: Baker Hughes

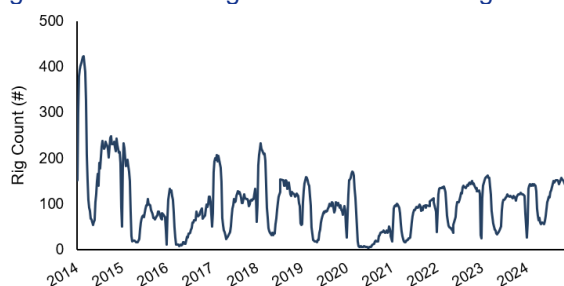
Oil: Total Cdn oil rigs down -5 WoW on Friday, with gas rigs -2 WoW

On Friday, Baker Hughes released its weekly North American drilling rig data. This week's total oil and gas rig count was down -7 rigs WoW from 200 rigs on November 15. Every year, Canadian rigs typically increase until mid-October, where remain relatively flat until late November when they begin ramping up until the end of December. However, this week, we saw a slight fall in line with continued depressed AECO pricing for the week. Cdn oil rigs were down -5 rigs WoW this week to 137 rigs and are up +14 rigs YoY. Gas rigs are down -2 rig WoW to 63 rigs and are down -10 rigs YoY, and miscellaneous rigs are flat WoW and YoY at 0 rigs total. As a reminder Baker Hughes changed their reporting format which does not allow us to see the provincial breakouts.

**Cdn rigs -7
WoW**

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Figure 27: Baker Hughes Total Cdn Oil Rigs



Source: Baker Hughes

Oil: US weekly oil production down -0.100 mmb/d WoW to 13.400 mmb/d

We don't place as much emphasis on the EIA weekly oil supply estimates as others do because we recognize the near impossibility for anyone to post an accurate estimate on a Wednesday for the totality of US oil production for the week ended the prior Friday [\[LINK\]](#). We have to give the EIA credit for putting out weekly oil supply estimates for the prior week—that can't be easy so no one should be surprised that the EIA weekly oil supply estimates, based on the Form 914 actuals, will regularly require re-benchmarking; sometimes the re-benchmarking can be significant and other times, it is relatively small. For the week of November 8, 2024, the EIA noted that this week's U.S. crude oil production estimate has been re-benchmarked; this has affected estimated volumes by less than 50,000 barrels per day, which is about 0.4% of this week's estimated production total. The EIA's weekly oil supply estimates had been essentially unchanged for the last nine months ranging from 13.100 to 13.300 mmb/d with the weekly estimates in July all at 13.300 mmb/d. This week's estimate came is slightly above the previous range, down -0.100 mmb/d WoW to 13.400 mmb/d for the week ending November 8. On November 13, the EIA released its November STEO and the EIA provides the backup monthly estimates for US oil production, and they are more or less in line with July at 13.210 mmb/d, August at 13.400 mmb/d, September at 13.210 mmb/d, and October coming in at 13.450 mmb/d. This week, the EIA's production estimates were down -0.100 mmb/d WoW to 13.400 mmb/d for the week ended November 8. Alaska were up +0.004 WoW to 0.432 mmb/d, compared to 0.428 mmb/d last week. Below is a table of the EIA's weekly oil production estimates.

US weekly oil production

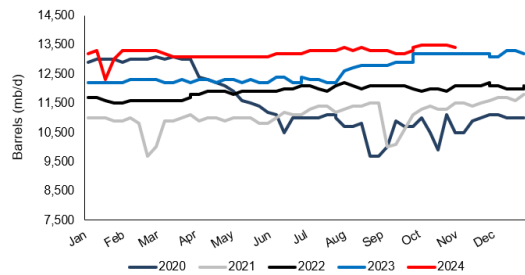
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Figure 28: EIA's Estimated Weekly US Field Oil Production (mb/d)

Year-Month	Week 1		Week 2		Week 3		Week 4		Week 5	
	End Date	Value	End Date	Value	End Date	Value	End Date	Value	End Date	Value
2023-Jan	01/06	12,200	01/13	12,300	01/20	12,200	01/27	12,200		
2023-Feb	02/03	12,300	02/10	12,300	02/17	12,300	02/24	12,300		
2023-Mar	03/03	12,200	03/10	12,200	03/17	12,300	03/24	12,200	03/31	12,200
2023-Apr	04/07	12,300	04/14	12,300	04/21	12,200	04/28	12,300		
2023-May	05/05	12,300	05/12	12,200	05/19	12,300	05/26	12,200		
2023-Jun	06/02	12,400	06/09	12,400	06/16	12,200	06/23	12,200	06/30	12,400
2023-Jul	07/07	12,300	07/14	12,300	07/21	12,200	07/28	12,200		
2023-Aug	08/04	12,600	08/11	12,700	08/18	12,800	08/25	12,800		
2023-Sep	09/01	12,800	09/08	12,900	09/15	12,900	09/22	12,900	09/29	12,900
2023-Oct	10/06	13,200	10/13	13,200	10/20	13,200	10/27	13,200		
2023-Nov	11/03	13,200	11/10	13,200	11/17	13,200	11/24	13,200		
2023-Dec	12/01	13,100	12/08	13,100	12/15	13,300	12/22	13,300	12/29	13,300
2024-Jan	01/05	13,300	01/12	13,300	01/19	12,300	01/26	13,000		
2024-Feb	02/02	13,300	02/09	13,300	02/16	13,300	02/23	13,300		
2024-Mar	03/01	13,200	03/08	13,100	03/15	13,100	03/22	13,100	03/29	13,100
2024-Apr	04/05	13,100	04/12	13,100	04/19	13,100	04/26	13,100		
2024-May	05/03	13,100	05/10	13,100	05/17	13,100	05/24	13,100	05/31	13,100
2024-Jun	06/07	13,200	06/14	13,200	06/21	13,200	06/28	13,200		
2024-Jul	07/05	13,300	07/12	13,300	07/19	13,300	07/26	13,300		
2024-Aug	08/02	13,400	08/09	13,300	08/16	13,400	08/23	13,300	08/30	13,300
2024-Sep	09/06	13,300	09/13	13,200	09/20	13,200	09/27	13,300		
2024-Oct	10/04	13,400	10/11	13,500	10/18	13,500	10/25	13,500		
2024-Nov	11/01	13,500	11/08	13,400						

Source: EIA

Figure 29: EIA's Estimated Weekly US Oil Production



Source: EIA

Oil: US shale/tight oil production relatively flat for the last 9 months

As mentioned earlier, the EIA combined its prior shale/tight oil information with its STEO, which was released on Wednesday, November 13, 2024 [\[LINK\]](#). (i) The EIA stopped forecasting future oil production by region and has updated their data for oil production from the major shale/tight oil and gas plays up to October. (ii) Note that the EIA revises their data for shale/tight oil production back to 2020 from October's STEO, and we have adjusted our table to reflect the updated data. However, the revisions for the last 12 months were a mix of small ups and downs with the average revision for the past 12 months being up +21,000 b/d. (iii) Shale/tight oil production in October was 8.624 mmb/d, basically flat MoM from September and down -2% YoY. October marks the 9th consecutive month of shale/tight oil above or at ~8.6 mmb/d, and this is down from ~8.74 mmb/d in Nov/Dec 2023. Note that shale/tight oil is approx. ~75% of total US production, so whatever the trends are for shale/tight oil are normally the trends for US oil in total. Below is our table of running STEO estimates of shale/tight oil production and our graph of MoM changes in major shale/tight oil production.

Shale/tight oil production

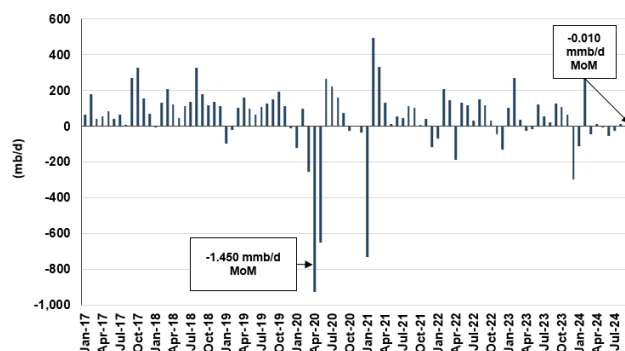
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Figure 30: US Major Shale/Tight Oil Production

Thousand b/d	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Oct MoM%	Oct YoY%
Austin Chalk + Eagle Ford	1,111	1,099	1,057	1,016	1,068	1,087	1,133	1,156	1,143	1,140	1,137	1,134	1,131	-0.3%	2%
Bakken	1,227	1,253	1,247	1,079	1,226	1,202	1,213	1,169	1,157	1,140	1,150	1,148	1,146	-0.2%	-7%
Mississippian + Woodford	228	230	229	205	219	212	216	208	204	199	198	195	194	-0.5%	-15%
Niobrara	471	480	492	448	472	475	446	460	440	440	440	441	441	0.0%	-6%
Permian	5,408	5,451	5,198	5,379	5,458	5,422	5,401	5,393	5,388	5,388	5,398	5,409	5,409	0.0%	0%
Rest of US L48	315	313	307	289	292	291	292	307	306	306	304	307	303	-1.3%	-4%
Total	8,760	8,826	8,530	8,416	8,735	8,689	8,701	8,693	8,638	8,613	8,627	8,634	8,624	-0.1%	-2%

Source: EIA, SAF

Figure 31: MoM Changes in US Major Shale/Tight Oil Production



Source: EIA, SAF

Oil: EIA DUCs flat MoM in October, DUCs down -6% YoY

We have been warning that we see a key risk to how much US oil production can sustainably grow in 2024 and 2025 is the need to increase rig counts (not have less frac spreads) to replenish the inventory of drilled uncompleted wells at higher levels and the challenge for oilfield services to add capacity to increase frac spreads and completions. The EIA's STEO [\[LINK\]](#) now contains the estimate of drilled uncompleted wells. (i) The EIA estimates DUCs were flat MoM, and down -6% YoY in October at 5,334 DUCs. Note that the EIA may revise their data for DUC wells back to 2020 in each STEO, and each month we adjust our table to reflect any updated data. (ii) To put the DUC figures in perspective, there were 9,757 DUCs in the height of the Covid slowdown in June 2020 when US production was approx. 10.6 mmb/d, 6,505 DUCs in October 2021 when US production was approx. 11.3 mmb/d, 5,883 DUCs in October 2022 when US production was approx. 12.1 mmb/d, 5,673 in October 2023 when US production was approx. 13.1 mmb/d, and now 5,334 DUCs in October 2024 with US production approx. 13.3 mmb/d. (iv) The largest YoY September DUCs declines are the Eagle Ford, down -34% YoY, and Bakken -22% YoY. (v) Note that shale/tight oil is approx. ~70% of total US production, so whatever the trends are for shale/tight oil are normally the trends for US oil in total. Below is our table of running DUC Wells.

DUCs flat in October

Figure 32: Estimated Drilled Uncomplete Wells in 2023/24

DUCs	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Oct MoM%	Oct YoY%
Appalachia region	832	823	813	813	806	796	789	785	784	771	767	761	750	739	-1%	-10%
Bakken region	396	398	380	375	397	393	394	381	354	344	335	326	317	309	-3%	-22%
Eagle Ford region	504	472	449	472	442	406	374	345	320	317	316	315	314	312	-1%	-34%
Haynesville region	793	792	784	787	792	797	798	786	785	791	797	799	801	803	0%	1%
Permian region	903	798	832	868	871	845	860	831	846	856	863	866	877	885	1%	11%
Rest of Lower 48 States, excluding GOM	2,413	2,390	2,395	2,383	2,379	2,372	2,368	2,363	2,354	2,334	2,315	2,306	2,294	2,286	0%	-4%
Total	5,841	5,673	5,653	5,696	5,687	5,609	5,583	5,491	5,443	5,413	5,393	5,373	5,353	5,334	0%	-6%

Source: EIA, SAF

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Oil: EIA Nov STEO immaterial changes to 2024 and 2025 US oil production forecast

On Wednesday, the EIA released its Short-Term Energy Outlook for November 2024 [\[LINK\]](#), which included a small increase to its 2024 and a small decrease to its 2025 oil production forecasts. (i) The November STEO forecasts for 2024 were immaterially increased and immaterially decreased for 2025 US oil production estimates vs the October STEO which had been almost flat compared September. (ii) The lookback to 2023 was unchanged with the October STEO estimate for 2023 held flat at 12.93 mmb/d from the October STEO. Recall the big +140,000 b/d revision in October 2023's STEO from the September 2023 STEO's forecast of 12.78 mmb/d, as the EIA had to play catch-up with higher oil production actuals being reported over weekly estimates. (iii) The November STEO forecast for 2024 is essentially unchanged at +0.01 mmb/d to 13.23 mmb/d from the October STEO of 13.22 mmb/d. There were some small revisions by quarter: Q1/24 flat at 12.94 mmb/d, Q2/24 flat at 13.23 mmb/d, Q3/24 flat at 13.27 mmb/d, and Q4/24 up +0.02 mmb/d to 13.47 mmb/d. (iv) The EIA forecasts US oil production of 13.53 mmb/d for 2025, which is essentially unchanged at -0.01 mmb/d from the October STEO. The revisions by quarter were Q1/25 flat at 13.46 mmb/d, Q2/25 flat at 13.53 mmb/d, Q3/25 flat at 13.54 mmb/d, and Q4/25 -0.04 mmb/d to 13.60 mmb/d. Below is our EIA STEO forecast comparison by month.

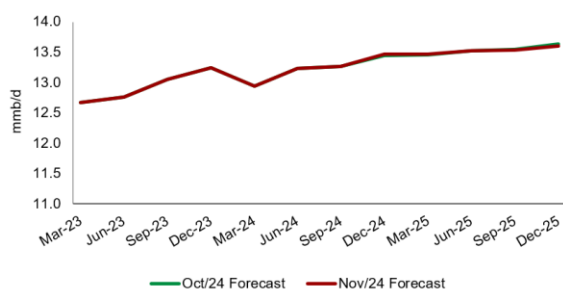
EIA STEO US oil production

Figure 33: EIA STEO Oil Production Forecasts by Month

(million b/d)	Q1/23	Q2/23	Q3/23	Q4/23	2023	Q1/24	Q2/24	Q3/24	Q4/24	2024	Q1/25	Q2/25	Q3/25	Q4/25	2025
Nov-24	12.67	12.76	13.05	13.25	12.93	12.94	13.23	13.27	13.47	13.23	13.46	13.53	13.54	13.60	13.53
Oct-24	12.67	12.76	13.05	13.25	12.93	12.94	13.23	13.27	13.45	13.22	13.46	13.53	13.54	13.64	13.54
Sep-24	12.67	12.76	13.05	13.25	12.93	12.94	13.22	13.38	13.47	13.25	13.45	13.60	13.73	13.89	13.67
Aug-24	12.67	12.76	13.05	13.25	12.93	12.94	13.20	13.33	13.44	13.23	13.46	13.66	13.76	13.90	13.69
July-24	12.63	12.75	13.07	13.26	12.93	12.94	13.21	13.32	13.10	13.25	13.52	13.72	13.84	13.98	13.77
June-24	12.63	12.75	13.07	13.26	12.93	12.94	13.17	13.33	13.50	13.24	13.51	13.68	13.76	13.88	13.71
May-24	12.63	12.75	13.07	13.26	12.93	12.96	13.10	13.25	13.50	13.20	13.55	13.73	13.76	13.87	13.73
Apr-24	12.63	12.75	13.07	13.27	12.93	12.84	13.13	13.32	13.54	13.21	13.56	13.72	13.74	13.86	13.72
Mar-24	12.63	12.75	13.07	13.28	12.93	12.91	13.13	13.25	13.47	13.19	13.49	13.66	13.68	13.78	13.65
Feb-24	12.63	12.75	13.07	13.29	12.93	13.03	13.12	13.06	13.18	13.10	13.37	13.46	13.50	13.64	13.49
Jan-24	12.63	12.75	13.07	13.22	12.92	13.27	13.22	13.15	13.21	13.21	13.36	13.44	13.43	13.53	13.44
Dec-23	12.63	12.75	13.06	13.26	12.93	13.09	13.07	13.07	13.23	13.11					
Nov-23	12.63	12.75	13.07	13.17	12.90	13.06	13.08	13.11	13.35	13.15					
Oct-23	12.63	12.75	13.13	13.16	12.92	13.07	13.02	13.07	13.31	13.12					
Sep-23	12.63	12.71	12.86	12.94	12.78	13.03	13.09	13.15	13.36	13.16					
Aug-23	12.63	12.67	12.81	12.93	12.76	12.98	13.01	13.08	13.27	13.09					
Jul-23	12.61	12.55	12.48	12.63	12.56	12.67	12.71	12.88	13.13	12.85					
Jun-23	12.60	12.56	12.57	12.70	12.61	12.69	12.63	12.76	13.00	12.77					
May-23	12.54	12.51	12.46	12.61	12.53	12.63	12.58	12.68	12.85	12.69					
Apr-23	12.54	12.50	12.50	12.61	12.54	12.69	12.71	12.77	12.83	12.75					
Mar-23	12.31	12.43	12.48	12.54	12.44	12.58	12.58	12.64	12.71	12.63					
Feb-23	12.44	12.46	12.49	12.56	12.49	12.63	12.62	12.65	12.70	12.65					
Jan-23	12.37	12.34	12.40	12.51	12.41	12.63	12.72	12.86	13.03	12.81					

Source: EIA STEO

Figure 34: Estimated US Crude Oil Productions by Forecast Month



Source: EIA STEO

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Oil: Exxon CEO doesn't see Trump unleashing a lot of US oil production

We were surprised by oil followers believing Trump's drill baby drill would get US oil companies to crank up drilling and production and lower oil prices. It never made sense and still doesn't. We recognize that is how Trump messaged it but it still doesn't make sense why oil companies would crank up drilling knowing it will lower oil prices and cash flows and impact their ability to maintain their returns approach. It's like people believed oil companies would return to the growth at any cost model. Exxon CEO Darren Woods didn't say it exactly that way but said he just didn't see how there was any opportunity to unleash more US oil production. On Tuesday, we tweeted [\[LINK\]](#) *"Drill baby drill won't have big negative impact most think. Exxon CEO 'I don't think U.S. production is constrained, so I don't know that there's an opportunity to unleash a lot of production in the near term, because most operators in the U.S. are already [optimizing] their production today.' reports @timmcconnell @semafor. Rather key near-term Trump impact on #Oil is return to 1st term priority to hit Iran & Venezuela economically by cutting out their oil exports. Discussion in my 📧 Nov 3, 2024 Energy Tidbits memo. #OOTT. [LINK]."* Semafor reported *"But Woods agreed with recent comments from Patrick Pouyanné, CEO of TotalEnergies, that the Trump administration shouldn't move to scrap the Biden administration's regulation to curb methane emissions from oil and gas operations. And he said that while ongoing capital spending is needed to maintain US oil production at its current record-high levels, the further increase in production sought by Trump probably isn't in the cards, for now. I don't think today that production in the US is constrained," he said. "So I don't know that there's an opportunity to unleash a lot of production in the near term, because most operators in the US are [already] optimizing their production today."*

Exxon doesn't see Trump unleashing oil production

Analysts don't see US oil co's abandoning returns models for growth

It's still early but we haven't seen an oil companies saying that, post Trump, they are planning to crank up drilling and return to a growth model instead of their disciplined return of capital model. One of the reasons we review as many earnings calls transcripts as possible is to hear the Q&A and no companies are saying they will move away from their returns models that they have worked hard over the past several years to build. Let's be clear, the oil companies will inevitably message the more favorable environment and some sort of increase to their capital because of the new environment. They have to message something positive because they are happy for their industry that Trump won and the environment will be more favorable for them. However, we also ask analysts what they are hearing directly from the oil companies, are they hearing any companies who are going to move away from their returns model to growth models or to make any significant increase to drilling. Senior US sell-side analysts have said comments like *"You're correct, there's absolutely no interest by these US companies to increase drilling activity. They remain capital disciplined and care more about free cash flow than production growth."*

Oil: Trump appoints Burgum & Wright, sets up higher for longer US oil production

The US oil companies may not crank up oil drilling and production in 2025 but Trump is certainly setting up the US for higher for longer oil and natural gas production with his appointments of Doug Burgum (North Dakota governor) as Interior Secretary, Chris Wright (Liberty Energy CEO, one of the leading frack companies) as Energy Secretary and both to the new Council of National Energy. Wright has worked with probably every CEO in all the

Trump appoints Chris Wright & Doug Burgum

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key shale/tight basins. Burgum has worked with many top CEOs in development of the Bakken. Industry has already come out with across the board accolades for both appointees. Yesterday, we tweeted [LINK](#) "US oil production higher for longer! Even Dems have to admit putting Chris Wright (Liberty Energy CEO) as Energy Secretary, Doug Burgum (North Dakota Gov) as Interior Secretary & both on Council of National Energy gives best odds for US #Oil #NatGas production to be higher for longer. #OOTT." These appointees are 180 degrees different from Biden's Energy and Interior Secretaries. CEO Wright knows how the oil and gas business works and probably has as much inside knowledge of the US major shale/tight plays as any person so knows the risks and upsides of the US plays. Our tweet included the Trump Truth Social post. Our Supplemental Documents package includes the Truth Social post.

