

Energy Tidbits

Oct 13, 2024

Produced by: Dan Tsubouchi

Israel media: Netanyahu says “*historic opportunity that should not be missed*” to hit Iran’s nuclear or oil facilities

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. Netanyahu says hitting Iran nuclear or oil facilities is a “*historic opportunity that should not be missed*”. [\[click here\]](#)
2. Underwhelming seems to be the word being used in the early reviews on China Finance Minister anticipated briefing yesterday. [\[click here\]](#)
3. Continued positive to Cdn oil in H2/24 as WCS less WTI differentials continue at very narrow levels. [\[click here\]](#)
4. US shale/tight gas is better than expected, EIA revised up its shale/tight gas production by ~1.6 bcf/d for the past year. [\[click here\]](#)
5. BNEF’s “*End of the Hydrogen Hype Cycle?*” recaps negatives across the board for hydrogen to date. [\[click here\]](#)
6. Please follow us on Twitter at [\[LINK\]](#) for breaking news that ultimately ends up in the weekly Energy Tidbits memo that doesn’t get posted until Sunday noon MT.
7. For new readers to our Energy Tidbits and our blogs, you will need to sign up at our blog sign up to receive future Energy Tidbits memos. The sign up is available at [\[LINK\]](#)

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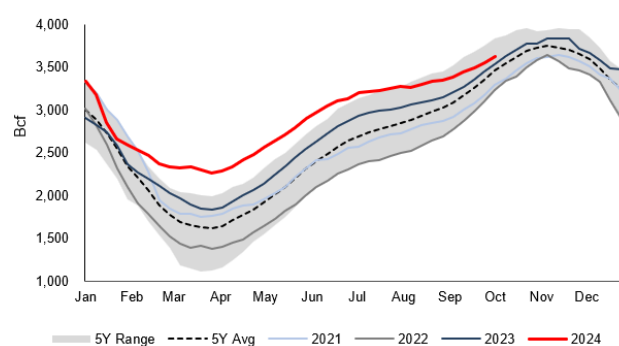
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Natural Gas: Expect higher YoY but not full US gas storage to start the winter

Coming off of last week's HH trading session, which saw the move to the Nov contract, and came in just under \$3 with the concern on hurricane supply interruptions, this week has seen lower pricing. It was a hot summer, Gulf of Mexico shut-ins from hurricanes and voluntary shut-ins have taken storage away from a risk of getting full early to just the expectation for High YoY gas storage. Last winter's warm temperatures led to a big +444 bcf YoY storage on May 3 with a real fear that storage would be full well before winter and that would cause producers to shut-in production. But that big early YoY surplus is now down to +124 bcf YoY so the risk of being filled early has gone and it's just the reality of higher YoY gas storage to start the winter. And, as noted below, storage could be a lot worse.

Higher YoY but not full gas storage

Figure 1: US Natural Gas Storage



Source: EIA

Natural Gas: Storage would be way worse if EQT, Coterra etc. didn't curtail production

The big holdback to Henry Hub prices over the past four months is much like oil in that there has been 1-2 bcf/d of voluntary shut-ins due to low price ie. higher YoY storage would be way worse if producers didn't shut-in production or hold back on planned completions. On Aug 20, 2024, we tweeted [\[LINK\]](#) "Risk continues HH #NatGas is stuck in show-me state until Nov & theoretical start to winter withdraw from gas storage season. Hold back remains 🙄 @NOAA Nov/Dec still looking warmer than normal. Especially with EQT ~0.5 bcf/d and Coterra 0.275 bcf/d shut-in production. #OOTT." We reminded that gas storage would be a lot worse than it is if key producers hadn't shut-in natural gas production due to low prices. We highlighted US natural gas production leader, EQT, and their Q2 report disclosure of continuing to shut-in production due to prices, which is about 90 bcf for H2/24. Note for our tweet, we wrote ~0.5 bcf/d, which is the 90 bcf over the last six months but we would assume EQT is assuming it could restore the natural gas before Dec 31. Our tweet also noted Coterra's announced shut-in of 0.275 bcf/d for H2/24. There are others like Chesapeake who have shut-in natural gas due to low natural gas prices. Below is last an excerpt from our Sept 29, 2024 Energy Tidbits memo; we noted that EQT is to start restoring natural gas production that they previously shut-in.

Storage could be worse

EQT to start restoring its ~1 bcf/d shut-in natural gas production in Oct

EQT said they would be restoring some of their shut-in production. Here is what we wrote in our Sept 29, 2024, Energy Tidbits memo. "EQT to start restoring its ~1 bcf/d

shut-in natural gas production in Oct. Last Thursday, we tweeted [LINK](#) "EQT to start to add back shut-in #NatGas production. Gas storage +159 bcf YoY would have been worse if EQT, Coterra, etc hadn't shut-in production due to low prices. EQT curtailed ~1 bcfd in spring. "We're watching to see that come back in October and November ... We will ease curtailments in October" EQT CEO Rice. Thx @scottdisavino #OOTT [LINK](#)." As we have been highlighting, natural gas storage would be way worse if EQT, Coterra, Chesapeake, etc hadn't shut in natural gas due to low prices. Don't forget HH was around \$2 up until the last couple weeks. EQT had indicated they were shutting in 90 bcf over H2/24 but hadn't specifically said when they would start to restore production. But, on Wednesday, EQT CEO said they would start to bring the shut-in production on in October. On Wednesday, Reuters reported [LINK](#) "U.S. energy company EQT (EQT.N), opens new tab plans to reverse some natural gas production curtailments in October and November as demand for the fuel and prices increase, CEO Toby Rice told Reuters on Wednesday. EQT, the biggest U.S. gas producer, has along with other U.S. drillers curtailed output in 2024 after prices collapsed to multi-year lows in the spring following a mild winter that left a tremendous oversupply of fuel in storage. "Production curtailments will be a normal part of our strategy when prices are low," Rice said, noting the company has already curtailed about 1 billion cubic feet per day (bcfd) of production in the spring. "We're watching to see that come back in October and November ... We will ease curtailments in October," Rice said, noting total curtailments were around 2 bcfd across the entire industry."

Apache voluntary curtailment of 0.1 bcf/d of natural gas in q3

This is an immaterial amount and we wouldn't have mentioned this except for it was part of a separate press release by Apache on Q3 supplemental information ahead of its Q3/24 call on Nov 7. On Wednesday, Apache provide an update [LINK](#) ahead of its upcoming Q3 results and the update included that "APA curtailed approximately 103 MMcf/d of U.S. natural gas production in the third quarter in response to weak or negative Waha hub prices. APA also curtailed an estimated 10,000 barrels per day of natural gas liquids during the quarter, which were mostly associated with the voluntary gas curtailments. Previous third quarter guidance issued in July contemplated curtailments of ~90 MMcf/d of natural gas and ~7,500 barrels per day of NGLs."

Natural Gas: +82 bcf build in US gas storage; now +124 bcf YoY

For the week ending October 4, the EIA reported a +82 bcf build [LINK](#). Total storage is now 3.629 tcf, representing a surplus of +124 bcf YoY compared to a surplus of +127 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 this week's data shows that storage remains below the range at -127 bcf below the 5-yr maximum of 3.756 tcf. Total storage is now +176 bcf above the 5-year average, below last week's +190 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.

**+82 bcf build in US
gas storage**

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Figure 2: US Natural Gas Storage

Region	Stocks billion cubic feet (Bcf)				Historical Comparisons			
	10/04/24	09/27/24	net change	implied flow	Year ago (10/04/23)		5-year average (2019-23)	
East	873	846	27	27	866	0.8	842	3.7
Midwest	1,041	1,013	28	28	1,012	2.9	1,002	3.9
Mountain	286	283	3	3	243	17.7	216	32.4
Pacific	293	293	0	0	278	5.4	278	5.4
South Central	1,137	1,113	24	24	1,106	2.8	1,116	1.9
Salt	275	261	14	14	265	3.8	273	0.7
Nonsalt	861	852	9	9	841	2.4	843	2.1
Total	3,629	3,547	82	82	3,505	3.5	3,453	5.1

Source: EIA

Figure 3: Previous US Natural Gas Storage

Previous 8 weeks (Bcf)				
Week Ended	Gas in Storage	Weekly Change	Y/Y Diff	Diff to 5 yr Avg
Aug/16	3,299	35	221	369
Aug/23	3,334	35	228	361
Aug/30	3,347	13	208	323
Sep/06	3,387	40	198	296
Sep/13	3,445	58	194	274
Sep/20	3,492	47	159	233
Sep/27	3,547	55	127	190
Oct/04	3,629	82	124	176

Source: EIA

Natural Gas: NOAA forecasts Fall temps, likely not a big driver of NatGas

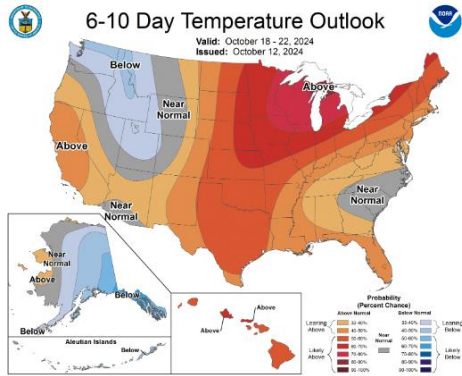
It's now the Fall and that generally means temperatures that are not hot enough to drive any major air conditioning demand or cold enough to drive any major heating demand.