Opening up federal lands for oil and gas will be a big plus for future growth

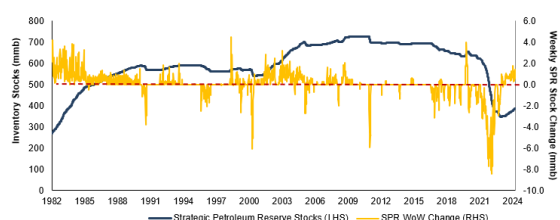
The Interior Department controls federal lands for oil and gas so is the major gatekeeper for what lands are or are not available for industry. And this includes both onshore and offshore lands. Not all lands are created equal for oil and gas prospectivity and we do not have our own maps of the most prospective oil and natural gas lands in the federal lands. However, we believe that most will look at offshore Gulf of Mexico and New Mexico as two of the most likely areas for oil and gas prospectivity for oil and natural gas. The benefit of opening up more federal lands for oil and gas is that it will set up for more production potential for the mid and long-term.

Oil: US SPR less commercial reserve deficit widens, now -41.957 mmb

The US Strategic Petroleum Reserves (SPR) continues to be much lower than total US commercial crude oil reserves. The SPR went back below commercial for the first time since 1983 in the Sep 16, 2022, week. This week, we saw a build on the SPR side and a build on the commercial side. The EIA's weekly oil data for November 8, [LINK](#) saw the SPR reserves increase +0.567 mmb WoW to 387.790 mmb, while commercial crude oil reserves increased +2.089 mmb to 429.747 mmb. There is now a -41.957 mmb difference between SPR reserves and commercial crude oil reserves. The below graphs highlight the difference between commercial and SPR stockpiles, along with the weekly changes to SPR stockpiles.

US SPR reserves

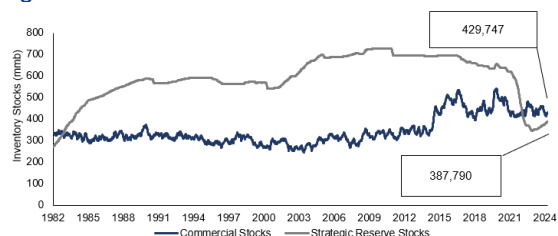
Figure 35: Strategic Petroleum Reserve Stocks and SPR WoW Change



Source: EIA

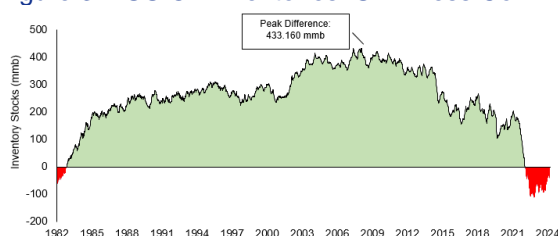
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Figure 36: US Oil Inventories: Commercial & SPR



Source: EIA

Figure 37: US Oil Inventories: SPR Less Commercial



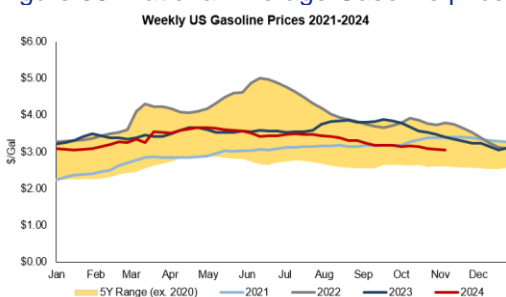
Source: EIA

Oil: AAA reports US national average gasoline price -\$0.01 WoW to \$3.08 on Nov 16

Yesterday, we tweeted [\[LINK\]](#) "AAA National average prices -\$0.01 WoW to \$3.08 on Nov 16, -\$0.12 MoM & -\$0.26 YoY. California average prices -\$0.04 WoW to \$4.47, -\$0.20 MoM & -\$0.57 YoY. Grocery prices, not gasoline prices, was the cost of living factor in US Nov 5 election. Thx @AAAnews #OOTT." Yesterday, AAA reported that US national average prices were \$3.08 on Nov 16, which was -\$0.01 WoW, -\$0.12 MoM, and -\$0.26 YoY. Yesterday, AAA also reported California average gasoline prices were \$4.47 on Nov 16, which was -\$0.04 WoW, -\$0.20 MoM and -\$0.57 YoY. Below is our graph of Bloomberg's National Average weekly gasoline prices.

US gasoline prices

Figure 38: National Average Gasoline prices



Source: Bloomberg

Oil: Crack spreads +\$0.69 WoW to \$17.99 WTI -\$3.36 WoW to \$67.02

On Friday, we tweeted [\[LINK\]](#) "321 crack spreads +\$0.69 WoW to \$17.99 on Nov 15. WTI -

Crack spreads closed at \$17.99

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\$3.36 WoW to \$67.02. Reinforces WTI is impacted more by global markets than by cracks ie. OPEC lowered oil demand fcast, strong US\$, China oil imports, truce expectations, etc. Thx @business #OOTT." Crack spreads were +\$0.69 WoW to \$17.99 on Nov 15 and WTI was - \$3.36 WoW to \$67.01. Crack spreads were fairly flat every day this week. WTI was generally down this week with items like OPEC reducing their oil demand forecast, stronger US dollar, low China oil imports and speculation on truces. As a general rule, over the past few months, WTI has been driven more by global factors and not crack spreads. Crack spreads at \$17.99 are in line with the middle of the pre-Covid \$15-\$20 range, and generally not high enough to incentivize refineries to take any more crude than necessary. Crack spreads of \$17.99 on Nov 15 followed \$17.30 on Nov 8, \$16.82 on Nov 1, \$16.91 on Oct 25, \$16.92 on Oct 18, \$17.42 on Oct 11, \$16.65 on Oct 4, \$15.82 on Sept 27, \$15.57 on Sept 20, \$14.30 on Sept 13, \$14.79 on Sept 6, \$17.06 on Aug 30, \$17.10 on Aug 23, and \$20.75 on Aug 16.

Crack spreads normally point to near term oil moves, explaining 321 cracks

It hasn't been normal times for oil markets for the past few months with Iran/Israel, Chinese stimulus, Trump win, stronger US\$, etc. So for the most part, the last few months are good examples that global oil and market items impact WTI more than crack spreads. As noted above, cracks spreads were up this week but WTI was down strong as markets focused on a range of items including OPEC lowering oil demand forecasts, stronger US\$, potential truce talks, continuing weak China oil imports, etc. But in normal times, broad market factors aside, we have focused on crack spreads for since the 90s as they are an unchanged fundamental of refineries – wide/high crack spreads provide incentives for refineries to buy more crude because there are big profit margins to be made. We track US crack spreads but there is also an influence on global refining capacity on US crack spreads as the increasing global refining capacity has also tended to have downward pressure on US crack spreads especially with demand being less than most expect. Plus, this year, as noted below, we have less US refinery turnarounds to there is less refinery capacity offline this fall than prior years. So if crack spreads are wide/high, it is normally a positive for the very near term look ahead to WTI. Conversely, if crack spreads are narrow/low, it doesn't give refineries any real incentive to take more crude, which is normally softness for the very near term look ahead to WTI. People often just say "cracks", which refers to the 321 crack spread. This is the spread or margin that refiners make from buying crude at a certain price and then selling the finished petroleum products at their respective prices. The 321 crack spread is meant to represent what a typical US refinery produces. It assumes that for every three barrels of crude oil, the refinery will produce two barrels of gasoline and one barrel of distillates. So the crack spread is based on that formula and worked back to a crack spread per barrel. Below is the current 321 crack spread vs WTI that we put in our tweet where we marked the gaps where the crack spread normally drags up oil prices. 321 Crack spread closed at \$17.99 on Friday Nov 15.

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Figure 39: Cushing Oil 321 Crack Spread & WTI Nov 15, 2014 to Nov 15, 2024



Source: Bloomberg

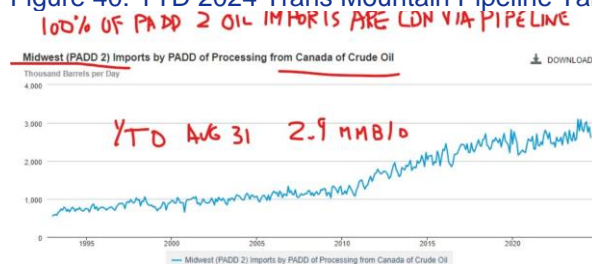
Oil: Trump won't tariff Cdn oil as US refineries can't live without Cdn heavy/medium

Here is what we wrote in last week's (Nov 10, 2024) Energy Tidbits memo on why we don't see Trump tariffing Cdn oil. "We understand that the world's #1 economic fear on Trump is that he will tariff almost everything but, when we saw commentators talking about tariffing Cdn oil, we have to tweet our view that we see this as highly unlikely. Trump is unpredictable but the US needs all the Cdn heavy and medium oil it can get for its US Midwest refineries. The US produces light oil so can't displace the Cdn heavy and medium crude. And even if the US could import heavy and medium crude from other countries, there isn't the pipeline infrastructure to move the oil to US Midwest refineries. Trump can tariff Cdn heavy and medium oil imports but it will go right to increasing the price of gasoline, diesel and jet fuel. (i) On Monday, we tweeted [LINK](#) "Here's why Trump won't put tariffs on Cdn #Oil exports. PADD 2 (Midwest) refineries import 2.9 mmb/d of oil and 100% is Cdn oil via pipelines @EIAgov. Tariffs on Cdn oil will simply add to cost of gasoline, diesel, jet fuel for Americans. #OOTT." (ii) On Tuesday, we followed up by tweeting [LINK](#) "Here's why US needs Cdn #Oil. US oil imports are almost all medium/heavy crude with CAN the #1 supplier as PADD 2 Midwest refineries set up to mostly run Cdn medium/heavy crude delivered on ENB mainline. US production is light oil ie. Midwest refineries can't take much more. Insufficient pipeline infra to replace CAN in Midwest with MEX, VEN, COL, KSA medium/heavy from Gulf Coast to Midwest #OOTT." Below is the EIA Padd 2 Midwest oil imports from Canada via Enbridge's mainline pipeline. Our tweet also included EIA's oil imports of crude by API that shows US imports medium/heavy crude and Enbridge's mainline pipeline overview. Our Supplemental Documents package includes these items.

**US needs Cdn
heavy/medium
crude3**

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Figure 40: YTD 2024 Trans Mountain Pipeline Tanker and est. Shipment volumes



eia Data source: U.S. Energy Information Administration

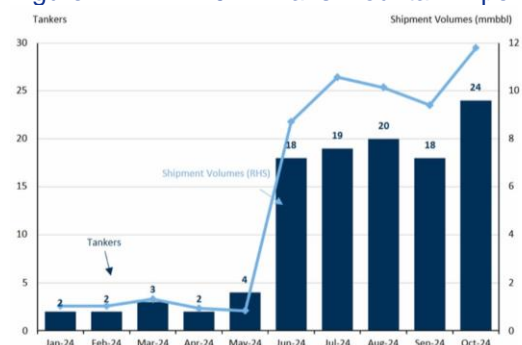
Source: EIA

Oil: TMX impact: Trans Mountain Tanker Loadings surpass 300,000 b/d in October

We have continued to note that in September, October, and November, we typically see a seasonal widening of the WCS-WTI differentials; however, the ramp up of volumes on 590,000 b/d TMX and increased tanker loadings has, kept WCS-WTI differentials from normal Sept/Oct/Nov widening; this week, we saw a significant increase in MoM Trans Mountain Tanker loadings. On Wednesday we Tweeted [\[LINK\]](#): “Big positive for Cdn #Oil. Trans Mountain tanker loadings up to >300,000 b/d in Oct. Thx Greg Parady @RBC See 📌 Nov 8 tweet graph, Q4/24 WCS less WTI differentials are \$15/b narrower in Sep/Oct/Nov because of these tanker loadings. #OOTT”. Importantly, in October we saw Trans Mountain tanker loadings pass 300,000 b/d, showing a significant MoM increase. Below we have included a chart from Greg Parady at RBC which shows Tankers, and estimated shipment volumes.

WCS differential narrows

Figure 41: YTD 2024 Trans Mountain Pipeline Tanker and est. Shipment volumes



Source: RBC Capital Markets

Oil: Cdn heavy oil differential narrows -\$0.20 WoW to close at \$11.50 on Nov 15

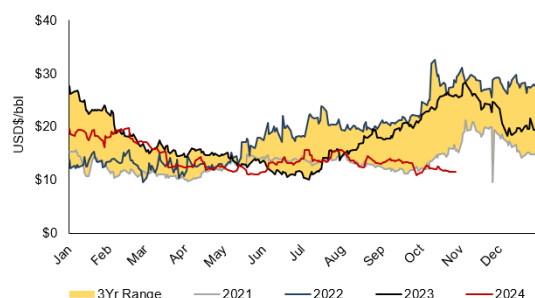
WCS less WTI differentials narrowed this week -\$0.20 WoW to close at \$11.50 on November 15. As noted in the following item, we have been saying that the real test for WCS less WTI differentials will be in Sept/Oct/Nov as to how much the startup of the 590,000 b/d TMX expansion will impact WCS less WTI differentials. And it looks like TMX is working as hoped, if not better, in keeping WCS less WTI differentials way lower than would be expected at this time of year. Sept/Oct/Nov is when we normally see a significant seasonal widening of the WCS less WTI differentials. And WCS less WTI differentials has remained much lower and

WCS differential narrows

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has not widened meaningfully this fall. But even with the TMX startup, there will always be the unexpected impact on WCS less WTI differentials from other items like refineries up and downs, wildfires, etc. Below is graph showing WCS-WTI differentials that shows this normal seasonal trend of narrowing WCS-WTI differentials that normally widens into or through October, which it did not. The WCS less WTI differential closed on November 15 at \$11.50 which was a narrowing of -\$0.20 WoW vs \$11.70 on November 8.

Figure 42: WCS less WTI oil differentials to November 15 close



Source: Bloomberg

TMX impact: WCS less WTI diffs not seasonally widening as in 2022 & 2023

The start of TMX pipeline in Q2 continues to have the big expected positive for Cdn oil by keeping WCS less WTI differentials a lot narrower than what is normally seen in the normal seasonal widening in Sept/Oct/Nov. WCS less WTI differentials are approx. \$13 narrower vs a year ago and approx. \$17 narrower than two years ago. That is a big win for cash flows for all Cdn oil producers. For the past few several months, we have been saying that the big test for the impact of the start of the 590,000 b/d TMX expansion on WCS less WTI differentials wasn't what happened in the summer months but what would happen in late Aug, Sept and Oct when differentials normally start to widen with seasonal refinery turnarounds. On Friday, we tweeted [\[LINK\]](#) "Big continuing win for Cdn #Oil Q4/24 cash flows. Ramp up of volumes on 590,000 b/d TMX has kept WCS less WTI differentials from normal Sept/Oct/Nov widening. WCS less WTI diffs: 11/15/24: \$11.50. 11/15/23: \$24.75. 11/15/22: \$28.50. Thx @garquake @business #OOTT." Our tweet included the below chart that shows how WCS less WTI differential have been stronger this summer, been fairly flat in Aug/Sept/Oct/Nov and how differentials were widening in Sept/Oct/Nov in 2022 and 2023.

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Figure 43: WCS less WTI differentials to Nov 15, 2024 close



Source: Bloomberg

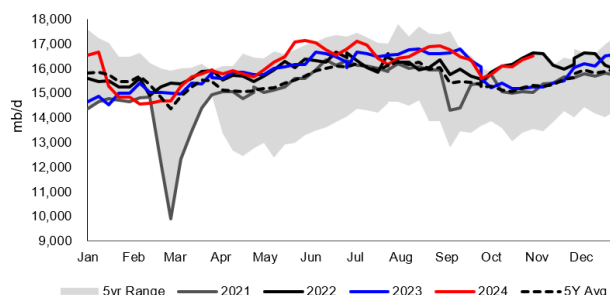
Oil: Refinery Inputs up +0.175 mmb/d WoW to 16.509 mmb/d

There are always unplanned refinery items that impact crude oil inputs into refineries. And there is always different timing for refinery turnarounds; generally late October marks the point when refineries have come out of fall turnarounds and are ramping up crude oil inputs as they change from summer to winter fuel blends. However, as noted in our Sept 22, 2024 Energy Tidbits memo, US refinery maintenance is expected to be less this year, which means that, on average, turnarounds will be shorter than normal i.e. less extra maintenance.

Although there are more refineries available to receive crude, we may see refineries reduce runs given the low crack spreads. On Thursday, the EIA released its estimated crude oil input to refinery data for the week ended November 8 [\[LINK\]](#). The EIA reported crude inputs to refineries were up +0.175 mmb/d this week to 16.509 mmb/d and are up +1.110 mmb/d YoY. Refinery utilization was up +0.9% WoW to 91.4% and was up +5.3% YoY.

Refinery inputs
+0.175 mmb/d
WoW

Figure 44: US Refinery Crude Oil Inputs



Source: EIA, SAF

US refinery preventative maintenance to be much less this fall than last

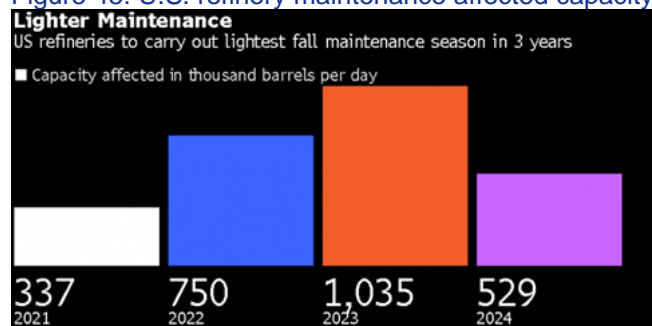
Here is what we wrote in September 22, 2024, Energy Tidbits memo. “On Thursday, Bloomberg posted a good reminder that US refineries are expected to have a light preventative maintenance season this fall according to IIR Energy data. Note they focused on “preventative maintenance” and didn’t use the word turnarounds.

Refineries have turnarounds to allow the refinery to switch from summer blend to winter blend fuel mix. Normally refineries schedule preventative maintenance at the same time as a turnaround. If preventative maintenance is less than normal, it

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means that the downtime for refineries will be less. They forecast that only 0.529 mmb/d of crude-processing capability is estimated to go offline during the fall, which is -0.506 mmb/d less than the fall of 2023, which saw 1.035 mmb/d go offline during the same period. However, this fall's capacity reduction of 0.529 mmb/d, is still +0.192 mmb/d when compared to the fall 2021 capacity that went offline of 0.337 mmb/d. If 321 crack spreads were high, we would expect to see the refineries run at high utilization rates to make the big profits. But with 321 crack spreads low, we would expect refineries to not run at high utilizations rates. Below is the Bloomberg chart."

Figure 45: U.S. refinery maintenance affected capacity



Source: Bloomberg, IIR Energy

Oil: US net oil imports down -0.321 mmb/d WoW as oil exports up +0.590 mmb/d

The EIA reported US "NET" imports were down -0.321 mmb/d to 3.069 mmb/d for the week of November 8. US imports were up +0.269 mmb/d to 6.509 mmb/d, while exports were up +0.590 mmb/d to 3.440 mmb/d. Top 10 were up +0.104 mmb/d. (i) Previously we have noted that the EIA did not report weekly Venezuela imports, however, last month the EIA resumed reporting imports from Venezuela. Give the EIA credit for putting out weekly oil import estimates, but it's a reminder that we must be careful about using the weekly oil import estimates. Rather we need to make sure we go to the monthly data for oil imports. (ii) Canada was up +0.074 mmb/d to 3.953 mmb/d. Weekly imports have been higher for the past five months with the increased Cdn crude coming off TMX and hitting west coast US refineries. (iii) Saudi Arabia was down -0.303 mmb/d to 0.140 mmb/d (iv) Mexico was up +0.137 mmb/d to 0.384 mmb/d. Oil imports from Mexico lately have been significantly lower than prior year's levels with the new Olmeca (Dos Bocas) refinery ramping up in 2024 (although it has been low lately) and Pemex's other refineries increasing crude oil processing; however, last week Mexico refineries saw refinery utilization fall to 43.9% in September, from 50.4% in August. Notably, Dos Bocas did not process any crude in September. (v) Colombia was up +0.070 mmb/d to 0.142 mmb/d. (v) Iraq was down -0.062 mmb/d to 0.121 mmb/d. (vi) Ecuador was up +0.210 mmb/d to 0.247 mmb/d. (vii) Nigeria was down -0.009 mmb/d to 0.077 mmb/d. (iix) Venezuela was up +0.147 mmb/d to 0.359 mmb/d.

**US net imports
down -0.321
mmb/d WoW**

Figure 46: US Weekly Preliminary Imports by Major Country

	Sep 13/24	Sep 20/24	Sep 27/24	Oct 4/24	Oct 11/24	Oct 18/24	Oct 25/24	Nov 1/24	Nov 8/24	WoW
Canada	4,155	3,912	3,799	3,499	3,537	3,719	3,660	3,879	3,953	74
Saudi Arabia	210	291	145	285	314	150	13	443	140	-303
Venezuela	0	0	297	315	134	289	250	212	359	147
Mexico	420	499	448	382	406	258	621	247	384	137
Colombia	121	295	347	149	223	365	150	72	142	70
Iraq	155	265	152	241	70	237	216	183	121	-62
Ecuador	54	4	253	228	35	138	67	37	247	210
Nigeria	264	135	84	44	134	125	145	86	77	-9
Brazil	306	0	186	134	154	285	88	202	280	78
Libya	0	0	77	28	0	81	89	238	0	-238
Top 10	5,685	5,401	5,788	5,305	5,007	5,647	5,299	5,599	5,703	104
Others	637	1,055	840	934	522	784	676	641	806	165
Total US	6,322	6,456	6,628	6,239	5,529	6,431	5,975	6,240	6,509	269

Source: EIA

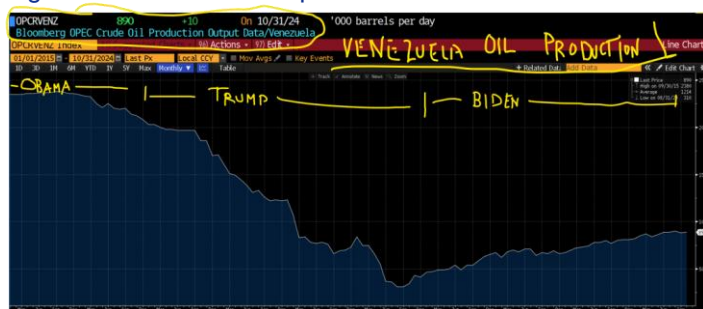
Source: EIA, SAF

Oil: Will Trump & Rubio go back to cutting Venezuela oil production & exports to US?

Our view has consistently been from well before the election that Trump's biggest near term impact on oil will be if he returns to his 1st term playbook of enforcing sanctions that had cut Iran and Venezuela oil exports to almost nothing. On Monday night, we tweeted [\[LINK\]](#) "Bullish for #Oil incl Cdn heavy/medium oil. Marco Rubio rumored to be Trump's Secretary of State. Rubio has led anti-Maduro charge & been against Biden's licenses opening up Venezuela oil exports. Trump had US oil imports from VEN down to zero. See ↗ Nov 3 tweet on Energy Tidbits memo. #OOTT." Senator Marco Rubio was then being rumored to be Trump's pick for Secretary of State and that was confirmed a day later. The Monday night reporting was focused on Rubia being a hardliner on China and we wanted to remind that Rubio has always been anti Maduro and spoken out against Biden opening up Venezuela oil production and exports because all it did was give Maduro more money and ability to stay in power as opposed to getting any money down to regular Venezuelans. So unless Rubio has had a big change of heart, he should continue to want to pull back on Biden's oil and gas licenses that opened up Venezuela oil production oil exports. Our tweet included the Bloomberg graphs of Venezuela oil production and US oil imports from Venezuela that Trump had essentially shut down to zero.

**Marco Rubio as
Secretary of
State**

Figure 47: Venezuela oil production



Source: Bloomberg

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Figure 48: US oil imports from Venezuela



Source: Bloomberg

Oil: Putin reiterates to Scholz any Ukraine deal sees Russia retaining new territories

On Friday, Putin and Scholz had their first call on Friday in almost two years. And as Kremlin spokesperson Peskov said the call was quickly arranged at the request of Germany. It looks like a politician playbook 101. Scholz is facing an election in the coming months, the domestic economic situation continues weak so he wants to at least project some international results/initiative. We say this because it doesn't look like the call accomplished any specifics other than talking again after almost two years. Yesterday, we tweeted [LINK](#) "Kremlin readout of Putin/Scholz call. Set up at request of Germany. Putin reiterates will look at a Ukraine deal BUT any deal must "rest on the new territorial realities", ie. RUS retains captured lands. Also explains why RUS doing full court press to regain Kursk. #OOTT." Our tweet included the Kremlin readout of the call. Putin didn't ask for anything necessarily new but reiterated Russia must keep the new territorial realities ie. their captured land. It also explains why there has been huge Russian push to recapture Kursk, the one area of Russia that Ukraine captured in the summer. Kremlin wrote [LINK](#) "The leaders had an in-depth and frank exchange of views on the situation in Ukraine. Vladimir Putin reiterated that the current crisis was a direct result of NATO's long-standing aggressive policy aimed at creating a staging ground against Russia on Ukrainian soil, while showing disregard for Russia's security concerns and trampling on the rights of Russian-speaking residents of Ukraine. Speaking on the prospects for reaching a political and diplomatic settlement of the conflict, the President of Russia pointed out that the Russian side had never rejected and was still open to resuming the talks broken off by the Kiev regime. Russia's proposals are well known and have been outlined, in particular, in the President's speech at the Foreign Ministry in June. Any possible agreements must address security concerns of the Russian Federation, rest on the new territorial realities, and, most importantly, eliminate the original causes of the conflict."

**Putin/Scholz
call**

Oil: Russian refineries crude processing back to highest levels since Aug

We should see a pull back in Russia oil shipments in a week or two give the Bloomberg Friday report "Russia Raises Weekly Refinery Runs to Highest Since Late August. More Russian oil refined within Russia means there is less oil for export. The caveat being it may take a week or two flow thru as there could be oil stored in tanks at the export terminals to make up for the refineries processing more crude oil within Russia. Bloomberg wrote "

**Russian oil
refineries**

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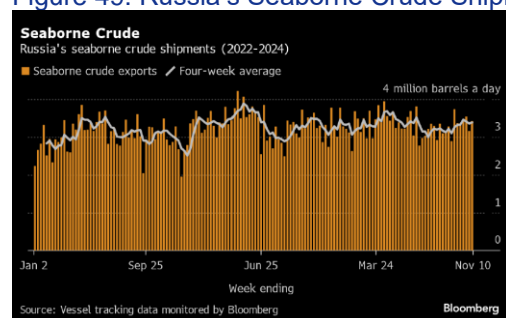
*Russia's primary crude-processing rate averaged 5.38m b/d over Nov. 7-13 period, as the nation's refineries ramp up operations after seasonal maintenance, according to a person with knowledge of the matter. * That's the highest weekly average since late August, and a nearly 260k b/d jump on the average for the previous seven days * The nation's refinery runs on Nov. 1-13 were at 5.26m b/d, showing a nearly 150k b/d increase on the average for most of October, according to historic data gathered by Bloomberg."*

Oil: Russia's seaborne crude oil exports rebound after previous falls

This week, the four-week average for Russia's seaborne crude exports rose, following two weeks of falling exports. The rebound comes from a recovery in flows from the Arctic port of Murmansk, and Novorossiysk on the Black Sea. This increase was somewhat offset by a decrease in flows from Russia's main Pacific terminal at Kozmino. We do not know the specific reasons, but refineries were coming off maintenance in October so, in theory, it should have reduced crude available for export. We have noted that the Russian refineries coming off maintenance means there was a reduction in oil exports from western Russia in November. But it may just be a case of more oil in tanks stored at tanks at ports. As a reminder if Russian refineries are in maintenance or turnaround, then that means less Russian oil is processed in Russia, which means more Russian oil is available for export—generally, when Russian refining capacity gets hit, it allows for more oil for export. The four-week average rose +30,000 b/d for the week to November 10. Bloomberg reported "Weekly flows rose by about 260,000 barrels a day in the period to Nov. 10, as a recovery in shipments from the Arctic port of Murmansk more than offset a dip in flows from Russia's main Pacific terminal at Kozmino. Shipments from the Black Sea port of Novorossiysk also rebounded from the previous week's maintenance-hit level. Four-week exports edged higher. Less volatile four-week average flows also rose, edging up to average 3.39 million barrels a day, an increase of 30,000 from the period to Nov. 3." Russia made significant output cuts in May, June, and July; however, they were still slightly above their promised targets. Notably, in last OPEC JMMC, the committee confirmed the cooperation of Russia in complying with these cuts going forward. Our Supplemental Documents package includes the Bloomberg report.

Russia's seaborne crude exports

Figure 49: Russia's Seaborne Crude Shipments



Source: Bloomberg

Russia oil exports to China bounce back to April levels

For the last several months, we have been highlighting how China is a price sensitive buyer of oil and has been hitting oil imports from Russia when Russia increased its

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prices in Q2/24. But China also has the ability to shift some Russian barrels to Iranian barrels and vice versa. And we suspect the unsaid reason for Russia oil shipments to China tweaking up in Nov is because Iran is increasing its oil price to China. (i) Russia oil shipments to China averaged 1.360 mmb/d for the first half of April. But they were down thereafter with the reports that Russia had cut its discounts to China, meaning China was taking less Russian oil. Bloomberg's crude oil shipments from Russia to China have been up +0.120 mmb/d the last two weeks vs late Oct. Bloomberg highlighted the four-week average of Russia oil shipments to China were up +0.020 mmb/d to 1.360 mmb/d for the week ending November 10, 2024, up from last week's 1.340 mmb/d for the week of November 3, 2024. This compares to 1.240 mmb/d for the last week of Oct. (ii) On Nov 6, Shana (news agency for Iran's energy ministry) reported Iran's oil price to China was the most expensive, relative to Brent, in five years. [LINK](#) Shana wrote "*Iran's crude oil going to China these days is priced at its narrowest discount to Brent in five years. Oil Price news website, quoting Reuters, announced this on November 5, adding the discount of Iran Light crude to ICE Brent has now narrowed to below \$4 per barrel, from \$5-\$6 a barrel earlier this year.*" (iii) Russia increasing oil prices in April led to lower Russia shipments to China. We have been highlighting that the warning that China oil imports from Russia were being hit on April 22 by one of our favorite commentators on the Gulf Intelligence Daily Energy Podcasts is Victor Yang, Senior Analyst JLC Network Technology. He is based in China, so we like to hear his on-the-ground views on oil, natural gas and markets in China. Here is what we wrote in our April 28, 2024, Energy Tidbits memo referencing Yang's comments from our April 22, 2024, tweet that included a transcript we made of Yang's comments. "*And for the second quarter, we see a lot of refinery maintenance, is imports will actually come down. And for now, the premium for Russian cargoes have strengthened this year, from -0.5 barrels to -0.3 barrels. And now it's flat to Brent, meaning 0 now. So, this has dampened refiners, particularly independents, interest in Russian crude. Their margins for imported crude, including Russian crude, actually turned negative late last month and the beginning of this month. So, it's now kind of [inaudible] slightly above the breakeven point. So, the interest in this has been dampened too. So, we are not expecting imports to grow much in the second quarter, yes.*" Below is the table from Bloomberg's Russia oil exports report this week.

Figure 50: Russian Crude Exports to Asia

Crude Shipments to Asia						
Shipments of Russian crude to Asian buyers in million barrels a day						
4 weeks ending	China	India	Other	Unknown Asia	Other Unknown	Total
October 6, 2024	1.34	1.80	0.00	0.00	0.00	3.14
October 13, 2024	1.24	1.85	0.00	0.00	0.00	3.09
October 20, 2024	1.36	1.73	0.00	0.05	0.00	3.15
October 27, 2024	1.24	1.63	0.00	0.17	0.09	3.12
November 3, 2024	1.34	1.38	0.00	0.24	0.09	3.04
November 10, 2024	1.36	1.23	0.00	0.30	0.14	3.02

Source: Vessel tracking data compiled by Bloomberg

Bloomberg

Source: Bloomberg

Oil: OPEC MOMR again lowers oil demand growth forecasts for 2024 and 2025

On Tuesday, OPEC released it's November Monthly Oil Market Report. (i) We don't think the

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market had any different views from the OPEC Nov MOMR vs its Oct MOMR because everyone thinks their demand growth forecasts are too optimistic and OPEC is likely to keep lowering the demand forecast again in the Dec MOMR. This is unfortunate as there continues to be the difference between looking back at the physicals that look solid with continued deficits to the 2015-2019 average for oil stocks but then the financial markets keep seeing OPEC's oil demand forecast being optimistic and continued risk for China. There is nothing significant to note on Nov MOMR non-OPEC supply forecast. But with another reduction in oil demand forecasts, it means a lesser call on OPEC+ NOC barrels. And Q1/25 oil demand is seasonally down -1.27 mmb/d vs Q4/24, it means that it continues to be hard to see Saudi et al adding back barrels in Q1/25 unless they see Trump hammering Iran and Venezuela oil exports. The physical positive in the look back that oil bulls hang their hats on is that oil + products stocks in the continued deficit to the 2015-2019 average. (ii) Demand. OPEC reduced their global oil demand forecast by -0.11 mmb/d for 2024 and -0.10 mmb/d in 2025. (iii) Non-DOC supply. OPEC made no changes to non-DOC supply growth in 2024 and 2025 saw a immaterial increase in growth rate due to a lower starting point, but no change to growth of +1.11 mmb/d to 54.17 mmb/d (compared to +1.11 mmb/d to 54.27 mmb/d in the Oct MOMR). Key non-DOC growth areas: 2024 are: US +0.60 mmb/d YoY, Canada +0.21 mmb/d YoY and Brazil which was not provided a number but was forecasted at +0.11 mmb/d YoY in the September MOMR. For 2025, US +0.50 mmb/d YoY, Brazil +0.18 mmb/d YoY, Canada +0.16 mmb/d YoY, and Norway +0.10 mmb/d YoY. (iv) Call on OPEC is now called Call on DoC Oil and is revised down by -0.1 mmb/d to 42.7 mmb/d for 2024 and by -0.2 to 43.0 mmb/d in 2025. (v) OPEC only production, based on secondary sources, Nove MOMR is +0.215 mmb/d MoM to 40.338 mmb/d in Oct. The largest MoM change was Libya +0.556 mmb/d MoM to 1.096 mmb/d which was expected with the stoppage from the recent shut-down caused by change in domestic central bank leadership and the countries Force Majeure which was lifted on Oct 3, 2024. The other big change was Kazakhstan, which may have seen maintenance in Oct, -0.292 mmb/d to 1.290 mmb/d. Non-OPEC DOC countries were down -0.251 mmb/d MoM to 13.803 mmb/d in Oct; the MoM change to Kazakhstan production decrease of -0.292 mmb/d MoM to 1.290 mmb/d, will likely be looked upon beneficially due to Kazakhstan's overproduction in recent periods. Russia saw production rise by +0.009 mmb/d to 9.010 mmb/d. (vi) The physical positive for oil is oil stocks continue lower. Nov MOMR has total crude oil + products stocks down by -3.0 mmb MoM to 2,808 mmb, which is -159.0 mmb below the 2015-2019 average. Crude oil only stocks at Sept 30. Nov MOMR has crude oil only stocks at down -7.5 mmb MoM to 1,317 mmb, which is -118.0 mmb below the 2015-2019 average. Products only stocks at Sept 30. Nov MOMR has products only stocks +5.0 mmb MoM to 1,491 mmb, which is 41.0 mmb below the 2015-2019 average. (ix) One overlooked positive in looking at global oil stocks is the comparison for oil stocks to the 2015-2019 average, oil demand is higher than that period. OPEC's forecast for 2024 oil demand is approximately 6 mmb/d higher than the 2015-2019 average oil demand. Our Supplemental Documents package includes excerpts from the OPEC November MOMR.

OPEC seen as an optimistic outlier for oil demand YoY growth in 2024 & 2025

One of the reasons why we didn't see the market reacting to OPEC's Nov MOMR on Tuesday was that the markets have considered OPEC an optimistic outlier in its oil demand growth forecasts and were expecting another month of OPEC tweaking down its YoY oil demand growth forecasts for both 2024 and 2025. Upon release of the OPEC Nov MOMR, we tweeted [\[LINK\]](#) "See 📌 *Comparison of #Oil demand*

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growth forecasts. OPEC Nov MOMR cuts oil demand growth again but is still a big outlier. OPEC +1.82 mmb/d YoY in 2024 & +1.54 mmb/d YoY in 2025. Next closest is Saudi Aramco Q3 +1.10 mmb/d YoY in 2024. EIA Oct STEO +1.29 mmb/d YoY in 2025. #OOTT.” Our tweet was before the IEA Nov OMR and EIA Nov STEO but the point was unchanged. Below is the table we attached to our tweet except for we added the IEA Nov OMR and EIA Nov STEO YoY oil demand growth forecasts.

Figure 51: Comparison oil demand YoY growth forecasts

Comparison of YoY Oil Demand Growth Forecasts		
million b/d	YoY Oil Demand Growth Forecast	
	2024 YoY	2025 YoY
OPEC Nov MOMR	1.82	1.54
OPEC Oct MOMR	1.93	1.64
OPEC Sept MOMR	2.03	1.74
OPEC Aug MOMR	2.11	1.78
Saudi Aramco Q3	1.10	1.20
Saudi Aramco Q2	1.60	1.40
IEA Nov OMR	0.92	0.99
IEA Oct OMR	0.86	1.00
IEA Sept OMR	0.90	0.95
IEA Aug OMR	0.97	0.95
EIA Nov STEO	0.99	1.22
EIA Oct STEO	0.92	1.29
EIA Sept STEO	0.94	1.52
EIA Aug STEO	1.14	1.61

Source: OPEC, Saudi Aramco, IEA, EIA

Prepared by SAF Group <https://safgroup.ca/insights/energy-tidbits/>

Source: EIA, IEA, OPEC, Saudi Aramco

Oil: IEA OMR, slight increase to YoY 2024 oil demand, 2025 oil demand revised down

On Thursday, the IEA released its monthly Nov Oil Market Report. (i) The IEA messaging continues to be negative on oil but we think the takeaway vs the Oct OMR is neutral. The messaging continue to be an oversupplied oil market in 2025 even if Saudi et al do NOT bring back their voluntary cut barrels. But their forecasts for YoY oil demand, non-OPEC oil supply and call on OPEC are basically unchanged so no MoM view changes based on the numbers. But the offsetting positive continues to be global oil stocks keep declining ie. what physical players keep highlighting. (ii) Demand. There was a small increase of +60,000 b/d to its oil demand growth for 2024, but that was due to a decrease in 2023 baseline. The 2024 YoY growth is now up to +920,000 b/d YoY to 102.820 mmb/d. The 2025 demand growth was revised down -8,000 b/d to +990,000 b/d to 102.810 mmb/d. (iii) The IEA forecast is that OECD countries reached peak oil demand in Q3/24 at 46.2 mmb/d. This was revised up from Oct OMR at 46.1 mmb/d. (iv) China remains the holdback to demand. The IEA wrote “China’s marked slowdown has been the main drag on demand, with its growth this year expected to average just a tenth of the 1.4 mb/d increase in 2023. Indeed, Chinese demand contracted for a sixth straight month in September – taking the 3Q24 average to 270 kb/d below a year ago.” (v) Non-OPEC supply for 2024 is unchanged at 70.2 mmb/d from last month’s forecast, and 2025 is unchanged at 72.0 mmb/d. (vi) The IEA’s call on OPEC for 2024 was unchanged at 27.2 mmb/d, and 2025 was unchanged at 26.2 mmb/d from 26.3 mmb/d. (vii) It doesn’t get much coverage but the IEA notes global oil stocks keep going lower. On Thursday, we tweeted [\[LINK\]](#) “Actuals vs forecast. Won’t move #Oil prices today but physical plays have been highlighting that actual global oil stocks continue to go lower. IEA Nov OMR “Global oil inventories plunged by 47.5 mb in September, to their lowest level since January, led by a

IEA Oil Market Report

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sharp draw in OECD oil products and non-OECD crude oil stocks” #OOTT.” The IEA wrote “Global oil inventories plunged by 47.5 mb in September, to their lowest level since January, led by a sharp draw in OECD oil products and non-OECD crude oil stocks. OECD industry stocks fell by 36.4 mb to 2 799 mb, 95.3 mb below the five-year average. Provisional data suggest total global stocks decreased for a fifth consecutive month in October.” (viii) Our Supplemental Documents package includes the IEA release and the Bloomberg tables and reports.