Yesterday, we tweeted [LINK](#) "It's Fall so that is mostly leave the windows open temps and not major A/C during day or heating demand at night. @NOAA updated 6-10 & 8-14 day temp outlook for Oct 18-26. High/lows: Chicago: 14-19C & 7-13C. NYC: 19-21C & 9-14C. Houston: 26-31C & 15-20C. #OOTT #NatGas." Our reminder is that warmer than normal in Oct temperatures, outside of Texas and Arizona, don't drive much A/C demand although we note daily highs are still above 30C in Texas but its is now cooling off at night. We checked AccuWeather and it shows daily high/lows for Chicago were 14-19C & 7-13C, for NYC were 19-21C & 9-14C, and for Houston 26-31C & 15-20C. So in the north, it's leave the windows open during the day and some heating demand at night. And in the south, it's some A/C demand during the day and leave the window open at night. Below are NOAA's updated, as of yesterday, 6-10 day and 8-14 day temperature outlook maps covering Oct 18-26.

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

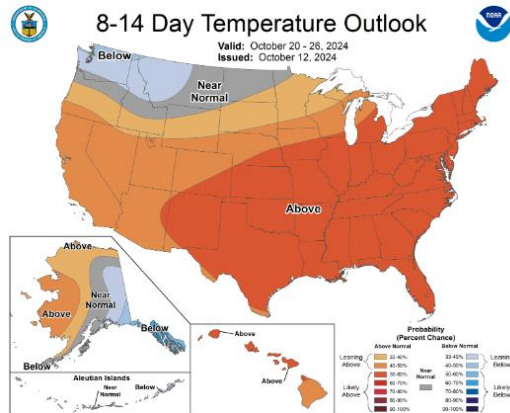
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Figure 4: NOAA 6-10 day temperature outlook for Oct 18-22



Source: NOAA

Figure 5: NOAA 8-14 day temperature outlook for Oct 20-26



Source: NOAA

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

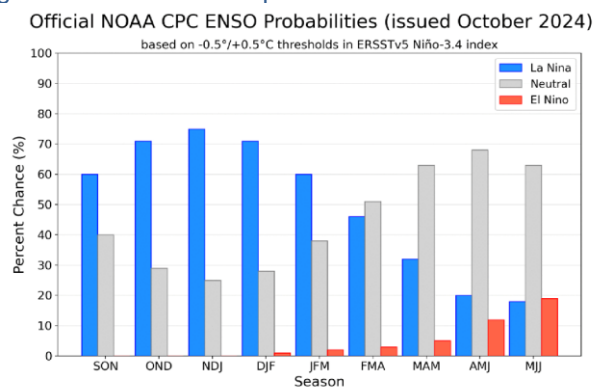
Summer is over so the focus for El Nino conditions is for the winter. On Thursday, NOAA posted the updated monthly El Nino/La Nina outlook, which is issued on the 2nd Thurs of every month [\[LINK\]](#). NOAA continues to forecast La Nina/Normal conditions in the Northern Hemisphere Winter 2024-25. The takeaway from the October update is that there has been a slightly lowered probability of a La Nina/Normal, expected to begin in September-November and persist through January 2025-March 2025. The probability forecast for Dec/Jan/Feb is 99% expectation for La Nina 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 were warmer this month, but still predict a weak La Niña. As a result of the warmer predictions and the recent weakening of equatorial trade winds, the team still favors a weak event, but has lowered the chances of La Niña. A weaker La Niña implies that it 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 favored to emerge in*

La Nina/Normal forecast for winter 2024/25

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September-November (60% chance) and is expected to persist through January-March 2025”.

Figure 6: NOAA El Nino probabilities



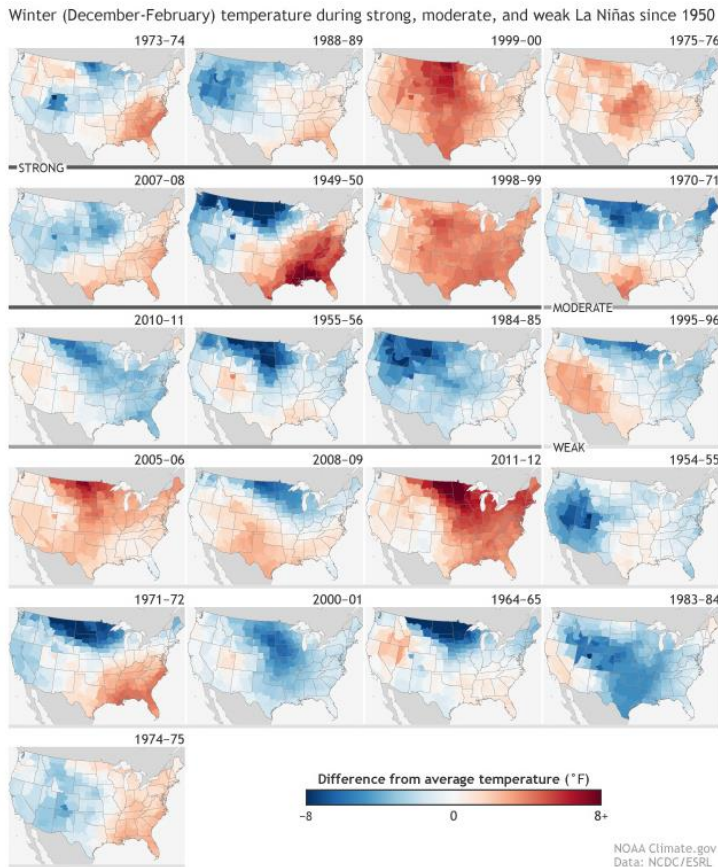
Source: NOAA

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 Niño 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 7: Winter (Dec-Feb) temp in strong, moderate and weak La Ninas since 1950



Source: NOAA

Natural Gas: EIA revises up LTM shale/tight gas production by average ~1.6 bcf/d

We highlight that the EIA revised up its forecast for US shale/tight natural gas production including the last 12 months by an average +1.6 bcf/d per month. And, as noted below, did not revise up its total US natural gas production, which doesn't make sense to us unless all the EIA did was shift natural gas production from other plays to the shale/tight natural gas plays. Otherwise, as noted below, an increase of ~1.6 bcf/d to the last 12 months shale/tight natural gas plays should have led to the EIA increasing its lookback at 2023 total US natural gas production and likely a smaller increase to 2024. (i) 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. 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 October) and a forecast for the next month (in this case November). But now, the EIA only provides estimates for the just finished month for tight/shale. So, in the case of the new October report, there is only shale/tight for the just

Shale/tight gas production

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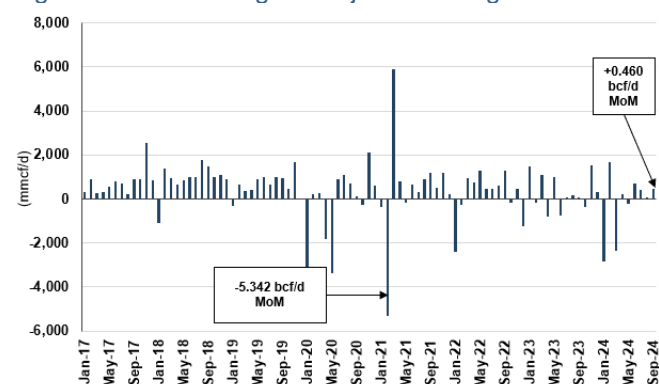
finished month, i.e., September. (iii) On Tuesday, the EIA released its monthly STEO for October 2024 [\[LINK\]](#). (iii) The key takeaway, as noted earlier, is that the EIA revised up their data for shale/tight gas production back to 2020 from September's STEO, and we have adjusted our table to reflect the updated data. For the last 12 months October 2023 thru September 2024, the EIA revised production figures in each month and the average revision for the past 12 months is +1.637 bcf/d. The two areas with the most revisions are Utica and Eagle Ford. (iv) With the revisions, the US shale/tight natural gas was just over 80 bcf/d for MAM, and now has been over 81 bcf/d for JJAS. September was +0.460 bcf/d MoM, at 81.991 bcf/d. Another key thing to note, is that 2024 at ~80.000 bcf/d is lower than ~83.000 bcf/d for Nov and Dec 2023. Our Supplemental Documents package includes excerpts from the EIA STEO.

Figure 8: EIA Major Shale/Tight Natural Gas Production

bcfd	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Sep MoM%	Sep YoY%
Permian	16,767	16,750	17,084	17,401	16,648	17,349	17,722	17,797	17,789	17,740	17,742	17,759	17,823	0.4%	6.3%
Haynesville	14,568	14,432	14,390	13,880	13,776	13,869	13,213	12,541	12,049	12,092	12,902	12,693	12,955	2.1%	-11.1%
Marcellus	25,061	25,356	26,312	26,480	25,859	25,681	23,919	25,440	25,146	25,788	25,728	25,809	25,890	0.3%	3.3%
Utica	5,990	5,709	5,866	5,991	5,877	5,956	5,899	5,518	5,647	5,763	5,474	5,582	5,624	0.8%	-6.1%
Eagle Ford	4,558	4,485	4,468	4,447	4,333	4,397	4,442	4,298	4,435	4,437	4,440	4,442	4,444	0.0%	-2.5%
Bakken	2,555	2,530	2,571	2,613	2,221	2,495	2,509	2,571	2,598	2,583	2,594	2,605	2,616	0.4%	2.4%
Barnett	1,794	1,779	1,784	1,766	1,679	1,716	1,703	1,702	1,692	1,682	1,672	1,662	1,652	-0.6%	-7.9%
Fayetteville	884	878	872	862	774	846	844	784	833	816	811	816	819	0.4%	-7.4%
Mississippian	2,462	2,335	2,320	2,412	2,344	2,484	2,323	2,338	2,339	2,340	2,341	2,342	2,342	0.0%	-4.9%
Niobrara-Codell	2,697	2,730	2,781	2,812	2,671	2,826	2,864	2,763	2,818	2,831	2,844	2,857	2,869	0.4%	6.4%
Woodford	2,838	2,870	2,847	2,902	2,707	2,848	2,763	2,761	2,875	2,850	2,849	2,849	2,847	-0.1%	0.3%
Rest of U.S.	2,250	2,216	2,289	2,331	2,181	2,253	2,183	2,108	2,184	2,190	2,118	2,115	2,110	-0.2%	-6.2%
Total	82,424	82,070	83,584	83,897	81,070	82,720	80,384	80,621	80,405	81,112	81,515	81,531	81,991	0.6%	-0.5%

Source: EIA

Figure 9: MoM Change – Major Shale/Tight Natural Gas Production



Source: EIA

Natural Gas: EIA STEO doesn't increase US gas production for revised up shale/tight

On Tuesday, the EIA released its monthly Short Term Energy Outlook for September 2024 [\[LINK\]](#). (i) We are surprised that the EIA did not make an upward revision to its lookback at 2023 natural gas production and did not make a larger upward revision to 2024 natural gas production and an increase to 2025 natural gas production. As noted above, the EIA revised up its lookback at US tight/shale natural gas production by ~1.6 bcf/d on average to the last 12 months. But it's like the EIA is just assuming that the non-tight/shale natural gas production is down by an offsetting amount. This implies that the only reason for the upward revision is that they (ii) We have the below running table of the EIA monthly forecasts so we

EIA US natural gas production forecast

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can see what changes are made by month. (iii) Lookback at 2023. The EIA made no changes to their lookback at 2023 natural gas production. That implies that the EIA’s upward revision to tight/shale natural gas production was a result of shifting production from other plays into shale/tight major plays. (iv) The EIA made an immaterial increase to its 2024 US natural gas production estimate by +0.1 bcf/d to 103.5 bcf/d, which, on a full year average basis, now gives a YoY decline of -0.2 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. The implication is that the EIA has not made factored in any increase to total US natural gas production despite shale/tight being revised ~+1.6 bcf/d vs last month. We say this because the EIA is implying the reason for its immaterial increase to 2024 production is due to using a higher HH price forecast. The EIA wrote “*The Henry Hub natural gas spot price rose by 15% to \$2.28 per million British thermal units (MMBtu) in September. We expect the Henry Hub price to continue rising to around \$2.80/MMBtu in the fourth quarter of 2024 and to further increase to around \$3.10/MMBtu on average in 2025 as liquefied natural gas exports, a component of total natural gas demand, increase with the addition of capacity.*” (v) The EIA decreased its 2025 forecast -0.1 bcf/d to 104.6 bcf/d, which, on a full year average basis, would be up +1.1 bcf/d YoY. Again the only explanation for not increasing their 2025 production forecast is that the EIA increase of ~+1.6 bcf/d to shale/tight was due to shifting production from non shale/tight p[lays].

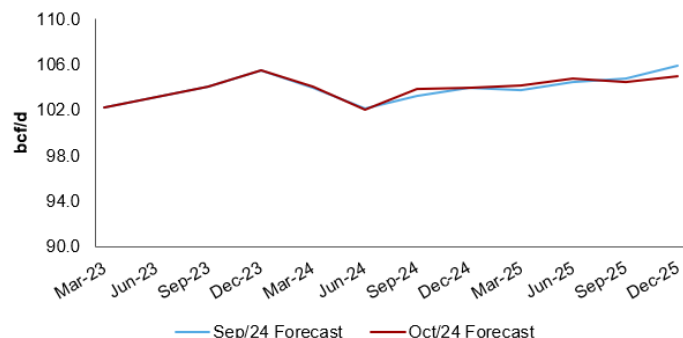
Figure 10: EIA STEO Natural Gas Production Forecasts

bcf/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
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

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Figure 11: EIA STEO Natural Gas Production Forecasts by Month



Source: EIA, STEO

Natural Gas: EIA STEO est. storage 3.813 tcf at Nov 1/24, +70.2 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 started Q4. (ii) 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 3.813 tcf at Nov 1, 2024, which is an increase of +70.2 bcf YoY. The Oct STEO is up immaterially vs the Sept STEO forecast of storage at 3.811 tcf at Nov 1, 2024. (iv) It's early and 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 2.225 tcf, which would be -337.7 bcf lower YoY. The key reason for less storage to end winter is that the EIA is assuming this winter is colder than last year's hot winter. The EIA assumes heating degree days will be +5% 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 3.748 tcf at Nov 1, 2025, which would be a little lower than its forecast for Nov 1, 2024, at 3.813 tcf. Below is a table tracking the working gas inventory forecasts and actuals since 2016.

EIA October STEO storage forecast

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Figure 12: EIA STEO US Natural Gas in Storage (2016-2025)

	US Working Natural Gas in Storage (billion cubic feet)					
	Storage Level	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	3,812.5	3,501.1	3,931.6	430.6	3,663.5	4.1%
Mar 2025	2,224.8	1,559.4	2,332.5	773.1	1,919.0	15.9%
Oct 2025	3,747.7	3,501.1	3,931.6	430.6	3,663.5	2.3%

Source: EIA, STEO

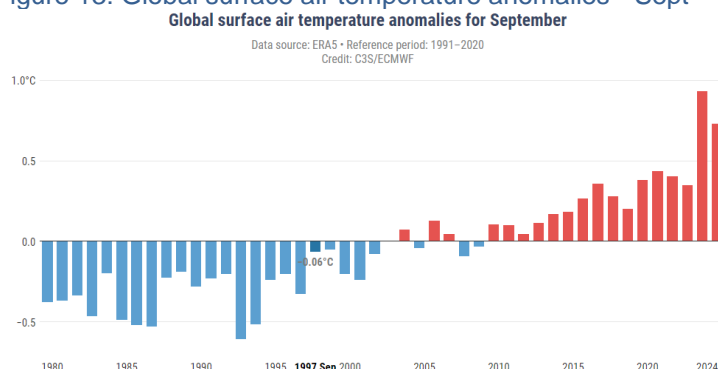
Natural Gas: Second warmest Sept for the world on record

There was a good reminder this summer on how the most important weather factor for natural gas and LNG is winter, not summer, although hot summers do support prices. The impact of a cold winter on natural gas price is significant, therefore as we enter winter, we will be paying close attention to forecasts. On Thursday, Copernicus posted its monthly climate bulletin for September [\[LINK\]](#). The bulletin highlighted that September was the second hottest September on record. In September Europe saw their second hottest September on record at an average temperature of 16.47°C, which is 1.74°C higher than the 1991-2020 average for September. Conversely, parts of Central Asia experienced below average temperatures, however, China experienced above average temperatures. Copernicus wrote “September 2024 was the second-warmest September globally, after September 2023, with an average ERA5 surface air temperature of 16.17°C, 0.73°C above the 1991-2020 average for September... Outside Europe, temperatures were well above average over Manitoba, Canada, and most of the rest of Canada, the central and western United States, and South America, where drought conditions and wildfires have been prevalent. Northeast Africa experienced heatwave conditions, especially in Egypt. China had above-average temperatures, with Sichuan and Chongqing notably affected by heatwaves. Japan had its second-warmest September on record (since 1898), while Australia had its fourth-warmest September on record (since 1910). Eastern Antarctica also had above-average temperatures. Conversely, below-average temperatures occurred over parts of the Sahel and southern Africa, along the eastern United States, and in parts of central Asia. West Antarctica had the most below-average temperatures.”