Figure 52: IEA Global Demand Forecast by OMR Report

mmb/d	2023	Q1/24	Q2/24	Q3/24	Q4/24	2024	24-23	Q1/25	Q2/25	Q3/25	Q4/25	2025	25-24
Nov 24	101.9	101.5	102.6	103.7	103.5	102.8	0.9	102.6	103.6	104.6	104.4	103.8	1.0
Oct 24	102.0	101.5	102.6	103.6	103.6	102.8	0.8	102.6	103.5	104.6	104.6	103.8	1.0
Sep 24	102.1	101.4	102.9	103.9	103.7	103.0	0.9	102.4	103.7	104.8	104.7	103.9	0.9
Aug 24	102.1	101.3	103.1	104.1	103.7	103.1	1.0	102.3	103.8	105.0	104.8	104.0	1.0
July 24	102.1	101.3	102.9	104.1	103.9	103.1	1.0	102.3	103.7	105.1	104.9	104.0	1.0
June 24	102.2	101.5	103.0	104.2	104.1	103.2	1.0	102.6	103.9	105.3	105.1	104.2	1.0
May 24	102.1	101.7	102.9	104.1	103.9	103.2	1.1	102.8	104.1	105.3	105.1	104.3	1.1
Apr 24	102.0	102.0	103.0	103.9	103.8	103.2	1.2	103.1	104.0	105.1	105.0	104.3	1.1
Mar 24	101.9	102.0	103.0	104.0	103.7	103.2	1.3						
Feb 24	101.8	101.7	102.8	103.8	103.7	103.0	1.2						
Jan 24	101.7	101.7	102.7	103.7	103.8	103.0	1.3						
Dec 23	101.7	101.4	102.4	103.4	103.9	102.8	1.1						
Nov 23	102.0	101.5	102.4	103.5	104.1	102.9	0.9						
Oct 23	101.9	101.3	102.2	103.5	103.9	102.7	0.8						
Sep 23	101.8	101.1	102.6	104.0	103.5	102.8	1.0						
Aug 23	102.2	101.5	102.6	104.2	104.3	103.2	1.0						

Source: IEA, Bloomberg

IEA Nov OMR doesn't seem to make any Trump adjustments to its forecasts

We do not have the paid subscription to the IEA's OMR so only have the IEA press release and any reports from reputable news agencies on IEA's comments. But, based on the Nov OMR press release, it doesn't seem the IEA made any changes yet to what Trump may or may not do. The only reference to Trump in the press release was “Meanwhile, world oil supply is rising at a healthy clip. Following the early November US elections, we continue to expect the United States to lead non-OPEC+ supply growth of 1.5 mb/d in both 2024 and 2025, along with higher output from Canada, Guyana and Argentina.”

IEA Nov OMR, global oil inventories plunged in Sept, lowest level since Jan

It may not get much attention but the IEA Nov OMR reminded that, despite their negative forward commentary on oil markets, the actual global oil stocks continue to be low. On Thursday, we tweeted [\[LINK\]](#) “Actuals vs forecast. Won't move #Oil prices today but physical playes have been highlighting that actual global oil stocks continue to go lower. IEA Nov OMR “Global oil inventories plunged by 47.5 mb in September, to their lowest level since January, led by a sharp draw in OECD oil products and non-OECD crude oil stocks” #OOTT.” We do not have the paid subscription to the IEA's OMR so only have their limited press release disclosure. But that disclosure was that global oil inventories are low. The IEA wrote ‘Global oil inventories plunged by 47.5 mb in September, to their lowest level since January, led by a sharp draw in OECD oil products and non-OECD crude oil stocks. OECD industry stocks fell by 36.4 mb to 2 799 mb, 95.3 mb below the five-year average. Provisional data suggest total global stocks decreased for a fifth consecutive month in October.’”

Oil: Absent Trump surprise, hard to see OPEC return voluntary barrels in Q1/25

Post this week's OPEC Nov MOMR and IEA Nov OMR, our view is unchanged that, absent

**OPEC+
countries
voluntary cuts**

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Trump moving to immediately cut back on Iran and Venezuela oil exports, we still believe it will be difficult for or Saudi et al to add back the voluntary cut barrels in Q1/25. For the past few months, we have been reminding of the big challenge for the OPEC+ voluntary cut countries in their planned start to adding back oil was that, if they didn't start adding back the voluntary cut oil on Oct 1, they might be forced to wait until at least Q2/25. Our view for that is unchanged in that if they added back barrels it would be in a period where global oil demand is always seasonally lower in Q1 vs the prior Q4. So they would be adding back barrels when oil demand is declining in Q1/25. Simply if oil supply is up and oil demand is down, it will move oil prices lower. Prior to this week's OPEC Nov MOMR and IEA Nov OMR, on Monday, we tweeted [\[LINK\]](#) "*Reminder #Oil demand seasonally weakens every year such that Q1 is always less demand than preceding Q4. OPEC Oct MOMR forecasts Q1/25 at 104.41 mmb/d, which is -1.20 mmb/d lower than Q4/24 of 105.61 mmb/d. #OOTT.*" On Tuesday, OPEC Nov MOMR forecasts Q4/24 demand of 105.56 mmb/d decreases -1.27 mmb/d QoQ to 104.29 mmb/d in Q1/25. On Thursday, IEA Nov OMR forecasts oil demand in Q4/25 of 103.5 mmb/d, then down 0.9 mmb/d QoQ to 103.5 mmb/d in Q1/25.

Will OPEC's decision in early Dec reveal if Trump plans to hit Iran oil exports

As we have been highlighting, there is a Trump wildcard to oil markets that would impact when Saudi et al can bring back voluntary cut barrels. Will Trump move immediately to cut Iran and Venezuela oil exports. Absent an early Trump move to do so, we stick to our view that the normal seasonal decline in oil demand from Q4/24 to Q1/25 will prevent Saudi et al from adding back barrels. We also wonder if Trump has given or will be giving a hint on what he plans to do on Iran to Saudi Arabia, Russia and UAE, who will be the big winners if Trump cuts Iran and Venezuela oil exports. Last week's (Nov 10, 2024) Energy Tidbits memo wrote "*It will be interesting to watch OPEC announces in a month on what Saudi, Russia et al decide about bringing back the voluntary cut barrels on Jan 1, 2025. Will they start the add back of voluntary oil barrels in Q 1/25 which is forecast to have lower QoQ oil demand vs Q4/24. Will they add back the barrels in Q1/25? If so, we have to believe Saud Arabia and UAE and Russia have some indication from Trump that he is going to move immediately to cut Iran oil exports. In his CNN Interview on Thursday, Brian Hook (former envoy on Iran in Trump's 1st administration and rumored lead on the transition team on US State Dept) made a point of highlighting that Trump's Day 1 calls were with Saudi Arabia, UAE, Egypt and Israel.*"

Oil: Oil wildcard? Elon Musk reportedly meets Iran's Ambassador to the UN

We have to give Trump credit for keeping the market, or at least us, on our toes for what he is going to do on Iran. To date, it seemed clear from comments from his former Iran envoy and rumored to head the transition team at the State Dept, Brian Hook, that Trump is mostly likely to return to his 1st term Iran playbook and hit Iran economically by cutting Iran oil production and exports. However, he seemed to at least throw a wildcard in that scenario with the New York Times reporting that Elon Musk met with Iran's Ambassador to the UN. [Note, yesterday, IRNA, state media, reported [\[LINK\]](#) "*Iran's Foreign Ministry Spokesman Esmail Baghaei has categorically denied media reports on a meeting between Elon Musk and the Islamic Republic's ambassador to the UN.*"]. But assuming the New York Times report is accurate, it throws a potential wildcard as the New York Times reported "*Elon Musk, a close adviser to President-elect Donald J. Trump, met with Iran's ambassador to the United Nations*

Did Elon meet with Iran?

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on Monday in New York in a session that two Iranian officials described as a discussion of how to defuse tensions between Iran and the United States. The Iranians said the meeting between Mr. Musk and Ambassador Amir Saeid Iravani lasted more than an hour and was held at a secret location. The Iranians, who spoke on the condition of anonymity because they were not authorized to discuss policy publicly, described the meeting as “positive” and “good news.” As noted, Iran says the meeting didn’t happen but, if the New York Times reporting is accurate, it made us wonder and at least note that this could set up the potential path for Trump to get Iran to be a good actor. We wonder if this potentially sets up a path for Iran to do so without Trump first hammering them economically. It’s why, on Friday, we tweeted [\[LINK\]](#) “Oil price wildcard for 2025? Could Trump surprise & do a deal with Iran without first hammering their cash flow by slashing their oil production & exports like he did in his 1st term? Elon met with Iran UN to discuss defusing tensions reports 📌 @farnazfassihi. #OOTT.” Our Supplemental Documents package includes the New York Times report

Seems Elon’s influence/role will be much more than cutting govt spending

The other big takeaway from the New York Times report is that, to no one’s surprise, Elon Musk’s influence, opinions and role for Trump will be much more than just cutting government spending. Rather, it seems to be he will be taking on informal roles in international areas like Iran. And even if he doesn’t take a specific informal or formal role, he will be making sure others in the cabinet, and in the public, know via his huge social platform his views on a range of key energy and market issues. So even if he isn’t directly involved, he will be able to have a big influence on other cabinet areas.

To date, Trump’s Brian Hook points to Trump cutting off Iran oil exports

We raise the Elon meeting with UN as a wildcard as the indications to date, post the Trump election win, were that Trump would return to his 1st term playbook to hit Iran economically and that means cutting off the big source of foreign currency – their oil exports. Here is what we wrote in last week’s (Nov 10, 2024) Energy Tidbits memo. “Trump’s Brian Hook points to Trump cutting off Iran oil exports. We were surprised that, prior to the election, analysts and agencies were focused on the downside risk to oil prices under Trump’s drill baby drill will get US oil companies to crank up drilling and lower oil prices. For months, we have been highlighting Trump’s big impact on oil prices will be what he does on Iran and Venezuela. (i) On Friday, we tweeted [\[LINK\]](#) “Positive for #Oil. Seems Brian Hook (rumored to lead transition team at State Dept) is clearly pointing to Trump is going to clamp down on Iran oil exports like he did in 1st term. Allow room for Saudi, Russia et al to bring back voluntary cut barrels without crashing oil price. Slash Iran oil revenues for funding proxies. Fits SAF Group 📌 Nov 3, 2024 Energy Tidbits highlight. Thx @BeckyCNN. #OOTT.” (ii) Brian Hook was Trump’s envoy on Iran in his first term and is the rumored person to lead Trump’s transition team on the State Dept. And he was interviewed on Thursday on CNN. (iii) Hook highlighted Trump’s Middle East accomplishments and “President Trump has no interest in regime change. The future of Iran will be decided by the Iranian people. We’ve said that repeatedly over four years. But what President Trump did say in Riyadh was that he would isolate Iran diplomatically and weaken them economically so they can’t fund all of the violence that is going with the Houthis in Yemen, Hamas, Hezbollah, PIJ and these proxies that around Iraq and Syria today.

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All of whom destabilize Israel and our Gulf Partners.” It’s worth reading what Hook said and he highlighted a couple of times on Trump’s strategy to weaken Iran financially. The #1 way to hit Iran financially is to enforce sanctions and cut back Iran oil exports to almost nothing like he did in his first term. (iv) Hook also highlighted Trump’s foreign policy is clear. CNN said he was swerving his answers away from the questions and Hook replied “well look Becky, President Trump’s foreign policy is hiding in plain sight. I’m not swerving any of your answers. I just think it’s fairly obvious what he did in the first term. It’s obvious that he isolated Iran and he weakened Iran economically.” (iv) Our tweet reminded that a cutting off of Iran’s oil exports would be a plus to Saudi Arabia and Russia as it would allow them to add back their voluntary cut barrels. And to Israel as it would cut off Iran’s cash flow that is used to fund the proxies. Our Supplemental Documents package includes the transcript we made of Hook’s comments.”

Trump’s big impact on oil will be from what he does on Iran and Venezuela

For the past 25+ years in writing the Energy Tidbits memo, I always try to mention items that present a contrary risk/upside – in this case Elon’s reported meeting with Iran. Absent this wildcard, I have been consistent in my view for months that Trump’s big impact on oil in the near term won’t be drill baby drill but if he returns to his 1st term playbook to cut off Iran and Venezuela oil exports. So if so reason, whether it be via Elon or other, that Trump can get Iran peace without hammering their oil exports as he did in the 1st term, it would change his Iran work from a positive on oil to a negative on oil. Here is what I wrote on Trump on Iran and Venezuela in our July 21, 2024 Energy Tidbits memo. *“We recognize that the market is focused on Trump’s big impact on oil being his “drill, baby, drill” for the US oil industry that he said twice in his acceptance speech on Thursday. Trump was clear that he says unleashing oil drilling in the US will lead to lower oil prices. We continue to believe that Trump’s big impact on oil will be from what he does on Iran and Venezuela, and if he will go back to what he did in enforcing sanctions and bringing their oil exports down to almost nothing. Trump did not address Venezuela oil in his acceptance speech but did highlight how he was forcing Iran to run out of money by enforcing the sanctions. Here is what Trump said on Thursday night “Iran was broke. Iran had no money. Now Iran has \$250 billion. They made it over the last two-and-a-half years. They were broke. I watched the other day on a show called De-Face the Nation. Has anyone seen it? And they had a congressman who is a Democrat say, well, whether you like them or not, Iran was broke dealing with Trump. I told China and other countries, if you buy from Iran, we will not let you do any business in this country and we will put tariffs on every product you do send in or 100 percent or more. And they said to me, well, I think that’s about it, they weren’t going to buy any oil. And they were ready to make a deal, Iran was going to make a deal with us. And then we had that horrible, horrible result that we’ll never let happen again, the election result. We’re never going to let that happen again. They used COVID to cheat. We’re never going to let it happen again. And they took off all the sanctions and they did everything possible for Iran. And now Iran is very close to having a nuclear weapon, which would have never happened. This is a shame what -- what this administration - - the damage that this administration has done.” Whether you like Trump or not, he was responsible for cutting Iran’s oil exports down to effectively zero and squeezing*

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Iran's cash. Here is what we wrote in our May 19, 2024 Energy Tidbits memo. "There were a number of comments on Trump reportedly promising to work with the oil industry, but we believe the bigger impact that Trump will have on oil prices is he moves back to enforcing sanctions on Iran and Venezuela sanctions. If he goes back to what he did, he will be knocking a million b/d or Iran oil exports off global oil markets and likely at least 150,000 b/d of Venezuela oil out of US oil imports."

Figure 53: Iran oil exports (as of July 2024)



Source: Bloomberg

Figure 54: US oil imports from Venezuela (as of July 2024)



Source: Bloomberg

Oil: Libya oil + condensate production of 1.374 mmb/d is slightly above Aug 1 levels

Libya oil production returned to Aug 1 levels three weeks ago and continues to be stable at slightly above Aug 1 production levels. On Wednesday, the Libya National Oil Corporation tweeted [\[LINK\]](#) "The total readings recorded today, Wednesday, for crude oil and condensate production rates reached 1,374,118 barrels, and for gas 202,983 barrels equivalent, bringing the total to 1,577,101 barrels." This is slightly above the NOC Aug 1 production update of 1.324 mmb/d. In the last four updates, the NOC has not provided a split of oil vs condensate in the 1.333 mmb/d. In our Oct 13, 2024 Energy Tidbits memo, we wrote "One item to keep in mind is that the NOC is not splitting out oil vs condensate volumes. But a decent rule of thumb is that condensate is probably about 50,000 b/d of the combined oil + condensate. Yesterday, we tweeted [\[LINK\]](#) "Libya #Oil has been quickly restored and almost back to Aug 1 levels. Note Libya NOC isn't splitting out oil vs condensate. Today: oil + condensate is back to 1.279 mmb/d. Aug 1: oil + condensate was 1.324 mmb/d (1.271 oil, 0.053 condensate). #OOTT." It is fair to use an approximate 50,000 b/d of condensate production included in the

**Libya oil +
condensate
production
1.374 mmb/d**

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NOC reporting of total crude oil + condensate production ie. the current 1.374 mmb/d is 1.324 mmb/d of crude oil and 0.050 mmb/d of condensate. Note that including natural gas, total Libya oil, condensate and natural gas production is over 1.5 mmboe/d.

Oil: Libya NOC sees oil production +0.2 mmb/d to 1.5 mmb/d by year-end 2024

Here is what we wrote in last week's (Nov 10, 2024) Energy Tidbits memo. "We have been highlighting how the Libya NOC has been careful to be specific when it refers to either crude oil or oil + condensate production. It is why we were surprised by the NOC's Thursday tweet on comments from their meetings at ADIPEC 2024 in Abu Dhabi that the NOC expects to raise "crude oil" production to 1.5 mmb/d by the end of 2024 and to 2 mmb/d by the end of 2025. On Thursday, the NOC tweeted [LINK](#) "This participation comes as part of the Corporation's strategy to enhance international cooperation and raise crude oil production rates to 1.5 million barrels per day by the end of 2024, and two million barrels per day by the end of 2025."

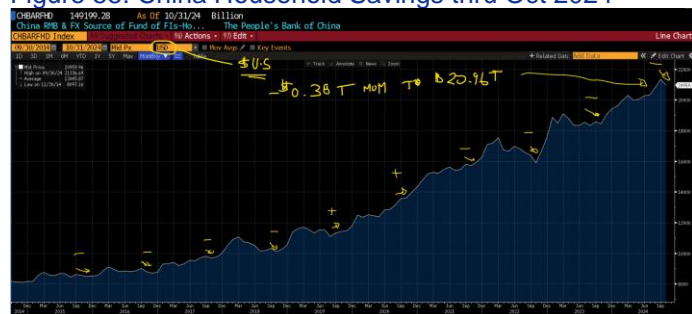
Libya oil + condensate to hit 1.5 mmb/d by yr-end

Oil: Chinese household savings down -\$380b MoM in Oct

The qualifier we make on all Chinese economic and consumer data for October is that this data is pre the Trump election and his announced cabinet including multiple anti-China hawks. On Thursday, we tweeted [LINK](#) "Positive China consumer indicator in pre-Trump period. Golden Week means Chinese spend & 9 of last 11 Oct's had MoM decrease in household savings. Oct 2024 is 2nd largest MoM decline. MoM US \$b: Oct 24: -\$380b to \$20,960b. Oct 23: -\$130. Oct 22: -\$490. Oct 21: -\$90. Oct 20: +\$60. Oct 19: +\$90. Oct 18: -\$210. Oct 17: -\$110. Oct 16: -\$200. Oct 15: -\$40. Oct 14: -\$60. Thx @business #OOTT." Normally Chinese households have MoM decrease in savings in October every year due to the National Day Golden Week holiday as people travel and celebrate National Day. Nine of the last eleven Octobers have seen MoM decreases. Household savings were down -\$380b MoM in Oct, which was the 2nd largest Oct MoM decrease only following Oct 2022 being down -\$490b. This shows that Chinese consumer were spending in Oct as they normally do in Oct, which would seem to support increased consumer confidence post the Sept stimulus. However, we think the test for the Chinese consumer, incl household savings, will be Nov, Dec, Jan now that the Chinese feel Trump's election impacts their confidence to spend. Below is the excel table for Chinese household savings in Oct going back to 2014 and the Bloomberg household saving graph that was attached to our tweet.