2nd warmest Sept for the world on record

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Figure 13: Global surface air temperature anomalies - Sept



Source: Copernicus

Natural Gas: Mozambique election expects to see ruling Frelimo keep power

As of our 7am MT news cut off, there is still no official results from the Mozambique election that saw the polls closed on Wednesday evening. There is no set timetable for the voting to be tabulated. But, the expectation has been that the ruling party, the Front for the Liberation of Mozambique (Frelimo) will continue its hold on government. Mozambique got its independence from Portugal in 1975 and Frelimo has been in power for the 49 years of Mozambique being a country. The existing President is Filipe Nyusi but he isn't running as he has served his maximum two terms. Daniel Chapo is Frelimo's candidate for President and is widely favored to win. This would be the best case scenario for TotalEnergies and ExxonMobil for their Mozambique LNG projects as the opposition candidates have been saying they want to renegotiate the LNG deals for a greater government take.

Waiting on Mozambique election results

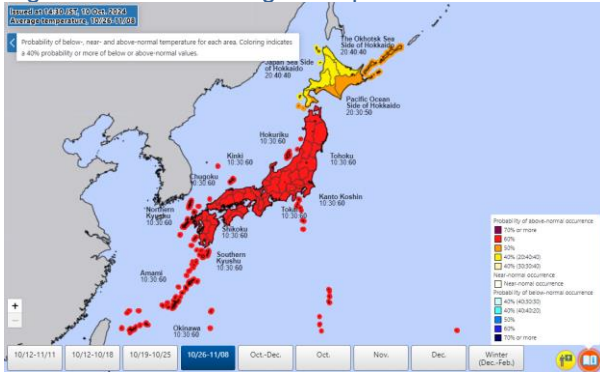
Natural Gas: Japan expects warmer than normal temps to start November

It was a hot summer in Japan and the warmer than normal temperatures continued in Sept and are forecasted to persist through the end of October and into November. On Thursday, the Japan Meteorological Agency updated its forecast for the next 30 days, Oct 26 thru Nov 8, in Japan [\[LINK\]](#). There is no JMA commentary on the forecast. JMA is calling for above normal temperatures for October through to the beginning of November, with a +60% probability of above normal temperature occurrence everywhere except Hokkaido, which is forecasted to have a 40%-50% chance of above normal temperature occurrence. We checked AccuWeather for Tokyo and, for the first 8 days of November, there are forecasted daily highs in the 17-20C range and overnight lows from 9-13C. 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 next 30 days.

JMA temperature forecast for the next 30 days

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Figure 14: JMA Average Temperature Outlook for Oct 26 – Nov 8



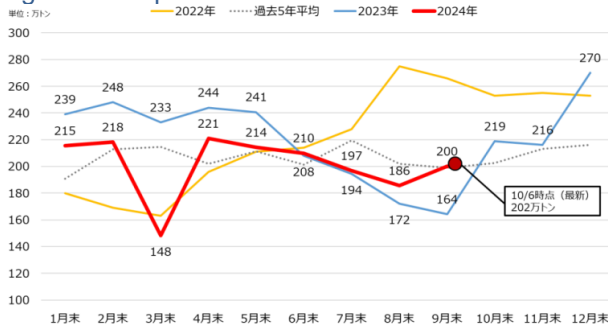
Source: Japan Meteorological Agency

Natural Gas: Japan LNG stocks up WoW, down YoY, and flat to 5-yr average

Japan's LNG stocks are up WoW, are down YoY, and are flat when compared to the 5-year average. On Wednesdays, Japan's METI releases its weekly LNG stocks data [LINK](#). LNG stocks on October 6 were 97.0 bcf, up +1.5% WoW from September 29 of 95.6 bcf, and down -7.8% from 105.2 bcf from a year ago. Stocks are flat from the 5-year average of 95.6 bcf. Below is the Japanese LNG stocks graph from the METI weekly report.

Japan LNG stocks up WoW

Figure 15: Japan LNG Stocks



Source: METI

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

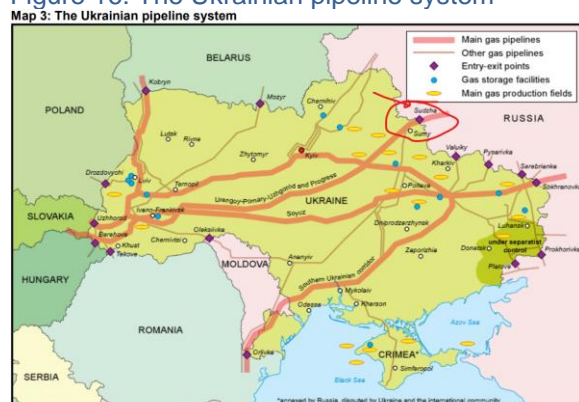
It's now been ~two months since Ukraine invaded the Russian region of Kursk and took over control of the Sudzha natural gas intake station in Russia for transport on the last remaining open natural gas intake station in Russia for transport on the last remaining open natural gas pipeline allowed to export 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. The latest confirmation we saw the Bloomberg Oct 11 report that Gazprom continues to ship the same volume of natural gas of 1.50 bcf/d via Sudzha. 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

Ukraine captures key Russian gas infrastructure

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revenue. So, for now at least, it 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 16: The Ukrainian pipeline system



Source: OIES

Source: Oxford Institute for Energy Studies

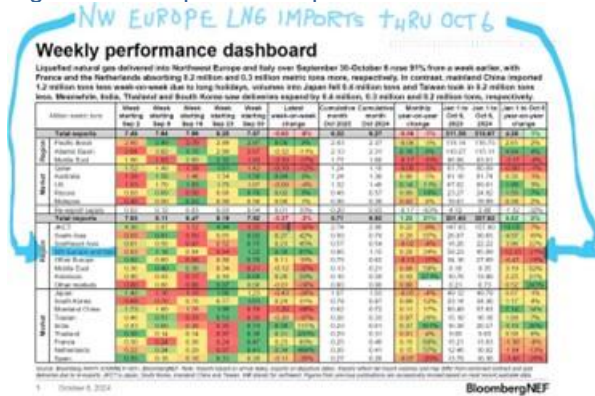
Natural Gas: NW Europe LNG imports down big YoY, down ~433 bcf, 1.55 bcfd YTD

On Friday, we tweeted [LINK](#) "NW Europe #LNG imports up in Oct 6 week. BUT if not for Israel/Iran risk, EU #NatGas prices would be lower in shoulder season. Storage would be full if NW EU hadn't cut back LNG imports in Q2/Q3. YTD Oct 6, NW EU #LNG imports down ~433 bcf or ~1.55 bcf/d YoY. Thx @BloombergNEF LNG Trade Weekly. #OOTT." The LNG market story is also the risk to LNG market if Israel escalates to attack Iran's oil facilities. Iran doesn't export LNG but any attacks around key Iran oil infrastructure like its Kharg Island would likely cause a stop in LNG shipments from nearby Qatar. And there is always the risk that Hezbollah could hit the eastern Mediterranean natural gas. But, if not for this escalation risk, we have highlighting that there is a big holdback to Europe natural gas prices is that Europe gas storage would be way worse if Europe hadn't significantly reduced LNG imports over the past few months as storage was looking like it would be full early. LNG imports into NW Europe are down big YoY in 2024. On Tuesday, BloombergNEF posted its LNG Trade Weekly. BloombergNEF estimates NW Europe LNG imports were +2.9 bcf/d WoW for the Sept 29-Oct 6 week. But this has only made a minor impact on NW Europe LNG imports that are still +433 bcf or +1.55 bcf/d YTD Oct 6. Our tweet included the below BloombergNEF chart.

Europe LNG imports down big in 2024

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Figure 17 Europe LNG Imports thru Oct 6



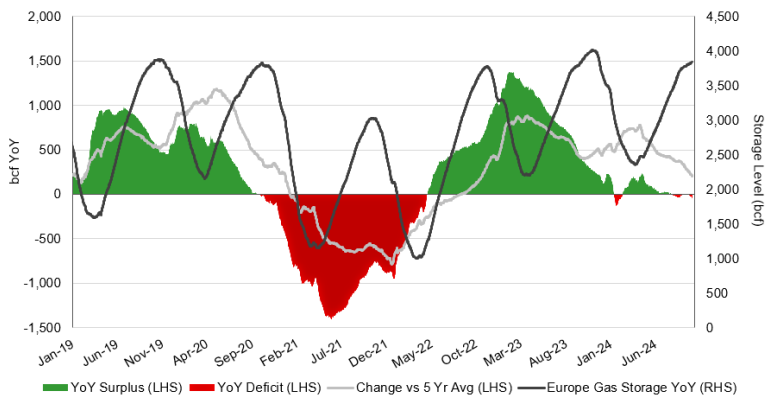
Source: BloombergNEF

Natural Gas: Europe storage up +0.5% WoW to 94.8% full, down -2.3% YoY

As expected, European natural gas storage has slowed down in filling up as NW Europe has increased its LNG imports ahead of winter. We have been highlighting that a big LNG theme in Q2 and Q3 was how NW Europe reduced LNG imports because storage was very high YoY leaving winter 2023/24. Europe gas storage is now 94.8% full. We remind that we don't necessarily expect Europe gas to get to 100% full. It's not like going to a gas station where you fill up your car to the limit. Rather, getting to mid 90%'s would be considered full. This week, Europe storage was up +0.5% WoW to 94.8% vs 94.3% on October 3. Storage is now down -2.3% from last year's levels of 97.2% on October 10, 2023, but up huge against the 5-year average of 91.6%. Below is our graph of European Gas Storage Level.

Europe gas storage

Figure 18: 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 that of the risk to Europe gas

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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 October 9, natural gas in Ukraine storage was at 26.4% of its total capacity, up from 25.7% of its total capacity on September 25. 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 19: Ukraine Gas Storage Facilities as of June 2023



Source: Bloomberg

Oil: U.S. oil rigs up +2 WoW and down -20 rigs YoY to 481 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 +2 rigs WoW to 481 oil rigs as of October 11. US oil rigs are now only down -20 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. (iii) Note we can see the basin changes but not by type of rig; the WoW basin changes were Ardmore Woodford up +1 rig WoW to 2 rigs, Arkoma Woodford flat WoW at 2 rigs, Cana Woodford up +2 rigs WoW to 20 rigs, Eagle Ford up +1 rig WoW to 49 rigs, Marcellus down -2 rigs WoW to 23 rigs, and Permian flat WoW at 304 rigs. (iv) The overlooked U.S. rig theme is the YoY declines, which have begun to taper as Q4 2023 saw activity leveling off. Total U.S. gas and oil rigs are down -36 rigs YoY to 582 rigs including US oil rigs -20 oil rigs YoY to 481 oil rigs. And for the key basins, the Permian is -7 rigs YoY, Haynesville is -3 rigs YoY, DJ Niobrara is -6 rigs YoY, Marcellus -6 rigs YoY, Utica -1 rig YoY, Williston up +1 rig YoY, Arkoma Woodford flat YoY, and Cana Woodford +4 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 must 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.

US oil rigs up
+2 YoY

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Figure 20: Baker Hughes Total US Oil Rigs



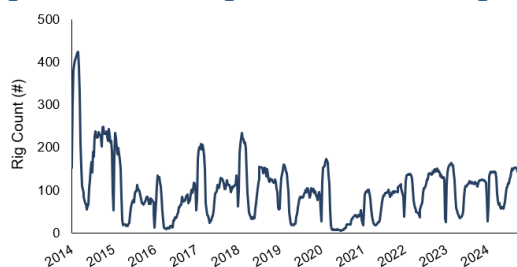
Source: Baker Hughes

Oil: Total Cdn oil rigs up -3 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 -1 rig WoW at 219 rigs on October 11. Every year, Canadian rigs typically increase until mid-October, where they remain relatively flat until late November when they begin ramping up until the end of December. Cdn oil rigs were down -3 rigs WoW this week to 154 rigs and are up +38 rigs YoY. Gas rigs are up +2 rigs WoW to 65 rigs and are down -11 rigs YoY, and miscellaneous rigs are up -3 rigs WoW to 0 rigs total and are down -1 rig YoY. As a reminder Baker Hughes changed their reporting format which does not allow us to see the provincial breakouts.

**Cdn rigs -1
WoW**

Figure 21: Baker Hughes Total Cdn Oil Rigs



Source: Baker Hughes

Oil: US weekly oil production up +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. And sometimes the re-benchmarking can be significant and other times, it is relatively small. 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 in slightly above the previous range, at +0.100 mmb/d WoW to 13.400 mmb/d

**US weekly oil
production**

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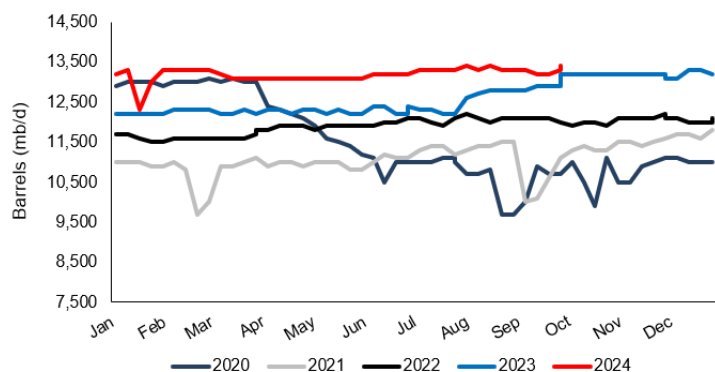
for the week ending October 4. On Tuesday October 8, the EIA released its October STEO and the EIA provides the backup monthly estimates for US oil production, and they are more or less in line with July at 13.200 mmb/d, August at 13.360 mmb/d, and September at 13.250 mmb/d. This week, the EIA’s production estimates were up +0.100 mmb/d to 13.400 mmb/d for the week ended October 4. Alaska was down -0.003 WoW to 0.432 mmb/d, compared to 0.435 mmb/d last week. Below is a table of the EIA’s weekly oil production estimates.

Figure 22: 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	12,200	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	13,200
2024-Jan	01/05	13,200	01/12	13,300	01/19	13,300	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								

Source: EIA

Figure 23: EIA’s Estimated Weekly US Oil Production



Source: EIA

Oil: US shale/tight oil production flat for the last 7 months

As mentioned earlier, the EIA combined its prior shale/tight oil information with its STEO, which was released on Tuesday for October 8, 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 production

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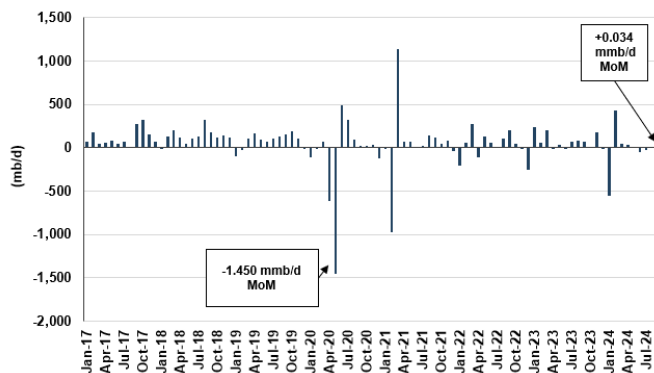
shale/tight oil and gas plays up to August. (ii) We were a little surprised that the EIA's revisions to prior data wasn't significant given, as noted earlier in the memo, there were significant upward revisions to shale/tight natural gas. Note that the EIA may revise their data for shale/tight oil production back to 2020 in each STEO, and each month we adjust our table to reflect any updated data. 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 +26,000 b/d. (iii) Shale/tight oil production in September was 8.670 mmb/d, basically flat MoM compared to August at 8.636 mmb/d and up +1% YoY. September marks the 8th consecutive month of shale/tight oil at ~8.6 mmb/d, and this is down from ~8.8 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.