Chinese household savings

Figure 55: China Household Savings thru Oct 2024



Source: Bloomberg

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Figure 56: China Household Savings

Year	Units	September	October	MoM Change
2024	(USD\$T)	21.34	20.96	(0.38)
2023	(USD\$T)	18.58	18.45	(0.13)
2022	(USD\$T)	16.38	15.89	(0.49)
2021	(USD\$T)	15.81	15.72	(0.09)
2020	(USD\$T)	13.56	13.62	0.06
2019	(USD\$T)	11.33	11.42	0.09
2018	(USD\$T)	10.32	10.12	(0.21)
2017	(USD\$T)	9.81	9.70	(0.11)
2016	(USD\$T)	9.00	8.80	(0.20)
2015	(USD\$T)	8.60	8.57	(0.04)
2014	(USD\$T)	8.18	8.12	(0.06)

Source: Bloomberg

Oil: China retail sales +4.8% YoY in Oct, highest YoY since Dec

There was another China consumer indicator that points to the Chinese consumer feeling a little better post the Sept stimulus but one that also points to the Chinese consumer being well below where they were pre Covid – China retail sales were +4.6% YoY in Oct, the highest YoY comp since Dec 2023. But we have our big reminder about being cautious on the return of the Chinese consumer – this was all before Trump was elected on Nov 5. On Friday, we tweeted [LINK](#) “Chinese consumer feeling better but still a way to go. And this was pre-Trump. Best YoY % increase in China retail sales since Dec. Oct +4.8%. Sep +3.2%. Aug +2.1%. July +2.7%. Jun +2.0%. May +3.7%. Apr +2.3%. Mar +3.1%. No Jan/Feb data. 2023. Dec +7.4%. Nov +10.1%. Oct +7.6%. Nowhere near pre-Covid steady +8-11%. #OOTT. Thx @business.” It will be interesting to see how China retail sales numbers are in Nov, Dec and Jan as China now knows Trump has won and his cabinet is to include a number of known anti-China hawks. Oct retail sales were +4.8% YoY and that is highest YoY increase in 2024. We extended our graph back to 2014 to show the steady state of YoY sales growth in China retail sales pre-Covid that was generally in the +8% to +11% YoY. But, the big uncertainty will be how China consumers react to Trump and his cabinet of anti-China hawks. Below is the Bloomberg graph we included with our tweet.

**China retail
savings**

Figure 57: China Retail Sales YoY%



Source: Bloomberg

Oil: China home prices continue to lose value, 17 mths for new & 18 mths for old

One of the most important priorities for China in their stimulus is to stop home values from declining. We also wonder how Chinese consumer sentiment for home buying will be in Nov, Dec and Jan now that Trump has been elected and his cabinet looks to include a number of anti-China hawks. On Thursday, we tweeted [LINK](#) “Negative China indicator. Chinese

**China home
prices fall**

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consumer's most important asset, their home values keep going lower even post Sept stimulus. New home prices: 17th straight MoM % drop. Oct -0.51%. Sept -0.71%. Aug -0.73%. 2nd hand home prices: 18th straight MoM % drop. Oct -0.48%. Sept -0.93%. Aug -0.95%. Thx @business #OOTT." China home prices continue to lose value – new home prices had a MoM % drop for the 17th straight month, and second-hand home prices fell for the 18th straight month. The MoM% drop was the lowest in several months but are still doing lower MoM. One of the most significant drivers of negative sentiment among Chinese consumers, is that they keep losing value in their homes, which means their biggest asset value keeps decreasing month after month. Just like in North America, the home is the most important asset for most Chinese people, and they have seen the value of their homes decline month after month with no end in sight. In October, Chinese new home and 2nd home prices were down MoM vs September. China new home prices were down -0.51% MoM and that is the 17th consecutive month of MoM declines. China second hand home -0.48% MoM and that is the 18th consecutive MoM decline in prices. It looks like China home prices got a lift post China Sept stimulus. But, as noted above, the qualifier will be how Trump's election and his anti-China hawk cabinet will impact Chinese consumer views. Below are the Bloomberg graphs with the Oct home prices that were included with our tweet

Figure 58: China new home prices MoM % change incl Oct 2024



Source: Bloomberg, National Bureau of Statistics

Figure 59: China 2nd hand home prices MoM % change incl Oct 2024



Source: Bloomberg, National Bureau of Statistics

Oil: China is cutting taxes on home purchases

As we note in all of our comments on China economic indicators for October, they are all pre Trump election and his naming a number of anti-China hawks to his cabinet. So the test for Chinese consumers will be in Nov, Dec and Jan data, moreso than the Oct data. But China is doing more to stimulate home purchases starting in Dec. On Wed, Bloomberg reported "China is cutting taxes for home purchases, as the government tries to put a floor under falling prices and sustain an improvement in housing transactions. The nation cut home

**China cutting
home purchase
taxes**

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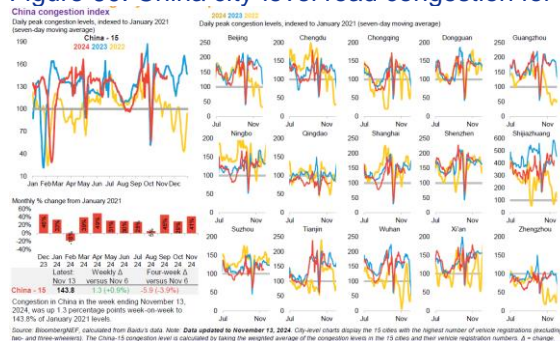
purchase deed taxes to 1% for first-and second-house buyers of flats of 140 square meters and below, from a current level of as much as 3%, according to a joint statement on Wednesday by the Ministry of Finance, State Taxation Administration and Ministry of Housing and Urban-Rural Development. That paves way for reduced costs for property purchases in mega cities including Beijing and Shanghai. The new policy will be effective from December.” And “China will also allow the biggest cities to scrap the distinction between ordinary and luxury homes, which would substantially lower purchasing costs for people seeking to upgrade their residences.”

Oil: Baidu China city-level congestion sees slight growth WoW

On Wednesday, BloombergNEF posted its China Road Traffic Indicators Weekly Nov 14 report, which includes the Baidu city-level road congestion for the week ended Nov 13. BloombergNEF reported Baidu city-level road congestion saw an increase +0.9% WoW to 143.8% of Jan 2021 levels. November MTD saw average daily peak congestion down -3.7% YoY when compared to November 2023. Note that this report was formerly titled Road Traffic indicators, and is now China Road Traffic Indicators, but the content of the report is unchanged. BloombergNEF's report was titled “Slight growth in congestion”. Below are the BloombergNEF key figures.

**China city-level
road congestion
sees slight
growth**

Figure 60: China city-level road congestion for the week ended November 13, 2024



Source: Bloomberg

Figure 61: China city-level road congestion for the week ended November 13, 2024

Indexed to January 2021 = 100	Nov 23	Dec	Jan 24	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Nov 23	Dec	Jan 24	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
China-15	146	146	133	81	138	148	130	129	127	104	144	128	141	155	187	151	55	100	114	110	96	104	87	94	99	96
Beijing	167	161	145	73	151	169	143	141	146	123	171	147	164	214	275	135	42	92	113	103	93	106	90	95	92	98
Chengdu	123	116	120	68	134	140	125	119	126	98	135	113	125	131	124	144	51	106	107	115	91	116	85	104	93	101
Chongqing	122	116	111	90	112	138	122	129	119	95	119	119	133	366	224	135	54	101	125	125	112	113	85	94	107	109
Dongguan	141	144	121	52	129	138	138	126	103	141	123	138	104	156	208	41	99	127	120	108	108	101	96	94	98	98
Guangzhou	178	181	161	76	171	195	174	170	162	158	179	159	175	317	307	199	45	99	127	127	107	107	106	98	99	98
Ningbo	146	142	127	79	144	146	120	128	121	94	140	119	124	101	127	203	59	115	140	121	112	106	81	110	101	85
Qingdao	99	103	78	81	71	78	72	75	91	80	87	79	78	124	195	175	62	94	97	98	87	95	76	82	85	79
Shanghai	155	150	115	79	146	152	130	132	119	93	151	121	137	93	172	156	54	98	117	105	101	98	76	93	95	88
Shenzhen	169	170	149	68	160	164	172	163	162	155	194	159	175	97	156	189	41	96	120	132	99	113	106	102	105	103
Shijiazhuang	491	461	494	350	400	390	311	329	334	308	364	356	405	459	258	156	69	93	85	81	77	89	70	75	104	82
Suzhou	127	136	118	79	134	137	113	112	105	96	115	106	114	88	157	171	68	111	130	117	97	99	88	86	88	89
Tianjin	169	180	133	85	160	165	145	132	106	98	186	150	156	137	244	136	68	114	121	119	100	96	86	107	100	92
Wuhan	159	159	167	105	174	171	146	144	141	117	169	154	161	192	187	151	55	94	100	97	85	95	86	88	107	101
Xi'an	156	155	152	98	141	147	129	123	135	107	145	136	147	139	152	132	66	110	112	105	91	110	97	96	101	94
Zhengzhou	97	108	110	85	95	96	80	78	86	66	91	83	97	294	164	119	76	98	102	90	82	98	72	86	103	100

Source: BloombergNEF calculations based on Baidu data. Note: Data updated to November 13, 2024. Values for the latest month are month-to-date. The China-15 congestion level is calculated by taking the weighted average of the congestion levels in the 15 cities and their vehicle registration numbers.

Source: Bloomberg

Oil: BloombergNEF “China’s steel PMI jumped to highest level in six years”

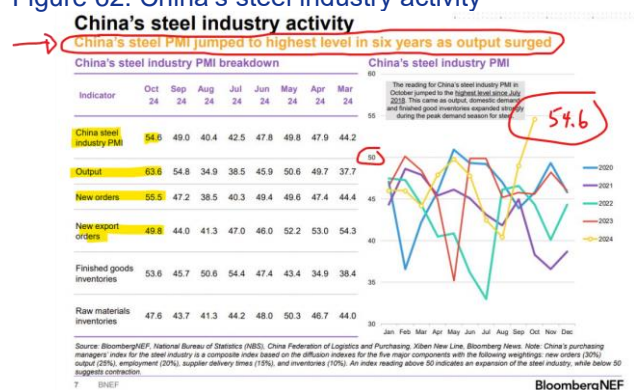
Perhaps one of the best economic indicators for China post Sept stimulus was from BloombergNEF's Industrial Metals Monthly on Friday as it was bullish on steel and steel is

**China steel
indicators up
big in Oct**

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always viewed as a key indicator for economies. On Friday, we tweeted [\[LINK\]](#) “Positive China economic activity. “China’s steel PMI jumped to highest level in six years as output surged” @BloombergNEF. China’s steel industry PMI, output, new orders, new export orders all up strong in Oct post Sept stimulus. #OOTT.” We look monthly at this BNEF report for the snapshot on China’s steel industry given steel is always viewed as a key indicator for the Chinese economy. BNEF shows big acceleration in China steel indicators. And there headline to the data was “China’s steel PMI jumped to highest level in six years as output surged.” China steel industry PMI was 54.6 in Oct, up from 49.0 in Sept and 40.4 in Aug. Steel output was 63.6 in Oct, up from 54.8 in Sept and 34.9 in Aug. New orders were 55.5 in Oct, up from 47.2 in Sept and 38.5 in Aug. New export orders were 49.8 in Oct, up from 44.0 in Sept and 41.3 in Aug. Our tweet included the below BloombergNEF chart.

Figure 62: China’s steel industry activity



Source: BloombergNEF

Oil: Bloomberg, China apparent oil demand -5.4% YoY to 14.073 mmb/d in Oct

As noted earlier in the memo, the IEA highlighted the weak China oil demand and how it sees “Chinese demand contracted for a sixth straight month in September – taking the 3Q24 average to 270 kb/d below a year ago.” On Friday, Bloomberg reported on its calculations for China “apparent oil demand” based data from China’s National Bureau of Statistics. Apparent oil demand is a good indicator, Bloomberg defines it as “* Total apparent demand is oil processing volume and net import of refined petroleum oil.” They would have picked up the data in Chinese and we won’t see the data in English for a few days. Bloomberg reported “China’s apparent oil demand fell 5.4% to 14.07m b/d in Oct., according to data compiled by Bloomberg. * Jan.-Oct. apparent oil demand -4.03% y/y to 14.00m b/d.” Below is Bloomberg’s table.

**China apparent
oil demand**

Figure 63: Bloomberg’s estimate for China Total Apparent Oil Demand

	Oct.	Sept.	Aug.	July	June	May	April	Year-to
	2024	2024	2024	2024	2024	2024	2024	Date
Total Apparent Oil Demand								
Million Barrels per Day	14.073	14.176	13.860	13.554	13.664	14.097	14.639	13,996
YoY%	-5.37%	-6.98%	-5.94%	-8.02%	-8.08%	-3.32%	-3.01%	-4.03%

Source: Bloomberg

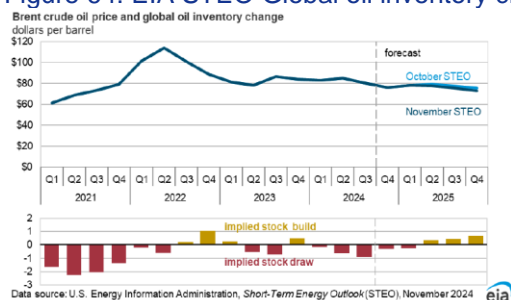
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Oil: EIA forecasts global oil stocks will continue to decline thru Q1/25

On Wednesday, the EIA STEO also included their forecast for changes in global oil stocks [\[LINK\]](#). (i) The EIA forecasts OPEC production in October 2024 at 31.96 mmb/d and for Dec 2025 at 32.54 mmb/d. It seems the EIA is building a return of the voluntary OPEC+ cuts. The EIA forecasts OPEC production is 32.10 mmb/d in Q4/24, this is expected to rise in 2025 by +0.50 mmb/d YoY to 32.60 mmb/d in Q4/25. The EIA forecasts OPEC+ is 42.39 mmb/d in Q4/24, in Q4/25 the EIA forecasts an increase of +1.08 mmb/d to 43.47 mmb/d. The EIA said: “By 2Q25, we expect OPEC+ production increases and supply growth from countries outside of OPEC+ will outweigh global oil demand growth and cause oil to be put into inventory.” (ii) The EIA forecasts continued global stock declines thru Q1/25. The EIA forecasts global oil stocks declined by -0.90 mmb/d in Q3/24 with continued declines in Q1/25 before returning to oil stocks build in H2/25. The EIA wrote “Despite the drop in oil prices in late October, we still expect that ongoing withdrawals from global oil inventories stemming from OPEC+ production cuts, along with potential for further geopolitical risk, will put upward pressure on oil prices through the first quarter of 2025 (1Q25). We estimate that global oil inventories fell by 0.9 million barrels per day (b/d) in 3Q24, and we estimate they will fall by an average of 0.3 million b/d in 4Q24 and 1Q25. As a result, we expect the Brent price will rise from \$72/b on November 11 to an average of \$78/b in 1Q25”. Below is the EIA STEO global oil inventory chart.

**EIA global oil
stock draws
thru Q1/25**

Figure 64: EIA STEO Global oil inventory change



Source: EIA

Oil: Vortexa crude oil floating storage est 48.16 mmb at Nov 15, -10.87 mmb WoW

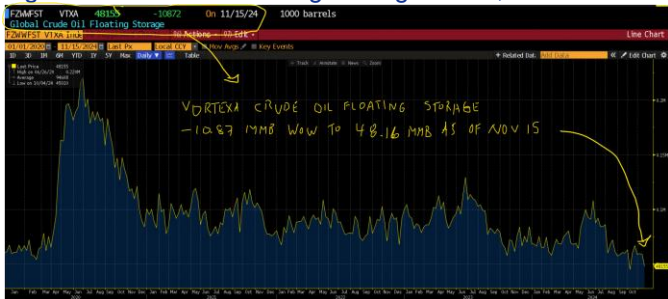
We are referencing the Vortexa crude oil floating storage data posted on the Bloomberg terminal as of 9am MT yesterday. Note that these estimates get revised over the course of the week and the revisions can go back months. We do not check daily for the revisions, so our comments on the new estimates are compared to the prior week's Vortexa estimates posted on Bloomberg on Nov 9 at 9am MT. (i) Yesterday, we tweeted [\[LINK\]](#) “Vortexa crude #Oil floating storage. Oct/Nov is lowest since Covid. -10.87 mmb WoW to 48.16 mmb at Nov 15. 7-wk moving average 56.88 mmb, lowest since Covid, only 5 times <60 mmb, all since Oct 1/24. Revisions last 7-wks average -2.22 mmb/wk. Thx @vortexa @business #OOTT.” (ii) As of 9am MT Nov 16, Bloomberg posted Vortexa crude oil floating storage estimate for Nov 15 a 48.16 mmb, which was -10.87 mmb WoW vs revised down Nov 8 of 59.03 mmb. Note Nov 8 was revised down -1.28 mmb vs 60.31 mmb originally posted at 9am on Nov 9. (iii) The 7-wk moving average of 56.88 mmb is the lowest 7-wk moving average since Covid. Only been five 7-wk moving averages below 60 mmb and all have been in the last two

**Vortexa floating
storage**

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months. (iv) Revisions. The revisions were small for the past 4 weeks but the prior 3 weeks were revised down -3.34 mmb, -4.32 mmb and -6.43 mmb. The prior post-Covid low and, prior to this week, the only week below 50 mmb of Oct 4 was revised -4.32 mmb to 45.01 mmb. Here are the revisions for the past seven weeks compared to the estimates originally posted on Bloomberg at 9am MT on Nov 9. Nov 8 revised -1.28 mmb. Nov 1 revised -0.18 mmb. Oct 25 revised +0.58 mmb. Oct 18 revised -0.58 mmb. Oct 11 revised -3.34 mmb. Oct 4 revised -4.32 mmb. Sept 27 revised -6.43 mmb. (v) There is a wide range of floating storage estimates for the past seven weeks, but a simple rolling average for the last seven weeks is 56.88 mmb vs last week's then seven-week rolling average of 61.24 mmb. This the only the 5th seven-week moving average below 60 mmb since Covid and the lowest such average since Covid. (vi) Also remember Vortexa revises these weekly storage estimates on a regular basis. We do not track the revisions through the week. Rather we try to compare the first posted storage estimates on a consistent week over week timing comparison. Normally we download the Vortexa data as of Saturday mornings around 9am MT. (vii) Note the below graph goes back to Jan 1, 2020 to show the run up to Covid and then how Covid started to impact Covid in March/April 2020. (viii) Nov 15 estimate of 48.16 mmb is -81.06 mmb vs the 2023 peak on June 25, 2023 of 129.22 mmb. Recall Saudi Arabia stepped in on July 1, 2023 with its voluntary cuts. (ix) Nov 15 estimate of 48.16 mmb is -27.64 mmb YoY vs Nov 17, 2023 at 75.80 mmb. Below are the last several weeks of estimates posted on Bloomberg as of 9am on Nov 16, Nov 9, and Nov 2.