Figure 24: US Major Shale/Tight Oil Production

Thousand b/d	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Sep MoM%	Sep YoY%
Austin Chalk + Eagle Ford	1,140	1,109	1,099	1,055	1,010	1,063	1,089	1,132	1,144	1,141	1,139	1,137	1,134	-0.3%	-1%
Bakken	1,260	1,227	1,253	1,247	1,079	1,226	1,202	1,213	1,189	1,156	1,154	1,153	1,151	-0.2%	-9%
Mississippian + Woodford	230	228	230	229	206	220	213	213	216	209	208	206	205	-0.5%	-11%
Niobrara	457	471	480	492	448	472	475	446	464	465	465	466	466	0.0%	2%
Permian	5,181	5,237	5,393	5,430	5,170	5,360	5,413	5,419	5,423	5,405	5,389	5,392	5,430	0.7%	5%
Rest of US L48	308	307	306	300	281	284	279	283	296	291	280	282	284	0.7%	-8%
Total	8,576	8,579	8,761	8,753	8,194	8,625	8,671	8,706	8,712	8,667	8,635	8,636	8,670	0.4%	1%

Source: EIA, SAF

Figure 25: MoM Changes in US Major Shale/Tight Oil Production



Source: EIA, SAF

Oil: EIA DUCs flat MoM in September, DUCs down -9% 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 -9% YoY in September at 5,315 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, 6,823 DUCs in September 2021, 5,989 DUCs in September 2022, 5,841 in September 2023, and now 5,315 DUCs in

DUCs flat MoM in September

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September 2024. (iv) The largest YoY September DUCs declines are the Eagle Ford, down -38% YoY, and Bakken -20% 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.

Figure 26: Estimated Drilled Uncomplete Wells in 2023/24

DUCs	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Sep MoM%	Sep YoY%
Appalachia region	823	813	813	806	796	789	785	784	771	767	761	752	-1%	-10%
Bakken region	398	390	375	397	393	394	381	354	344	335	326	315	-3%	-20%
Eagle Ford region	472	449	472	442	406	374	345	320	317	316	315	314	0%	-38%
Haynesville region	792	784	787	792	797	798	786	785	791	797	801	803	0%	1%
Permian region	798	832	866	871	845	860	831	846	856	863	870	881	1%	-2%
Rest of Lower 48 States, excluding GOM	2380	2365	2339	2335	2328	2324	2319	2310	2290	2271	2262	2250	-1%	-7%
Total	5,663	5,623	5,652	5,643	5,565	5,539	5,447	5,399	5,369	5,349	5,335	5,315	0%	-9%

Source: EIA, SAF

Oil: EIA Sept STEO no real changes to 2024 and 2025 US oil production forecast

On Tuesday, the EIA released its Short-Term Energy Outlook for September 2024 [LINK](#), which included a small decrease to its 2024 and 2025 oil production forecasts. (i) The October STEO forecasts for 2024 was revised down slightly, and there was a small decrease to 2025 US oil production estimates vs the September STEO which had been slightly down from August. (ii) The historical figures from 2023 were unchanged with the October STEO; the total estimate for 2023 was kept flat at 12.93 mmb/d from the September STEO. Recall last years October revision of +140,000 b/d from the September 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 October STEO forecast for 2024 is down -0.03 mmb/d to 13.22 mmb/d from the September STEO of 13.25 mmb/d. There were some small revisions by quarter: Q1/24 flat at 12.94 mmb/d, Q2/24 up +0.01 mmb/d to 13.23 mmb/d, Q3/24 down -0.11 mmb/d to 13.27 mmb/d, and Q4/24 down -0.02 mmb/d to 13.45 mmb/d. (iv) The EIA forecasts US oil production of 13.54 mmb/d for 2025, which is down -0.13 mmb/d from the September STEO. The revisions by quarter were Q1/25 +0.01 mmb/d to 13.46 mmb/d, Q2/25 -0.07 mmb/d to 13.53 mmb/d, Q3/25 down -0.19 mmb/d to 13.54 mmb/d, and Q4/25 -0.25 mmb/d to 13.64 mmb/d. Below is our EIA STEO forecast comparison by month.

EIA STEO US oil production

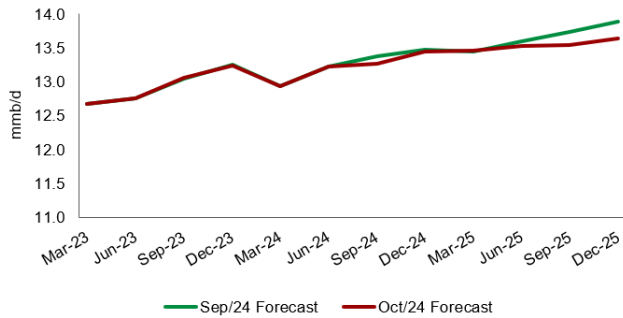
Figure 27: EIA STEO Oil Production Forecasts by Month

(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
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

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Figure 28: Estimated US Crude Oil Productions by Forecast Month



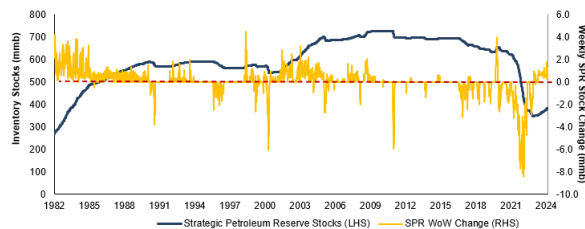
Source: EIA STEO

Oil: US SPR less commercial reserve deficit widens, now -39.811 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 as well as a build on the commercial side. The EIA’s weekly oil data for October 4, [\[LINK\]](#) saw the SPR reserves increase +0.377 mmb WoW to 382.930 mmb, while commercial crude oil reserves increased +5.810 mmb to 422.741 mmb. There is now a -39.811 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.

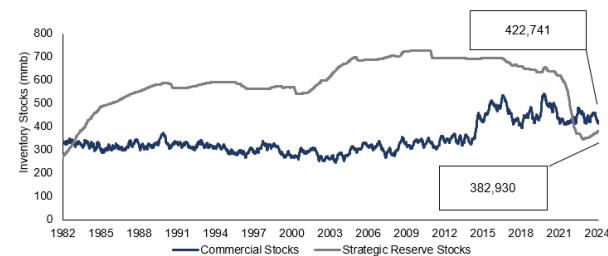
US SPR reserves

Figure 29: Strategic Petroleum Reserve Stocks and SPR WoW Change



Source: EIA

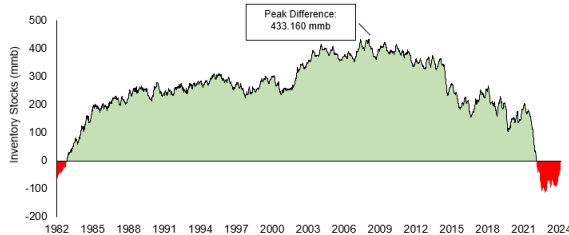
Figure 30: US Oil Inventories: Commercial & SPR



Source: EIA

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Figure 31: US Oil Inventories: SPR Less Commercial



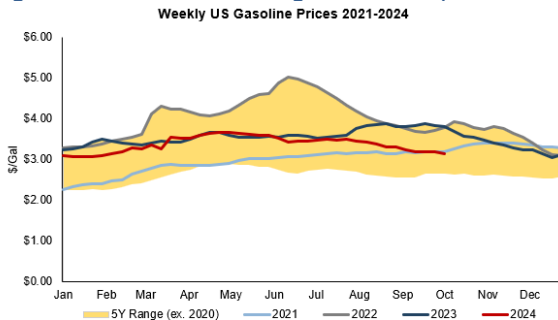
Source: EIA

Oil: AAA reports US national average gasoline price +\$0.02 WoW to \$3.20 on Oct 12

Yesterday, we tweeted [\[LINK\]](#) "Good to see Florida average gasoline prices, despite back-to-back hurricanes, down -\$0.01 WoW & -\$0.07 MoM to \$3.10. AAA National average prices +\$0.02 WoW to \$3.20 on Oct 12, -\$0.04 MoM & -\$0.45 YoY. US election is Nov 5. National average prices were ~\$3.80 at time of 2022 mid-terms. Thx @AAAnews #OOTT." Yesterday, AAA reported that US national average prices were \$3.20 on Oct 12, which was +\$0.02 WoW, -\$0.04 MoM and -\$0.45 YoY. Yesterday, AAA also reported California average gasoline prices were \$4.67 on Oct 12, which was flat WoW, -\$0.09 MoM and -\$1.03 YoY. Given the back-to-back Hurricanes Helene and Milton that hit Florida, it was good to see that there doesn't look to be any big increase to Florida gasoline prices. Yesterday, AAA reported Florida average gasoline prices were \$3.10 on Oct 12, which was -\$0.01 WoW, -\$0.07 MoM, and -\$0.29 YoY. Below is our graph of Bloomberg's National Average weekly gasoline prices.

US gasoline prices

Figure 32: National Average Gasoline prices



Source: Bloomberg

Oil: Crack spreads +\$0.77 WoW to \$17.42, WTI +\$1.18 WoW to \$75.56

On Friday, we tweeted [\[LINK\]](#) "321 crack spreads +\$0.77 WoW to \$17.42 ie. middle of pre-Covid \$15-20 range. WTI +\$1.18 WoW to \$75.56. WTI continues to be impacted more by global markets than by crack spreads. Since 09/27, 321 cracks +\$1.70 whereas WTI +\$7.38. Thx @business #OOTT." Cracks spreads were +\$0.77 WoW to \$17.42 and WTI was +\$1.18 WoW to \$75.56. Our tweet highlighted how WTI is more impacted by global events than crack spreads which has led to WTI outperformance since China stimulus. Since Sept 27, 321 crack spreads are +\$1.70 whereas WTI is +\$7.38. Crack spreads at \$17.42 are in line with the middle of the pre-Covid \$15-\$20 range, and generally not high enough to incentivize

Crack spreads closed at \$17.42

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refineries to take any more crude than necessary. Crack spreads of \$17.42 on Oct 11, followed \$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, \$20.75 on Aug 16, \$22.92 on Aug 9, \$23.77 on Aug 2, \$24.91 on July 26, \$22.43 on July 19, and \$23.22 on July 12.

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

This last two weeks are a good example that global oil and market items impact WTI more than crack spreads. And this is especially so over the last two weeks since the China stimulus. But, 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 \$17.42 on Friday Oct 11.

Figure 33: Cushing Oil 321 Crack Spread & WTI Oct 11, 2014 to Oct 11, 2024



Source: Bloomberg

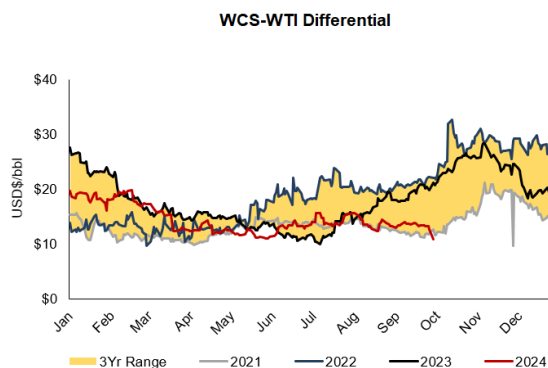
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Oil: Cdn heavy oil differential narrows -\$1.20 WoW to close at \$11.25 on October 11

WCS less WTI differentials narrowed again this week, decreasing -\$1.20 WoW to close at \$11.25 on October 11. As noted in the following item, we have been saying that the real test for WCS less WTI differentials will be in Sept/Oct as to how much the startup of the 590,000 b/d TMX expansion will impact WCS less WTI differentials. And, at least so far, TMX is working as hoped, if not better, in keeping WCS less WTI differentials way lower than would be expected. The end of August/beginning of September is when we normally see a widening of the WCS less WTI differentials. And WCS less WTI differentials has remained much lower and has not widened 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. The WCS less WTI differential closed on October 11 at \$11.25 which was a narrowing of -\$1.20-WoW vs \$12.45 on October 4.

WCS differential narrow

Figure 34: WCS less WTI oil differentials to October 11 close



Source: Bloomberg

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

It looks like TMX is having, at least so far, the expected big impact of keeping WCS less WTI differentials a lot narrower than what is normally seen in the normal seasonal widening in Sept/Oct. WCS less WTI differentials are approx. \$10 narrower vs a year ago and approx. \$20 narrower than two years ago. That is a big win for Cdn oil producers. For the past few 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 will be in late Aug, Sept and Oct when differentials normally start to widen with seasonal refinery turnarounds. On Friday, we tweeted [\[LINK\]](#) "Continued positive to Cdn #Oil in H2/24. Looks like ramp up of volumes on new 590,000 b/d TMX has, at least so far, kept WCS less WTI differentials from the normal Sept/Oct widening. WCS less WTI diffs: 10/11/24: \$11.25. 10/11/23: \$21.35. 10/11/22: \$31.00. Thx @garquake #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 and how differentials were widening at this time of year in 2022 and 2023.

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Figure 35: WCS less WTI differentials to Oct 11, 2024 close



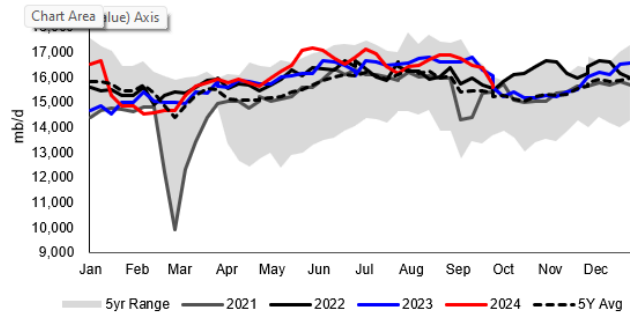
Source: Bloomberg

Oil: Refinery Inputs down -0.101 mmb/d WoW to 15.590 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 September/early October is when refineries are in their fall turnarounds to 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 ie. less extra maintenance. Although there are more refineries available to receive crude, we may see refineries reduce runs given the low crack spreads. On Wednesday, the EIA released its estimated crude oil input to refinery data for the week ended October 4 [LINK]. The EIA reported crude inputs to refineries were down -0.101 mmb/d this week to 15.590 mmb/d and are up +0.386 mmb/d YoY. Refinery utilization was down -0.9% WoW to 86.7% and was up +1.0% YoY.

**Refinery inputs
-0.101 mmb/d WoW**

Figure 36: US Refinery Crude Oil Inputs



Source: EIA, SAF

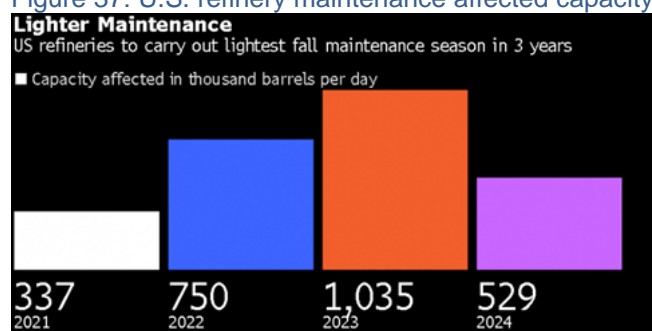
US refinery preventative maintenance to be much less this fall than last

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

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same time as a turnaround. If preventative maintenance is less than normal, it 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 37: U.S. refinery maintenance affected capacity



Source: Bloomberg, IIR Energy

Oil: H2S release kills two at Deer Park (Pemex) refinery

On Thursday, there was a H₂S leak at the Pemex's Deer Park refinery on the outskirts of Houston that killed two and harmed 35. We haven't gone thru a list but it seems like Pemex refineries and offshore platforms get hit by industrial accidents more than at other large oil companies. Pemex reported [LINK](#) "The general director of Petróleos Mexicanos (Pemex), Víctor Rodríguez Padilla, attended the morning conference: "The people's mornings" to report on the security incident at the Deer Park refinery, which occurred yesterday, Thursday, October 10, at 4:40 p.m. He reported that the incident was a leak of hydrogen sulfide, which is completely harmful to health. 35 people are reported affected, of which 13 are currently receiving care in the hospital; Their health condition is reported stable and by protocol they will remain under supervision for 24 hours. Unfortunately, there are two deceased workers, both from external maintenance companies. The bodies were recovered early in the morning, when there was no longer any risk to the staff. He pointed out that protocols were immediately activated to notify local authorities, Harris County, in the state of Texas, as well as the federal government of the United States. Investigations continue to establish the root cause of this incident and the actions that allow the resumption of the operation of the units involved as soon as possible." Deer Park has a calendar day operating capacity of 312,500 b/d. As of our 7am MT news cut off, we have not seen how much capacity is off line and how long it will be off line. The Pemex release notes the units involved are off line.