Figure 65: Vortexa Floating Storage Jan 1, 2000 – Nov 15, 2024, posted Nov 16 at 9am MT



Source: Bloomberg, Vortexa

Figure 66: Vortexa Estimates Posted 9am MT on Nov 16, Nov 9 and Nov 2

Posted Nov 16, 9am MT						Nov 9, 9am MT						Nov 2, 9am MT					
FZwWFST VTXA Inde						FZwWFST VTXA Inde						FZwWFST VTXA Inde					
ID	3D	IM	GM	YTD	Y	ID	3D	IM	GM	YTD	Y	ID	3D	IM	GM	YTD	Y
Date Last Px						Date Last Px						Date Last Px					
Fr	11/15/2024					Fr	11/08/2024					Fr	11/01/2024				
	48155						60310						49065				
Fr	11/08/2024					Fr	11/01/2024					Fr	10/25/2024				
	59027						59812						54909				
Fr	11/01/2024					Fr	10/25/2024					Fr	10/18/2024				
	59633						58561						69263				
Fr	10/25/2024					Fr	10/18/2024					Fr	10/11/2024				
	59137						67616						63415				
Fr	10/18/2024					Fr	10/11/2024					Fr	10/04/2024				
	67040						63524						49630				
Fr	10/11/2024					Fr	10/04/2024					Fr	09/27/2024				
	60179						49328						70159				
Fr	10/04/2024					Fr	09/27/2024					Fr	09/20/2024				
	45010						69556						60566				
Fr	09/27/2024					Fr	09/20/2024					Fr	09/13/2024				
	63134						61131						60928				
Fr	09/20/2024					Fr	09/13/2024					Fr	09/06/2024				
	59935						61071						59278				
Fr	09/13/2024					Fr	09/06/2024					Fr	08/30/2024				
	60625						59407						58594				
Fr	09/06/2024					Fr	08/30/2024					Fr	08/23/2024				
	58592						58038						61621				
Fr	08/30/2024					Fr	08/23/2024					Fr	08/16/2024				
	57533						61786						73061				

Source: Bloomberg, Vortexa

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Oil: Vortexa crude oil floating storage WoW changes by regions

Bloomberg posts Vortexa crude oil floating storage in key regions, but not all regions of the world. The regions covered are Asia, North Sea, Europe, Middle East, West Africa and US Gulf Coast. We then back into the “Other” for rest of world. (i) As noted above, last week’s Nov 8 was revised -1.28 mmb. The major revisions were Asia revised -2.79 mmb and Middle East revised +1.84 mmb. (ii) Total floating storage at Nov 15 of 48.16 mmb was -10.87 mmb vs the revised down Nov 8 of 59.03 mmb. The major WoW changes were Other -5.96 mmb WoW and Asia -5.07 mmb WoW. (iii) Nov 15 estimate of 48.16 mmb is -81.06 mmb vs the 2023 high on June 23, 2023 of 129.22 mmb. Recall Saudi Arabia started its voluntary 1 mmb/d production cuts on July 1, 2023. The major changes by region vs the last year June 23, 2023 peak are Asia -49.03 mmb and Other -25.95 mmb. (iv) Below is the table we created of the WoW changes by region posted on Bloomberg at of 9am MT yesterday. Our table also includes the “Original Posted” regional data for Nov 8 that was posted on Bloomberg at 9am MT on Nov 9.

Vortexa floating storage by region

Figure 67: Vortexa crude oil floating by region

Region			WoW	Original Posted	Recent Peak	
	Nov 15/24	Nov 8/24		Nov 8/24	Jun 23/23	Nov 15 vs Jun 23/23
Asia	24.26	29.33	-5.07	32.12	73.29	-49.03
North Sea	0.12	0.86	-0.74	0.12	4.71	-4.59
Europe	1.96	2.37	-0.41	2.29	5.63	-3.67
Middle East	10.68	9.19	1.49	7.35	6.76	3.92
West Africa	6.43	6.94	-0.51	8.76	7.62	-1.19
US Gulf Coast	0.47	0.14	0.33	0.00	1.02	-0.55
Other	4.24	10.20	-5.96	9.67	30.19	-25.95
Global Total	48.16	59.03	-10.87	60.31	129.22	-81.06

Vortexa crude oil floating storage posted on Bloomberg 9am MT on Nov 16
 Source: Vortexa, Bloomberg

Source: Bloomberg, Vortexa

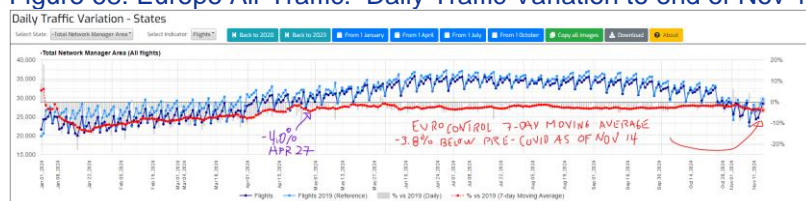
Oil: Europe airports daily traffic 7-day moving average is -3.8% below pre-Covid

Yesterday, we tweeted [\[LINK\]](#) “Tough times in EU? Daily Europe air traffic lowest since Apr. 7-day moving average as of: Nov 14: -3.8% below pre-Covid. Nov 7: -2.9%. Oct 31: -2.0%. Oct 24: -1.6%. Oct 17: -1.9%. Oct 10: -1.7%. Oct 3: -2.9%. Sept 26: -2.9%. Sept 19: -2.8% Sept 12: -3.0%. Thx @eurocontrol #Oil #OOTT.” Daily Europe air traffic is now back down to late April levels. Other than over Christmas, European daily traffic at airports has been stuck a little bit below pre-Covid. The 7-day moving average has got close to pre-Covid including -0.8% below pre-Covid as of May 30, but the 7-day moving average is now -3.8% below pre-Covid as of Nov 15, which is the lowest since -4.0% as of Apr 27. Prior weeks were -2.9% as of Nov 7, -2.0% as of Oct 31, -1.6% as of Oct 24, -1.9% as of Oct 17, -1.7% as of Oct 10, -2.9% as of Oct 3, -2.9% as of Sept 26, -2.8% as of Sept 19, and -3.0% as of Sept 12. Please note that we try to pull the data early Saturday mornings for a consistent weekly comparison. Eurocontrol updates this data daily and it is found at [\[LINK\]](#).

Europe airports daily traffic

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Figure 68: Europe Air Traffic: Daily Traffic Variation to end of Nov 14



Source: Eurocontrol

Oil & Natural Gas: Q3 hit Cdn natural gas producers more than Q2

Q3 reporting should be finished this week for Cdn oil and gas companies and, no surprise, one of the key themes in the just finished Q3 reports were the weak AECO gas price in Q3/24. This should not surprise anyone as it was one of the known themes for Cdn oil and gas producers will be that Q3 will show lower oil and gas prices than for Q2 reporting, in particular for natural gas prices. Below is our table that shows the final prices to the end of Q3/24. The big negative vs Q2 is AECO averaged \$0.66 in Q3/24 vs \$1.12 in Q2/24 and \$2.23 in Q1/24. The issue for analysts will be twofold. Reflecting the actuals in their model and what price forecast to use in their valuations. Below is our table of oil and gas prices.

AECO Q3/24
\$0.66

Figure 69: Oil & natural gas prices

Period	Brent	WTI	EDPAR	WCS	HH	AECO
Q1/19	US\$ 62.90	US\$ 54.72	US\$ 50.55	US\$ 44.11	US\$ 2.92	C\$ 2.42
Q2/19	US\$ 69.19	US\$ 59.93	US\$ 54.39	US\$ 47.34	US\$ 2.66	C\$ 1.05
Q3/19	US\$ 62.23	US\$ 56.41	US\$ 52.35	US\$ 43.84	US\$ 2.38	C\$ 0.96
Q4/19	US\$ 64.19	US\$ 56.98	US\$ 50.75	US\$ 37.94	US\$ 2.39	C\$ 2.34
Q1/20	US\$ 51.63	US\$ 46.10	US\$ 39.04	US\$ 28.10	US\$ 1.92	C\$ 1.93
Q2/20	US\$ 29.71	US\$ 27.97	US\$ 22.25	US\$ 18.39	US\$ 1.70	C\$ 1.90
Q3/20	US\$ 44.38	US\$ 40.88	US\$ 36.84	US\$ 31.09	US\$ 1.96	C\$ 2.14
Q4/20	US\$ 45.17	US\$ 42.80	US\$ 38.03	US\$ 31.36	US\$ 2.47	C\$ 2.52
Q1/21	US\$ 61.15	US\$ 57.91	US\$ 54.39	US\$ 46.06	US\$ 3.39	C\$ 2.97
Q2/21	US\$ 68.05	US\$ 66.16	US\$ 62.17	US\$ 53.31	US\$ 2.91	C\$ 2.93
Q3/21	US\$ 73.24	US\$ 70.59	US\$ 66.94	US\$ 57.70	US\$ 4.31	C\$ 3.40
Q4/21	US\$ 79.04	US\$ 77.29	US\$ 73.79	US\$ 60.91	US\$ 4.71	C\$ 4.48
Q1/22	US\$ 101.80	US\$ 94.93	US\$ 93.84	US\$ 82.29	US\$ 4.63	C\$ 4.53
Q2/22	US\$ 113.86	US\$ 108.85	US\$ 107.12	US\$ 93.39	US\$ 7.47	C\$ 6.89
Q3/22	US\$ 100.62	US\$ 91.81	US\$ 89.95	US\$ 71.19	US\$ 7.96	C\$ 4.16
Q4/22	US\$ 88.64	US\$ 82.61	US\$ 79.71	US\$ 54.91	US\$ 5.54	C\$ 5.01
Q1/23	US\$ 81.17	US\$ 76.10	US\$ 73.75	US\$ 56.94	US\$ 2.66	C\$ 3.08
Q2/23	US\$ 78.30	US\$ 73.61	US\$ 70.56	US\$ 60.29	US\$ 2.16	C\$ 2.30
Q3/23	US\$ 86.70	US\$ 82.19	US\$ 79.76	US\$ 66.16	US\$ 2.59	C\$ 2.48
Q4/23	US\$ 84.22	US\$ 78.46	US\$ 71.01	US\$ 55.67	US\$ 2.74	C\$ 2.19
Q1/24	US\$ 83.04	US\$ 76.99	US\$ 68.71	US\$ 60.03	US\$ 2.31	C\$ 2.23
Q2/24	US\$ 84.84	US\$ 80.80	US\$ 72.80	US\$ 68.28	US\$ 2.07	C\$ 1.12
Q3/24	US\$ 80.32	US\$ 75.52	US\$ 68.11	US\$ 62.20	US\$ 2.11	C\$ 0.66

Source: Bloomberg

Source: Bloomberg, SAF Group

Oil & Natural Gas: TIPRO Texas oil & gas jobs see fifth consecutive month of growth

On Friday, the Texas Independent Producers and Royalty Owners Association (TIPRO) posted its recaps for October, which included their updated their employment figures for the Texas upstream sector [\[LINK\]](#). Note that the release is dated November 15, 2024. TIPRO reported a MoM increase in jobs in October, and an increase in jobs in September, which marks October as the 5th consecutive month of growth. October jobs were up +1,400 jobs MoM vs the revised September jobs figure. Direct Texas upstream employment totaled 196,100 in October, down -1,300 from the recent high in March. TIPRO wrote "TIPRO's new workforce data yet again indicated strong job postings for the Texas oil and natural gas industry. According to the association, there were 11,703 active unique jobs postings for the Texas oil and natural gas industry last month, including 4,678 new postings. In comparison, the state of California had 3,619 unique job postings in October, followed by New York

TIPRO October
jobs update

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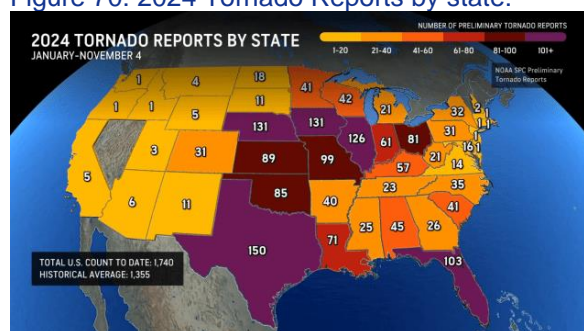
(2,435), Florida (2,064), Pennsylvania (1,612) and Oklahoma (1,521). TIPRO reported a total of 56,043 unique job postings nationwide last month within the oil and natural gas sector". Our Supplemental Documents package includes excerpts from the TIPRO recaps for October.

Oil & Natural Gas: Most active tornado season in 13 years

Last Friday, AccuWeather posted a "Severe Weather" report detailing this year's hurricane and tornado season [\[LINK\]](#). We follow tornados as they can impact oil operations in Kansas, Oklahoma, and Texas, but there weren't any reported significant outages reported this tornado season. As of November 3rd, 2024, the U.S. recorded 1,732 tornadoes, which up +377 when compared to the 14-year mean of 1,355 tornadoes. The 2024 figures, however, are still under the 2011 record of 2,250 tornadoes for the year. When examining states with key energy infrastructure, Texas has seen 150 tornados, Kansas saw 89, and Oklahoma saw 85. AccuWeather reported: "As of Nov. 3, the United States had recorded 1,732 tornadoes, according to NOAA's Storm Prediction Center's preliminary tornado reports, a number far above the 14-year mean of 1,355...For the second year in a row, the highest tornado counts have returned to the "classic" Tornado Alley. Texas has the country's largest tornado count this year, with over 150 twisters touching the ground. Due to its size and location in a tornado-prone part of the country, Texas is often number one, and tornadoes from Hurricane Beryl helped secure that first-place spot in 2024 The second-highest state number is 131, in both Nebraska and Iowa. Illinois comes in next with 126 confirmed tornadoes". Our Supplemental Documents Package includes the AccuWeather report.

**Most active
tornado season
in 13 years**

Figure 70: 2024 Tornado Reports by state:



Source: EIA

Oil & Natural Gas: EIA's Malaysia Country Brief

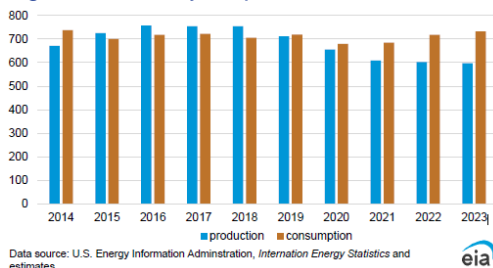
We continue to recommend adding the EIA's country analysis briefs to reference libraries as good quick high level breakdowns of areas of interest, in this case the EIA updated the country executive summary [\[LINK\]](#) on Malaysia. (i) However, one item to note is that the EIA seems to ignore writing about a major Malaysia oil role – it's massive imports of Iranian oil that is rebranded and exported to China. And that China customs data includes as oil imports from Malaysia and not Iran. Our Energy Tidbits memo have regularly reported on this rebranding of Iranian oil, which is now up to ~2 mmb/d that China customs says is imports from Malaysia. Note the EIA country brief estimates Malaysia oil + liquids production at 0.597 mmb/d for 2023. The EIA brief didn't include some key data such as the amount of

**EIA's country
brief on Malaysia**

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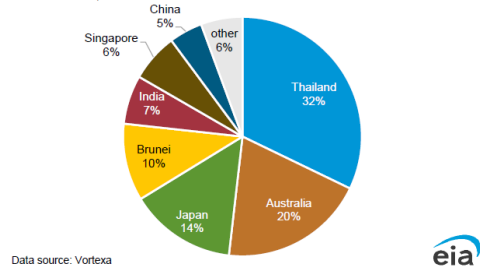
Malaysia crude oil exports. And in the backup data section, the EIA only included crude oil oil export data up to 2018. And its graphic for crude oil and condensate exports by destination for 2023 did not include the b/d volume but noted China was only 5% of its exports. The EIA said crude oil and condensate exports fell by -14% YoY in 2023. However, the EIA reported crude oil and condensate exports by destination as a percentage of total exports; in 2023 Thailand made up 32% of exports, followed by Australia at 20%, and Japan at 14%. Below we include our recent comments on Iranian oil being rebranded as Malaysia oil for China. (ii) Likely also some rebranding of petroleum products. The EIA reported Malaysia's imports of petroleum products was 1.200 mmb/d in 2023 and had petroleum products exports of 1.3 mmb/d; we have to wonder why Malaysia is importing significantly more than their net consumption, unless they are rebranding another country's petroleum products for re-export to China. (iii) The EIA also notes Petronas expects Malaysia oil and natural production to peak in 2024 at 2.000 mmb/d. Th EIA reported: "*Malaysia is the second-highest producer of petroleum and other liquids in Southeast Asia and the fifth-highest exporter of liquefied natural gas (LNG) globally in 2023. Malaysia is strategically located in the South China Sea and borders the Malacca Strait, both of which are important maritime routes for energy trade... Malaysia's oil and natural gas production is expected to peak at 2 million barrels of oil equivalent per day (BOE/d) in 2024, according to national oil company Petronas. This would be an increase of just over 200,000 BOE/d from the 1.79 million BOE/d produced in 2023*" Below we have included a graph of Malaysia's petroleum and other liquids production and consumption, as well as a graph of Malaysia's crude oil and condensate exports by destination in 2023. Our Supplemental Documents Package includes the EIA brief.

Figure 71: Malaysia petroleum and other liquids production and consumption:



Source: EIA

Figure 72: Malaysia's crude oil and condensate exports by destination in 2023:



Source: EIA

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Kpler tanker data shows Iran oil exports to China to hit record ~2 mmb/d in Oct

China has been the home for Iran oil exports. Here is what we wrote in our Nov 3, 2024, Energy Tidbits memo. "As we noted in last week's (Oct 27, 2024) Energy Tidbits memo, official China customs data still shows China importing zero barrels of oil from Iran and that we keep seeing Iranian oil being rebranded as Malaysian oil. It looks like Iran oil into China should hit a record ~2 mmb/d in October. On Monday, Bloomberg reported on Kpler tanker tracking data that showed "China's imports of Iranian oil are poised to reach a record of ~2m b/d this month, according to data from Kpler. * That figure would top the previous peak of 1.75m b/d set in August, according to Kpler figures, which extend back to January 2013 ** The daily total in September 2024 was 1.57m b/d." Bloomberg also reported Kpler floating storage of Iran oil "Separately, Iranian oil in floating storage off Singapore and Malaysia fell to less than 1m bbl in mid-Oct. down from 9.4m bbl in mid-April, according to data from Muyu Xu, senior crude oil analyst at Kpler. Since then, the figure rebounded to ~6.6m bbl in the week to Oct. 27, she added."

Figure 73: Kpler tanker tracking data Iran oil into China



Source: Bloomberg

Kpler data fits Iran oil is being rebranded as Malaysian oil into China

The Kpler tanker tracking data noted above estimated China imported 1.57 mmb/d of Iran oil in Sept. That is almost exactly what the China customs data reported for oil imports from Malaysia for Sept. Here is what we wrote in our Oct 27, 2024, Energy Tidbits memo on China oil imports from Malaysia in Sept. "Last Sunday night, we tweeted [\[LINK\]](#) "Iran #Oil keeps getting rebranded as Malaysia oil. China customs official data is zero oil imports from Iran since June 2022. BUT China oil imports from Malaysia in Sept was 1.50 mmb/d vs OPEC Secondary Sources total Malaysia production of 0.348 mmb/d. #OOTT. Bloomberg had just posted the China customs data of crude oil imports by country for Sept. We checked Iran and there were no changes to China customs not showing any oil imports from Iran since June 2022. But then we looked as usual at Malaysia and the China customs data shows China crude oil imports from Malaysia were 1.50 mmb/d in Sept, which followed 1.77 mmb/d in Aug, 1.47 mmb/d in July and 1.44 mmb/d in June. Our tweet also included the OPEC Monthly Oil Market Report October 2024, which included Secondary Sources estimate that Malaysia only produced 0.348 mmb/d in Sept i.e. China is importing oil from Malaysia that is equal to over four times Malaysia total country

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production. Below is the Bloomberg graph of China oil imports from Malaysia that was attached to our tweet.”

Figure 74: China crude oil imports from Malaysia



Source: Bloomberg

05/09/24: Malaysia recognizes UN, not individual country sanctions

Here is what we wrote in our May 12, 2024, Energy Tidbits memo. “One of the oil trade themes in the past year is how we see Iran oil rebranded as Malaysia oil and then shipped to China and likely other markets. That will be continuing as Malaysia has said they don’t follow individual country sanctions like US on Iran but follow all UN sanctions. The Straits Times reported [\[LINK\]](#) “Malaysia rebuffs US on Iran oil sales, says it recognises only UN sanctions. Malaysia will recognise sanctions imposed by the United Nations only and not by individual countries, said Home Minister Saifuddin Nasution Ismail on May 9, following claims by a top US official that Iran has relied on Malaysian service providers to sell US-sanctioned oil in the region. “I emphasised that we will only recognise sanctions if they are imposed by the United Nations Security Council. “The delegation from the US respected our stance,” Datuk Seri Saifuddin told reporters following a meeting with the US Treasury Department’s top sanctions official Brian Nelson, who was visiting Kuala Lumpur.” We hadn’t realized the trade level between Malaysia and the US. The Straits Times closed their report “Still, the “US would also not want to lose the support of Malaysia, which is one of its key Asean partners, as the country will assume the role of Asean chair next year”, he said. Malaysia is among the US’ top 20 trading partners, with bilateral trade between the two nations amounting to US\$78.3 billion (\$106 billion) in 2022.”

Energy Transition: Trump pulled US out of Paris, Biden had US rejoin on his Day 1

There is no doubt that Trump’s election is the big dark cloud overhanging COP29 and this has been noted in almost all reporting and comments and, give countries credit, they are trying to see what can be accomplished knowing Trump plans to withdraw from Paris agreement. As his son, Donald Trump jr, highlighted in announcing RFJ jr.s role “promises made, promises kept”. One of Trump’s promises is to withdraw, once again from the Paris agreement. We have not yet seen him say it will be a Day 1 executive order, but we expect it will be so on the pile of executive orders for after he assumes office at 12:01pm on Jan 20, 2025. Don’t forget Trump pulled the US out of the “unfair, one-sided Paris Climate Agreement” and Biden, on Day 1, had the US rejoin the Paris climate accord.

**Trump says will
deliver on
promises made**

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Energy Transition: Trump planning to cut out EV \$7,500 purchase credit

No one should have been surprised to see the Reuters Monday report [\[LINK\]](#) “Exclusive- Trump's transition team aims to kill Biden EV tax credit. President-elect Donald Trump's transition team is planning to kill the \$7,500 consumer tax credit for electric-vehicle purchases as part of broader tax-reform legislation, two sources with direct knowledge of the matter told Reuters.” The Reuters report is that Trump will remove the EV \$7,500 purchase credit so Americans will pay sticker price for EVs and not discounted EV prices post the 47,500 tax credit. This fits what we expect from Trump – create a level playing field for Americans when they buy cars and they can buy whatever they want. This is what Trump said on May 11, 2024. On Tuesday, we tweeted [\[LINK\]](#) “Trump to bring EVs down to level playing field with ICE. Today: No surprise, Trump planning to kill \$7,500 EV purchase credit. Thx @JarrettRenshaw @c_kirkham. Fits Trump 05/11/24 “there will no ban anywhere in the USA on gas. You can buy electric if you want, you can buy gas, you can buy whatever you want, that's the way it should be.” See 📢 11/06/24 tweet. #OOTT [\[LINK\]](#).” Our tweet included the transcript attached to our Nov 6 tweet when we highlighted getting rid of Biden's EV mandate as a Day 1 executive order priority. Our Supplemental Documents package includes the Reuters report.

**Trump to cut out
EV \$7,500
purchase credit**

Trump stated Day 1 executive order to get rid of Biden EV mandate

Here is what we wrote in last week's (Nov 10, 2024) Energy Tidbits memo. “Trump stated Day 1 executive order to get rid of Biden EV mandate. Even prior to Trump's election, we noted our expectation for analysts and agencies to revise peak oil demand forecasts to higher peak oil levels and peak oil at a later date. (i) On Wednesday, we tweeted [\[LINK\]](#) “Peak Oil Demand! Ending Biden's EVs mandate is a clearly stated Trump Day 1 executive order priority. Would fit @IEA's “stated energy policies” criteria ie. should give them the excuse to push out their peak oil demand by 2030. 05/11/24: “On Day 1, I will immediately terminate Joe Biden's insane electric vehicle mandate. And there will be no ban on gas cars and gas trucks in the Garden State. There will no ban anywhere in the USA on gas.” Trump. #OOTT Thx @cspan.” Then on Friday, we tweeted Trump's victory speech comments. [\[LINK\]](#) “Higher & later Peak #Oil Demand forecasts. “I will govern by a simple motto. Promises made, promises kept. We're going to keep our promises.” Trump victory speech. Ending Biden's EV mandate is a clearly stated Trump Day 1 executive order priority. #OOTT.” (ii) Our tweets included the transcript we made of Trump's May 11, 2024 highlighting his clearly stated plan for a Day 1 executive order to get rid of Biden's EV mandate. SAF Group created transcript of comments by Donald Trump at a campaign speech in Wildwood, New Jersey on May 11, 2024. Video courtesy of c-span [\[LINK\]](#). At 28:06 min mark. Trump “But unfortunately, the Democrats in New Jersey have embraced Joe Biden's radical pro-China plan plan to eliminate gas-powered cars and trucks. Can you believe it? And force everyone into ultra-expensive electric vehicles that don't go far. I always say, they have a couple of problems – they're too expensive, they're going to be made in China, and they don't go far. Other than that, I think they're wonderful. On Day 1, I will immediately terminate Joe Biden's insane electric vehicle mandate. And there will be no ban on gas cars and gas trucks in the Garden State. There will no ban anywhere in the United States of America on gas. You can buy electric if you want, you can buy gas,

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you can buy whatever you want, that's the way it should be." (iii) The reality of analysts and agencies is that they are always opportunistically looking for a reason why they have to revise their forecasts and Trump's EV views will give them that opportunity. (iv) This will also work for the IEA as Trump's clearly stated intention should qualify for the criteria for their stated energy policies forecast. We have been expecting the IEA to revise their peak oil demand forecast and they can now have an excuse to do so."

Energy Transition: Elon & Energy Sec Wright have warned world needs oil & NatGas

As noted earlier, Trump is putting together an energy team that sets up the US for its best possible chance for higher for longer oil and natural gas production. However, it is also a team that believes very much that the world needs oil and natural gas or else there will big problems for the environment and people. These are not new views. Rather we highlighted the views of Elon Musk and Chris Wright in our 2021 Energy Tidbits memos. Following Trump's announcement that Liberty Energy CEO Chris Wright is to be his Energy Secretary, yesterday we tweeted [\[LINK\]](#) "Trump 2.0 key players warned the world needs & runs on #Oil #NatGas. Elon warned "we can't just like stop instantaneously and not have oil and gas. We'll like die of starvation basically". See 02/14/21 tweet [\[LINK\]](#). Liberty CEO Wright (Energy Sec) warns on human impacts in the absence of oil & gas. See 📌 09/11/21 tweet: #OOTT."

**Trump teams
warned need oil
and gas**

02/12/21, Elon warned don't try to get rid of fossil fuels too quickly

As noted earlier in the memo, the New York Times report that Elon Musk met with Iran's Ambassador to the UN reminded that Elon is going to be having a broader role than his role in cutting govt spending/waste. And we also expect to see him to continue to influence other areas by "sharing" his views on his huge social platform. One such area that Elon has been highlighted in prior years is that the world needs fossil fuels. It's safe to say Elon will not be supporting anything that causes US oil and natural gas supply to be held back. On Friday, we tweeted [\[LINK\]](#) "Elon has long stated the world needs #Oil #NatGas. 02/12/21: "we're going to need to burn fossil fuels for a long time" Elon on reality check the world needs #Oil #NatGas. See 📌 02/14/21 tweet. @jimcramer @davidfaber @carlquintanilla just discussed Elon's #NatGas to power his Memphis AI data center. #OOTT." We were listening to CNBC and just heard Jim Cramer and David Faber discuss how Elon had cranked up to use natural gas in his AI data center. And it reminded us of our Feb 14, 2021 tweet on Elon's highlighting the world's need for oil and natural gas. Here is what we wrote in our Feb 14, 2021 Energy Tidbits memo. "Elon warns don't try to get rid of fossil fuels too quickly. Earlier this morning, we tweeted [\[LINK\]](#) "Elon warns #EnergyTransition "we can't just like stop instantaneously and not have oil and gas. We'll like die of starvation basically" "we're going need to burn fossil fuels for a long time" thx @elonmusk @joerogan for many great tidbits in interview. #NatGas #OOTT". We recognize that Elon Musk uses grand adjectives to make his point so its key to look beyond the adjectives to get the point. In this case, he says "we'll likely die of starvation" if we try to get rid of fossil fuels instantaneously. And one of the many points from his 3 hr 25 min Joe Rogan Experience interview was a warning to not try to get rid of fossil fuels too quickly. Our point on energy transition is happening but the set up looks clearly that it just won't happen as quickly, as smoothly, as inexpensively as per aspirations. Elon has a simple solution for

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reducing emissions – put a carbon tax and work it so the price does what is supposed to do. But he also made a point of highlighting that fossil fuels are here for a long time. Its why we have written that demise of oil and natural gas will take longer than the what is envisioned by the aspirations of the climate change side. We made a transcript of his comments on the Joe Rogan Experience JRE Elon Musk Episode #1609 – Feb 12, 2021 [\[LINK\]](#) At 2hr 43: 50 min mark: Musk “by the way, I am actually not in favor of like demonizing the oil and gas industry. Because we can’t just like stop instantaneously and not have oil and gas. We’ll like die of starvation basically.” “we’re going need to burn fossil fuels for a long time. the question is just at what rate do we move to a sustainable energy future. So we should probably move there faster than slower. but the current approach is basically just demonize oil and gas and I’m like, okay, well there are people here who have spent their whole career in oil and gas and they started out in their career when it didn’t seem like that bad of a thing to do. so then they’re like hey man, I just spent my whole career working hard to do useful things and now you’re telling me I’m the devil. that’s going to make them pretty upset. So I say instead of demonizing oil and gas, and also they should stop lobbying against the carbon tax by the way. then just, honestly the smartest thing the oil and gas industry could do is say let’s do a carbon tax. we’ll just do a carbon tax and make us not the devil.”

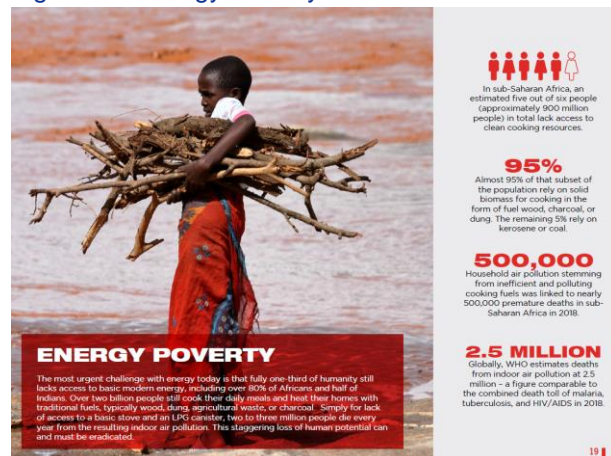
09/11/21: Liberty CEO: Warns of environmental/human impact of no oil & gas

Our tweet yesterday linked to our Sept 11, 2021 tweet on Liberty CEO Wright warning on the environmental and human impacts in the absence of oil and natural gas> Here is what we wrote in our Sept 12, 2021 Energy Tidbits memo. “*Liberty CEO: need to consider environmental/human impact of no oil & gas. We recognize that its not greenwashing, but we are unchanged in our big concern that the pro-Energy Transition people just won’t acknowledge the reality and critical role of oil and gas. Its like if they acknowledge any positive or needed role, they feel it contaminates their view. And the problem with that is that the world is being set up for a big energy crisis. The energy transition is going to happen, its just will take longer, won’t be smooth and will cost a lot more. Yesterday morning, we tweeted [\[LINK\]](#) on what we thought was the best oil and gas ESG report we have seen to date – the Liberty Oilfield Services “Bettering Human Lives: 2020 ESG Report”. We hadn’t seen it until Josh Young (Bison Interests CIO) tweeted [\[LINK\]](#) the below Energy Poverty graphic. And then was sent the 82-pg ESG report from Liberty’s Anjali Voria”. This is a very different ESG report. Its the same as most ESG report in that Liberty discusses what they are doing on the ESG front but, what makes it’s the best read is the how Liberty discusses the contribution of energy to the world. There are dozens of simple reminder statements throughout the report (as well as many informative graphics), but a couple that stood out were “it is simply not possible to discuss the environmental and social impacts of our industry without considering the environmental and human impacts of the absence of our industry”, and “The most urgent challenge with energy today is that fully one-third of humanity still lacks access to basic modern energy, including over 80% of Africans and half of Indians. Over two billion people still cook their daily meals and heat their homes with traditional fuels, typically wood, dung, agricultural waste, or charcoal. Simply for lack of access to a basic stove and an LPG canister, two to three million people die every*

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year from the resulting indoor air pollution. This staggering loss of human potential can and must be eradicated.” This is a must read for the reality check of the critical role of energy in the world. We recommend adding the report [\[LINK\]](#) to reference libraries. Our Supplemental Documents package was only able to include a few of the key pages.”

Figure 75: Energy Poverty



Source: Weather Channel

Maybe more like Putin warns we'll back in caves if abandon natural gas

Here is another item from our Feb 14, 2021 Energy Tidbits memo that came to mind then when we heard Elon say getting rid of oil and gas and “we like die of starvation basically.” Here is what we wrote in our Feb14, 2021 Energy Tidbits memo. “Maybe more like Putin warns we’ll back in caves if abandon natural gas. Elon said No one, or least, we have never denied the energy transition is happening. Its just that it won’t be as smooth, as quick or as cost effective as the aspirations. Elon’s warning that “we’ll likely die of starvation” reminded us of an item from our Nov 24, 2019 Energy Tidbits on Putin’s comments on trying to get rid of oil and natural gas. In that memo, we wrote “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

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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."

Energy Transition: Goldman, AI data center need baseload, wind/solar don't fit the bill

There was some good food for thought on AI data centers from Jared Cohen (Goldman Sachs, President of Global Affairs) on CNBC Squawk Box on Tuesday. The big picture thesis is what we have been saying for a year – AI data centers need 24/7 power and until nuclear is available in a decade or more, it means natural gas and coal. Cohen makes a point of saying “differentiated” data centers i.e. cloud driven can't run on wind and solar “intermittent power like wind and solar, they don't fit the bill. So you need baseload power. Think nuclear, coal, natural gas. We have plenty of that in the US, the problem is that we can't transport it from where it is through multiple jurisdictions because of Non-In-My-Backyard.” Cohen reminds the only next few years option are for coal and natural gas to power AI data centers as he says that if the US wants to retain leadership, they need an “overflow option”. He says “So the US is going to need some sort of overflow option if they want to continue leading in this space. And there is not a single geography represents a panacea to this problem”. Cohen then went on to say there are three broad groups like (i) Canada, Australia, Nordic countries ie. democratic countries with similar views as US, (ii) SE Asia countries like Malaysia, Indonesia but where China is the chief market, or (iii) Middle East that has the best conditions of power supply and ability to execute big energy projects quickly but are swing states ie. their allegiance can switch. On Tuesday, we tweeted [\[LINK\]](#) “AI Data Center 101. AI data centers “require concentrated power source so intermittent power like wind and solar, they don't fit the bill. So you need baseload power; so, think nuclear, coal, natural gas” NIMBY preventing getting US baseload potential to markets so US needs “an overflow option” for more baseload if it wants to continue AI data center leadership. Preferred option is democratic countries like Canada, Australia, Nordic countries. Need to bring on 35+ GW of power in just the next couple years relative to 17 GW existing. Above from great 9 min clip from @GoldmanSachs Jared Cohen. What is there in next 10 yrs besides new #NatGas generation & not retiring but expanding #Coal? Also expect Cdn natural gas producers likely being approached on power for data centers. Great interview @andrewsorkin @BeckyQuick @JoeSquawk #OOTT.” Our Supplemental Documents package includes the transcript we made of Cohen's comments.

Goldman on AI data centers

The easy AI data center locations are gone

Cohen didn't get into details but his comments also led to some of the other related themes we have been highlighting such as it will impact the value of natural gas. Also Cohen does not say this specifically but our view of data centers is that all the easy locations are gone. By that we mean that all the data centers that are close to major cities that could tap into 24/7 nuclear or natural gas or coal are to the most part be done. So the easy pickings are done. And that is the implication of his comments. Another support for our view that the easy pickings are gone is why we are seeing AI data centers pop up in North Dakota. North Dakota is far from major centers but has coal and natural gas. Separate question that may be interesting is the years ahead is what happens if North Dakota starts to need all its natural gas within state?

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Energy Transition: Sustainable Aviation Fuel is at stage zero in displacing jet fuel

For years, we have been highlighting how Sustainable Aviation Fuel can have displace jet fuel at nowhere the Net Zero aspirations. It is hugely expensive vs jet fuel and can't be produced in scale. The reality is that the best and most effective way to reduce jete fuel emissions and consumption is get rid of old planes. United Airlines put this in perspective by stating total worldwide SAF production is 150 million gallons, which sounds big until you compare it against United's own jet fuel consumption of 4.25 billion gallons. So if United had 100% of the world's SAF production, it would only displace 3.5% of United's total jet fuel consumption. But what was the other reality checks were United Airlines say SAF is at state zero in displacing jet fuel and the ways United Airlines says you produce SAF and none of them sound like they the ability to scale up in size. United Airlines Chief Sustainability Officer Lauren Riley was interviewed by Semafor at COP29. On Tuesday, we tweeted [\[LINK\]](#)

"Reality check that Sustainable Aviation Fuel can displace jet fuel within decade or two. Worth 85 seconds to listen to comments from @united CSO Riley. "we are Stage Zero". Total worldwide SAF production is 150 million gallons. UAL alone uses 4.25 billion gallons. 7, 8 ways to produce SAF ranging from trash from trash cans, corn, pulling CO2 from atmosphere to convert into SAF, used cooking oil from the restaurant next door. Do any of these sound like can scale up to produces enough SAF to displace any portion of jet fuel? Thx @lizrhoffman @semafor #OOTT." Our tweet included the video of the interview. We made a transcript of the Q&A. Semafor's Liz Hoffman asked "Are you going to be able- is there enough volume in feedstock to do all this without displacing crop land without y'know some other sort of negative side-effects?" Lauren Riley replied "Yeah, y'know, it is a complex space, and that is why it is taking some time to actually build the market. Unlike fossil where you drill and you have your hydrocarbons released, and you actually come up with your conventional jet fuel- there is seven, eight ways to produce sustainable aviation fuels. It is anything from trash from your trash cans, you can take corn, ethanol, there is an ethanol blend in your car gasoline, you can have future state pulling CO2 from the atmosphere and actually converting that into a jet fuel. You can take used cooking oil from the restaurant next door and actually convert that into a jet fuel. So, there is many different ways that you can create sustainable fuels, which creates complexities, and we have to work to sort of simplify the operations, simplify the infrastructure, so that we can actually enable it to scale. Today, it is less then 0.1% of total supply, so by, what does that mean, what does that mean, last year worldwide, 150 million gallons of sustainable fuel were produced. Does anyone have any sense of what United as a single airline uses in a year? I will answer that for you, it is four and a quarter billion gallons. So, we are stage zero of creating a really important marketplace for how all of us will be travelling in the future."

SAF is at stage zero of displacing jet fuel

Energy Transition: China speeding up testing of autonomous vehicles on roads

Last Sunday night, we tweeted [\[LINK\]](#) "China realizing Elon is the man behind the Trump throne. "China will speed up piloting market access for intelligent connected vehicles and letting them run on the roads, authorities have said." State media. Will help EVs advancement & stay on Elon's good side. #OOTT." Last Saturday night, Xinhua (stated media) reported [\[LINK\]](#) "China will speed up piloting market access for intelligent connected vehicles and letting them run on the roads, authorities have said. The country will promote the demonstration and application of autonomous driving and driverless vehicles in key areas including the Yangtze River Delta region and the Guangdong-Hong Kong-Macao Greater Bay Area, according to an action plan jointly released by the Ministry of Transport and the

China speeding up autonomous vehicle piloting

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National Development and Reform Commission.” Xinhua did not mention Tesla but we suspect that everyone sees this as a move to help Tesla accelerate its autonomous driving advancement. Our Supplemental Documents package includes the Xinhua report.

Cathie Wood says 90% of their 5-yr Tesla target upside is for autonomous

Cathie Wood (CEO Ark Invest) may not have said it specifically, but she is probably happy to see China’s announcing it is speeding up its pilots for autonomous vehicles. We were watching Squawk Box on Friday when she was talking about Tesla. We tweeted [\[LINK\]](#) “Tesla. Just now @CathieDWood with @andrewsorkin @SquawkCNBC. reminds 90% of their 5-yr target upside in Tesla is for autonomous. ICYMI, see 📌 11/13/24 tweet. China is doing its part to help Elon's autonomous ramp by speeding up pilot for autonomous on roads. #EVs.”

Energy Transition: Germany slowly moving to add 1.7 bcf/d new NatGas generation

XXXXX

We have to believe this long-awaited update on its slow-moving Germany’s June announcement that it would add ~1.7 bcf/d new natural gas generation is part of Chancellor Scholz and Vice Chancellor Habeck’s action list of things they haven’t worked on but want to show some progress ahead of the upcoming election. And given that they will need parliament approval, he will be able to blame any inaction on others. But the last thing Scholz and Habeck would want is to see some sort power shortage this winter with him having nothing on the plan since June. On Monday, we tweeted [\[LINK\]](#) “Germany slowly moving on its stated plan to add #NatGas generation. VC Habeck to present draft law to states & stakeholders for consultation & then to cabinet. Thx @petrasorge. Very slow moving, see 📌 June 7 tweet. Wonder if DEU secretly hoping a Trump driven RUS/UKR deal might somehow lead to return of cheap RUS pipeline #NatGas?? #OOTT.” On Monday, Bloomberg reported “Germany wants to present the draft law for its long-awaited expansion of gas-fired power plants “without further delay,” Economy Minister Robert Habeck said at an energy conference in Berlin. * Has a goal to present the document to states and stakeholders for consultation, and then pass it in cabinet * NOTE: Germany needs to build new gas-fired power plants as it phases out coal and to meet rising power demand* Draft law would need a vote in parliament, where the government no longer has a majority after Chancellor Olaf Scholz fired his finance minister last week and a new general election will take place”

06/07/24: Germany wants ~1.7 bcf/d new natural gas generation

This Germany action to add ~1.7 bcf/d of new natural gas generation was set in motion, albeit very slow motion, in June. Here is what we wrote in our June 9, 2024 Energy Tidbits memo. “Germany wants ~1.7 bcf/d new natural gas generation. More renewables = more natural gas power generation. On Friday, we tweeted [\[LINK\]](#) “More Renewables = More Natural Gas Electricity Generation. Germany to support utilities to add #NatGas powered generation to stabilize the grid when renewables fall short reports @Reuters Markus Wacket. More #NatGas is needed for more intermittent power generation. #OOTT.” On Friday, Reuters reported that Germany is going to pay billions to support utilities to add 10 GW of new natural gas generation. Using a heat rate of 7,000 btu/kWh gets to ~1.7 bcf/d. Reuters said the new natural gas generation “to be able to stabilise the grid when unsteady renewable energy supplies fall short, people familiar with the negotiations told Reuters on Friday.” And “Germany is transitioning to renewables, having switched off nuclear

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power and seeking to phase out coal-powered electricity, but wants to give state support for natural-gas powered plants that underpin the grid during demand peaks and lows in unsteady supply from wind and solar power.” It looks like Germany is having another reality check it needs more natural gas. Although they are couching in that the natural gas will be able to be converted to hydrogen power with Reuters expecting in 2035 to 2040. Our Supplemental Documents package includes the Reuters report.

Energy Transition: COP29 signees will only agree to do what they choose to do

**COP29 scheduled
end is Nov 22**

It was a tough week at COP29 with the cloud overhanging from Trump's election and his expected pulling the US, once again, out of the Paris Agreement. It didn't start off well when Azerbaijan President Ilham Aliyev opening address that said Azerbaijan's oil and gas assets are a "gift from God". COP29 is scheduled to end on Nov 22 and normally, like prior COPs, we would expect COP to be extended a few days to get all the countries to sign on the final statement. So unless it gets worse and COP29 explodes into chaos and people storm out, there should eventually be a signed off final statement with the vast majority of countries signing off. The question this year will be how many countries. But, every year, we remind that no matter how many countries sign off, the final text always includes enough caveats that countries are not obligated to do something they don't want to do. The final statements always don't obligate countries, rather they "call on" countries. And the key provisions always include that countries do what they can but it is written the they call on countries to act ".... in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches". On Friday, we tweeted [\[LINK\]](#) "COP29. dDespite reports of divisions at COP29, should inevitably get broad sign off on text but will have more outs than normal for countries. COP28 "calls on Parties to contribute in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches". Everyone wants a cleaner environment but #Oil #NatGas #Coal will be needed for longer than aspirations. #OOTT." Our tweet included the key excerpt from the final COP28 text that we highlighted in our Dec 17, 2023 Energy Tidbits memo.

COP28 signees only agreed to do what they wanted to do

Here is what we wrote in our Dec 17, 2023 Energy Tidbits memo on COP28. "Did anyone "win" at COP28? It was interesting to see the reported reactions to the final COP28 agreement negotiated by UAE's COP President al Jaber. Saudi Arabia, the most outspoken on those who want to phase out fossil fuels were reportedly happy with the deal. But also the climate change side seemed happy as it marked the first time the world including the words transition away from fossil fuels. When we reviewed the key section on fossil fuels, we can see why both sides got something they can message on until the next COP. The lead in to the key fossil fuel section 28 is the is what will allow countries like India to determine what they can do and do their best to do what they think they can do. Countries are not committing to any specific action or target. Rather the COP28 agreement "calls on" companies to do the best they can. This is the key caveat. It calls on parties to do their best and doesn't obligate them to meet certain targets or actions. And what countries do is as they determine they can do given their own national circumstance. The point 28 lead in is "28. Further recognizes the need for deep, rapid and sustained reductions in

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greenhouse gas emissions in line with 1.5 °C pathways and calls on Parties to contribute to the following global efforts, in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches". So COP28 is calling on countries to do what they determine they can do on the below points. But, at the same time, it allows the western countries like Canada to drive hard saying this is the commitment they have made to the world and the world has made. Even if countries aren't committing to any specific target or actions. Rather they are all signing on to a call to do their best. It is not a commitment to do a certain amount. And it also allows more right wing governments in Europe to go at their best pace. And it allows other like India and China and African countries, etc to do what they think is right taking into account what they think is right and their different national circumstances. It's basically a do what you can approach. Here is the lead-in to point 28, on fossil fuels. "28. Further recognizes the need for deep, rapid and sustained reductions in greenhouse gas emissions in line with 1.5 °C pathways and calls on Parties to contribute to the following global efforts, in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches"

Energy Transition: Will UK find a work around their BEV 22% min sales mandate

We have been highlighting the problem with UK EV sales and the UK requirement that car manufacturers have BEV sales be a minimum of 22% of their total car sales into the UK. And how this has caused ICE and Hybrids to be withheld. The new Starmer Labour govt has kept to their EV push and we understand that it would require parliament to amend the 22% minimum requirement. So far, the Starmer govt hasn't given into any industry or business requests to find a work around. Earlier this morning, we tweeted [\[LINK\]](#) "Here's why UK Labour govt will try to find a work around the requirement BEVs are 22% min of sales in 2024. "Sharon Graham, general secretary of Unite, the Labour Party's biggest union backer, suggested this weekend that momentum was building in Whitehall towards plans to reform the Zev mandate and make it more appealing for carmakers such as Stellantis to keep building vehicles in the UK. "Unite is already having constructive discussions with government and industry to reform the Zev mandate to protect jobs," Graham said". Thx @ojngill #OOTT [\[LINK\]](#)." We have to believe the union will have the best insight into the Labour govt understanding the BEV mandate is hurting industry and therefore jobs.

**Will UK work
around their BEV
22% min**

10/22/24: UIK Sept BEV sales +24.4% YoY since ICE/HEV sales are held back

Here is what we wrote in our Oct 27, 2024 Energy Tidbits memo on UK BEV sales. "The big outlier in the ACEA Sept new car registration in Europe was the UK sold 56,387 BEV sales which was +13.2% YoY. And no surprise, Petrol sales of 83,100 were -21.2% YoY, diesel sales of 7,029 were -29.0% YoY and HEV sales 104,237 or only +11.6% YoY. We say no surprise because there has been ICE and HEV demand in the UK but car manufacturers have been holding back ICE and HEV deliveries to ensure BEV sales try to get as close as possible to the UK targeted minimum 22% of total car sales in 2024. So if the BEV demand hasn't and still isn't high enough, then the car manufacturers have to restrict and hold back ICE and HEV

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sales. So weak demand for BEVs automatically translates into weaker ICE and HEV sales than demand. On Tuesday, we tweeted [\[LINK\]](#) "UK BEV numbers are deceiving. UK BEV sales: Another month of strong sales +24.4% YoY and YTD +13.2% YoY. @ACEA_auto. BUT not because of BEV demand but because BEVs at 17.8% is still well short of UK regulated BEVs to be 22% of 2024 total car sales. See 10/16/24 tweet: @vertumotorsCEO some car manufacturers rationing ICE & HEV to meet ZEV mandate. [\[LINK\]](#) #OOTT."

Figure 76: UK Sept new car registrations by power source

	Sep-24	Sep-23	% Change	YTD Sept 24	YTD Sept 23	% Change
BEV	56,387	45,323	24.4%	269,931	238,544	13.2%
PHEV	24,486	18,535	32.1%	124,943	98,993	26.2%
HEV	104,237	93,393	11.6%	538,935	461,739	16.7%
Others	0	0	n/a	0	0	n/a
Petrol	83,100	105,463	-21.2%	537,037	595,946	-9.9%
Diesel	7,029	9,896	-29.0%	43,248	56,686	-23.7%
Total	275,239	272,610	1.0%	1,514,094	1,451,908	4.3%

Others incl fuel-cell electric vehicles, natural gas vehicles, LPG, E85/ethanol, and other fuels

Source: ACEA

10/23/24: Vertu: UK BEVs sales down, some ICE/HEV being rationed

Here is another item from our Oct 27, 2024 Energy Tidbits memo. "Our ACEA Tuesday tweet linked to a prior Oct 16 tweet on this issue of car manufacturers holding back on ICE and HEV due to lesser BEV sales. One other item we noted was how UK BEV sales are being driven by fleet buying and not individual consumer buying. Here is what we wrote in last week's (Oct 20, 2024) Energy Tidbits memo. "tweet No one should be surprised by the negative UK BEVs update from the Vertu H1 results. Vertu is one of the large car dealership groups in the UK. On Wednesday, we tweeted [\[LINK\]](#) "More UK BEVs reality check from Vertu @vertumotorsCEO UK BEV in retail customer market -7% YoY, concerns not just price and charging infra, but also costs. UK BEV growth due to fleet. Some car manufacturers rationing ICE & HEV to meet ZEV mandate. UK needs either more incentives or reduce % of new sales to be BEV. #OOTT." Vertu noted that retail customer BEV sales are -7% YoY despite big BEVs sale discounts but overall BEV sales are up a bit due to fleet sales. They warn retail customer demand continues to be weak due to price and charging infrastructure. But Vertu also added that retail customers are concerned about costs, which we believe relates to items like higher BEV insurance costs. Because weak retail BEV, as of Aug 2024, BEVs only accounted for 17.2% of new car registrations, which is below the government mandated target of 22% in 2024. BEVs at 17.2% would be lower if some car manufacturers hadn't already started to restrict ICE and HEV deliveries in 2024 to not make the 17.2% a lower percentage. Vertu says "as manufacturers cannot sustain price cuts indefinitely, government incentives like tax breaks or subsidies will likely be needed to boost BEV private sales or changes to the Mandate will be required to take the pressure off the sector and make the transition to BEV vehicles more achievable and sustainable." i.e. the government has to lower the target significantly to something realistic to customer demands."

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09/08/24: Vertu warned restricting ICE/HEV to help UK EVs sales get to 22%

Vertu was the first significant auto group to warn that car manufacturers were already restricting ICE and HEV deliveries to try not to make the BEV % of total car sales get even lower. Here is what we wrote in our Sept 9, 2024 Energy Tidbits memo. *"The UK government will be able to say UK EVs sales should be near their regulated 22% of total car sales. But it won't be because EVs demand supports 22% of total car sales. Rather it will be because car manufacturers are holding back ICE and HEVs in 2024. It's math. If EVs sales are less, then the ICE/HEV sales have to be stopped or else the denominator will get too large. On Friday, we tweeted [\[LINK\]](#) "Blunt talk! UK EVs should hit UK regulated EVs to be 22% of total car sales BUT not because of EVs demand. RATHER @vertumotorsCEO explains: "some franchises there's a restriction on supply of petrol cars and hybrid cars, which is actually where the demand is." "It's almost as if we can't supply the cars that people want, but we've got plenty of the cars that maybe they don't want." "They [manufacturers] are trying to avoid the fines. So they're constraining the ability for us to supply petrol cars in order to try and keep to the government targets." "The new car market is no longer a market, unfortunately. It's a state-imposed supply chain." #OOTT." This is the concern that others have had but weren't as blunt as Vertu Motors CEO Forrester – disappointing demand for EVs means car manufacturers have to restrict deliveries of ICE and HEVs. Vertu Motors posted The Daily Telegraph story that included Forrester's comments. They also wrote "But the scheme has prompted stark warnings from bosses at major brands, such as Vauxhall owner Stellantis and Ford, which have said they cannot sacrifice profits by selling EVs at large discounts indefinitely. Instead, they have previously warned they may be forced to restrict petrol car supplies to artificially boost their ZEV mandate performance. The warning from Vertu is the first confirmation that carmakers have now begun doing so"*

Capital Markets: Forbes recap of Trump's 30+ picks for cabinet/key roles

Earlier this morning, we tweeted [\[LINK\]](#) "Good recap of Trump's 30+ picks thru last night of cabinet and key roles: Should see his financial/economic team this week. Thx @sara_dorn @Pequeno04 @forbes #OOTT [\[LINK\]](#)." Our tweet linked to the Forbes updated list of Trump's cabinet and key roles up until yesterday evening. It doesn't have detailed bio's but is a good listing with some short comments on all the Trump key people picks to date. It provides a starting point for digging further on some of the names. Our Supplemental Documents package includes the Forbes listing.

**Trump's 30+
people picks so
far**

Capital Markets: Biden's push for new regulations/executive orders is by Dec 31

As a reminder, the Biden Administration's big push for new regulations and executive orders will be in 2024. The Twentieth Amendment of the Constitution provides the terms of the President shall end at noon on the 20th day of January and the terms of Senators and Representatives at noon on the 3rd day of January. So as of Jan 3, Biden will be facing a Republican House and Senate.

**New congress is
Jan 3**

Capital Markets: Liberals, so many countries ask us for advice on dealing with Trump

We really wish politicians had played high level competitive sports. We couldn't help think of sports coaches giving their players heck for publicly boasting about an opponent and giving the other team something to pin up on the bulletin board in the dressing room for a little extra

**Liberals are
experts in
dealing with
Trump**

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motivation when we heard Liberals Foreign Affairs Minister Melanie Joly in her press gaggle in Peru on Friday. We had CBC radio on and heard her comments on as interviewed by the press in Peru. She was asked about dealing with the new Trump administration and she highlighted how many in the world want the Liberals advice on how to deal with Trump. Keep in mind this is about dealing with the incoming Trump administration. It makes no sense why an experienced minister like Joly would be telling Trump that the Liberals know how to deal with him. The only thought that comes to mind is that Joly is looking ahead to a sound bite for an upcoming election on how many in the world look to the Liberals as the expert on how to deal with Trump. Yesterday, we tweeted [\[LINK\]](#) *"Why boast in advance you are the expert on understanding Trump. Liberals FM Joly 'If there is a country in the world that understands the US, it's Canada. So, that's why there are so many delegations, so many countries that are coming to see us. To ask us about the new Administration. To ask us about how we, they can adapt.' if it was sports, coach would be mad that gave the opponent extra motivation to run up the score. Thx @judyatrinh #OOTT."* Our tweet included the CTV news video clip of Joly's comments.

Liberals will fight to hold off on election until July 2025 as hosting G7 in June

Liberals Foreign Minister Joly also reminded that Canada hosts the G7 in Kananaskis in 2025. There isn't yet a fixed date but it is scheduled for June 2025. Yesterday we tweeted [\[LINK\]](#) *"Expect @JustinTrudeau to fight to push off sending Liberals to polls for caelection until July. Will want global stage spotlight as ca hosts #G7 in Kananaskis in June. That means @theJagmeetSingh leverage should increase until then. And Cdns should expect push left. #OOTT @rmoutlook."* We had forgotten about the G7 in Canada until the Joly highlight. But we think is naïve if anyone doesn't see this as a political opportunity that the Liberals will not want to risk losing whether it's to raise their profile for the next election or to raise their individual exposure/profile for jobs after the election. So it is an opportunity the Liberals will want to maintain, which means NDP Leader Jagmeet Singh should have increasing leverage with PM Trudeau especially in April/May as the last thing Trudeau will want is to be fighting an election during the G7. And if the NDP has more leverage until then, it should mean the Liberals push further left over the coming months to either placate the NDP or try to steel their thunder.

Twitter: Thank you for getting me to 11,000 followers

Last month, I went over 11,000 followers on Twitter/X. I really appreciate the support and, more importantly, some excellent insights and items to look at from Twitter followers. It helps me do a better job. For new followers to our Twitter, we are trying to tweet on breaking news or early views on energy items, most of which are followed up in detail in the Energy Tidbits memo or in separate blogs. Our Twitter handle is @Energy_Tidbits and can be followed at [\[LINK\]](#). We wanted to use Energy Tidbits in our name since I have been writing Energy Tidbits memos for over 20 consecutive years. Please take a look thru our tweets and you can see we aren't just retweeting other tweets. Rather we are trying to use Twitter for early views on energy items. Our Supplemental Documents package includes our tweets this week.

**@Energy_Tidbits
on Twitter**

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Misc Facts and Figures.

During our weekly review of items for Energy Tidbits, we come across a number of miscellaneous facts and figures that are more general in nature and often comment on sports and food.

Wine of the week: 1999 Andrew Will “Sorella”

In August, I started the wine of the week when I realized I had to get to opening up some wines bought 20 to 30 years ago that included some that, unfortunately, were getting past their prime. One of the negatives of the change in life from Covid was a huge absence of entertaining at home, which means there has been a big shortfall in wine drinking at our home. So am now making sure what, when I bought them 15-25 years ago, were some good wines and make sure bottles get opened especially as many are 20 to 40 years old. On Saturday, I tweeted out the wine of the week, which was a 1999 Andrew Will “Sorella”, a red blend out of Washington state. It was past the original Wine Advocate anticipated maturity window of 2004-2015. But I decanted for a couple hours and it was still very good and remains one of my favorite reasonably priced Washington state red wines. Unfortunately, I only have one bottle left.

Figure 77: 1999 Andrew Will “Sorella”



Source: SAF Group

Remembrance Day

We are lucky to live in Canada and most haven't known men and women who have served in combat who survived with or without physical or mental injuries or who were killed in combat. But one of the benefits for those of us who have been fortunate to live in the US for any extended period is to get to know veterans who served in combat. And no question it makes Veterans Day or Remembrance Day personal and it gives a deeper appreciation for these people who sacrifice for their country and our rights. One thing I never understood is how some people can look down on soldiers. Soldiers don't pick the wars to fight, they just serve their country. It's why, we tweeted [\[LINK\]](#) *"Thank you to the men & women in the Cdn & US military who do what their duty asks them to do so the rest of us can do what we choose to do. How can we not respect young people doing their duty in defense of country & society. Good day for all of us to donate to veterans support."*

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Good news, Southwest's 3316 was 1/2 hr late as cell phone fire was on ground

There was good news for the passengers on Southwest Airlines flight 3316 on Friday as it was 30 min late in taking off from Dallas to go to Houston. The plane was 30 min late on takeoff and reportedly just leaving the gate when a passenger's cell phone lithium battery caught fire while she was holding the phone. The fire spread to her seat but wasn't a huge fire. Passengers from the back were evacuated by the slide whereas passengers from the front were evacuated by the door. If the plane had taken off on time, the fire would have happened 30 min into the flight so good news. What was impressive was this passenger who managed to walk away from the emergency slide with her big purse, backpack and rolling carry-on suitcase with her. Good thing for others, it wasn't a big emergency.

Figure 78 Passengers after slide down emergency slide Southwest Airlines 3316



Source: CBS News

McMaster 1965 grad gets back his grad ring lost off coast of Barbados in 1977

There was hugely surprising news for McMaster 1965 grad, Morgan Pierigo, a few weeks ago. In 1977, he lost his grad ring while wading in the Ocean off the coast of Barbados. Perigo said *“One day I took my younger son and waded into the ocean. He was knocked over by a wave, so I reached to grab hold of him. He pulled on my hand and my Mac Alumni ring came off,” recalled Perigo in an email. “We searched for it but were unsuccessful.”* He was surprised to receive a FedEx on the eve of his 83rd birthday that returned his lost ring that was found by a freediver, Alex Davis, who was operating his newly-acquired underwater metal detector. Davis did some research, reached out to McMaster alumni officer to track down a 65 grad with the initials FMP. The alumni officer ultimately connected Davis and Perigo and the ring was returned. The McMaster daily news report is at [\[LINK\]](#).

Figure 79 Morgan Perigo, Alex Davis



Source: McMaster daily news