Refinery inputs
-0.101 mmb/d WoW

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Oil: US net oil imports down -0.305 mmb/d WoW as oil exports down -0.084 mmb/d

The EIA reported US “NET” imports were down -0.305 mmb/d to 2.445 mmb/d for the week of October 4. US imports were down -0.389 mmb/d to 6.239 mmb/d, while exports were down -0.084 mmb/d to 3.794 mmb/d. Top 10 was down -0.483 mmb/d. (i) Previously we have noted that the EIA did not report weekly Venezuela imports, however, last week 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 down -0.300 mmb/d to 3.499 mmb/d, which is likely due to US Midwest refinery turnarounds. Weekly imports have been higher of late with the increased Cdn crude coming off TMX and hitting west coast US refineries. (iii) Saudi Arabia was up +0.140 mmb/d to 0.285 mmb/d. (iv) Mexico was down -0.066 mmb/d to 0.382 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 and Pemex’s other refineries increasing crude oil processing. (v) Colombia was down -0.198 mmb/d to 0.149 mmb/d. (vi) Iraq was up +0.089 mmb/d to 0.241 mmb/d. (vii) Ecuador was down -0.025 mmb/d to 0.228 mmb/d. (viii) Nigeria was down -0.040 mmb/d to 0.044 mmb/d. (ix) Venezuela was up +0.018 mmb/d to 0.315 mmb/d.

**US net imports
down -0.305 mmb/d
WoW**

Figure 38: US Weekly Preliminary Imports by Major Country

	Aug 16/24	Aug 23/24	Aug 30/24	Sep 6/24	Sep 13/24	Sep 20/24	Sep 27/24	Oct 4/24	WoW
Canada	4,083	3,874	3,516	4,026	4,155	3,912	3,799	3,499	-300
Saudi Arabia	207	311	204	326	210	291	145	285	140
Venezuela	0	0	0	0	0	0	297	315	18
Mexico	167	619	374	510	420	499	448	382	-66
Colombia	213	212	179	229	121	295	347	149	-198
Iraq	166	153	201	222	155	265	152	241	89
Ecuador	163	103	104	103	54	4	253	228	-25
Nigeria	190	33	32	175	264	135	84	44	-40
Brazil	177	302	180	113	306	0	186	134	-52
Libya	86	1	86	83	0	0	77	28	-49
Top 10	5,452	5,608	4,876	5,787	5,685	5,401	5,788	5,305	-483
Others	1,200	952	916	1,080	637	1,055	840	934	94
Total US	6,652	6,560	5,792	6,867	6,322	6,456	6,628	6,239	-389

Source: EIA, SAF

Oil: Colombia oil production still well below pre-Covid, August was 0.777 mmb/d

We continue to believe it’s hard to see how Colombia oil production ever sustainably rallies anywhere back to 1.000 mmb/d or even 900,000 b/d. Despite stronger oil prices post Covid, Colombia oil production has been stuck below 800,000 b/d. On Friday, Bloomberg published Colombian production data for August. Production in August was down -0.9% MoM to 0.777 mmb/d from 0.784 mmb/d in July. This puts August’s production down -0.6% YoY vs 0.782 mmb/d in August 2023. Production is now -12.3% below pre-Covid levels of 0.886 mmb/d in 2019.

**Colombia oil
production
stuck below
800,000 b/d**

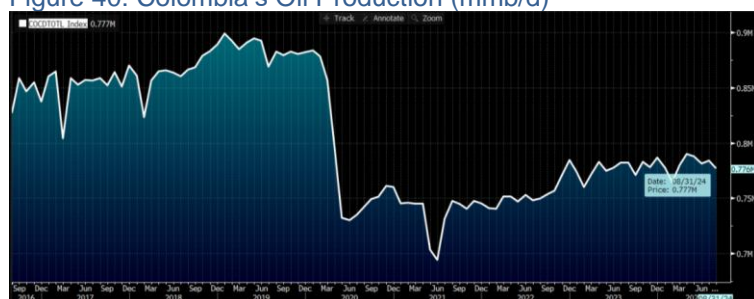
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Figure 39: Colombian Oil Production

mmb/d	2016	2017	2018	2019	2020	2021	2022	2023	2024	24/23
Jan	0.986	0.860	0.860	0.899	0.884	0.745	0.740	0.774	0.777	0.4%
Feb	0.955	0.864	0.823	0.893	0.878	0.746	0.740	0.759	0.764	0.7%
Mar	0.917	0.804	0.856	0.885	0.857	0.745	0.751	0.771	0.780	1.2%
Apr	0.915	0.857	0.865	0.891	0.796	0.745	0.751	0.782	0.790	1.0%
May	0.904	0.851	0.866	0.895	0.732	0.703	0.746	0.774	0.788	1.7%
June	0.888	0.857	0.864	0.892	0.730	0.694	0.752	0.778	0.781	0.4%
July	0.843	0.856	0.860	0.869	0.735	0.731	0.748	0.782	0.784	0.3%
Aug	0.827	0.858	0.866	0.883	0.742	0.748	0.749	0.782	0.777	-0.6%
Sept	0.859	0.851	0.869	0.879	0.749	0.744	0.754	0.771		
Oct	0.846	0.864	0.879	0.883	0.751	0.740	0.757	0.778		
Nov	0.855	0.851	0.883	0.880	0.761	0.747	0.771	0.783		
Dec	0.837	0.870	0.889	0.882	0.759	0.745	0.784	0.787		

Source: Hydrocarbons Colombia, Bloomberg

Figure 40: Colombia's Oil Production (mmb/d)



Source: Bloomberg

Oil: Colombia President Petro’s latest anti oil and gas public statements

For the past couple years, we have been consistent in our view that Colombia wouldn’t get back to their prior levels of oil production given President Petro’s key election promise was get rid of oil and gas as he was anti fossil fuels. There has been no change and last week, Petro reinforced his anti-fossil fuels in his speech last week by publicly calling out Ecopetrol. President who was in the audience. Last week, GSNotias reported “President Gustavo Petro urged Ecopetrol to carry out an “exorcism” to free itself from its focus on hydrocarbons and focus on artificial intelligence and clean energy. In his speech at the Economy for Life Fair, he addressed Ricardo Roa, president of the company, and emphasized the importance of transforming it so that it becomes a leader in sustainable technologies. “Ricardo (Roa), you who have been in the meetings, Ecopetrol has to do a kind of exorcism, take the oil out of its head and put artificial intelligence in it, so that it is a more powerful company,” he said.” And “In addition, he criticized recent discoveries of oil and gas fields, considering them more of a concern than a cause for celebration. He reiterated that the government’s central policy is to reduce the demand for gas in the country and move towards a future free of fossil fuels.” Our Supplemental Documents package includes the GSNotias report. [\[LINK\]](#)

President Petro’s latest anti oil view

Oil: Russia’s seaborne crude oil exports rise to highest since July

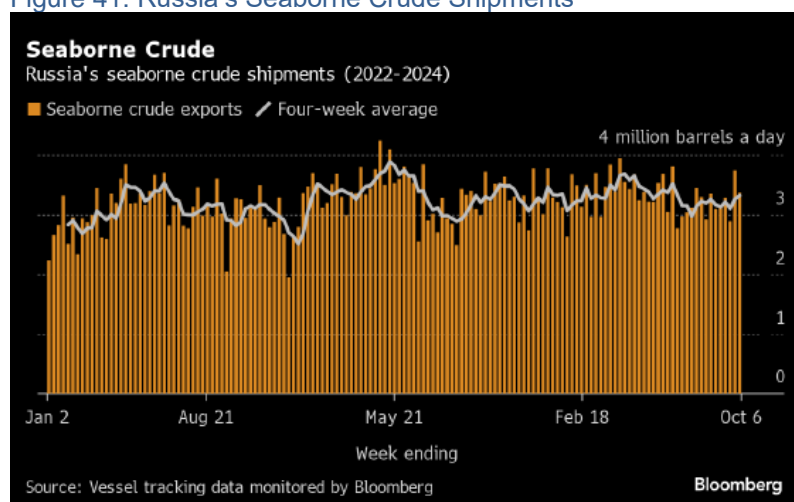
This week, the four-week average for Russia’s seaborne crude exports rose to the highest figures since July, continuing last week’s rise. It’s hard to know exactly how much Russian refining capacity is on or off and how much extra oil is freed up for export, however, as seasonal turnarounds and maintenance ramp up, there has been more oil available for export. Generally, when Russian refining capacity gets hit, it allows for more oil for export. The four-week average reached 3.32 mmb/d for the week to October 6. The increase

Russia’s seaborne crude exports

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persisted despite a drop in shipments from Baltic and Asian ports; Bloomberg reported “*Four-week average cargoes grew by about 60,000 barrels a day in the week to Oct. 6, reaching the highest since early July. Russia’s oil processing during most of September fell to the lowest since June amid works at plants nationwide, a trend that continued in the early days of this month*”. Russia made significant output cuts in May, June, and July; however they were still slightly above their promised targets. Notably, in last week’s OPEC JMMC, the committee confirmed the cooperation of Russia in complying with these cuts going forward. Our Supplemental Documents package includes the Bloomberg report.

Figure 41: Russia’s Seaborne Crude Shipments



Source: Bloomberg

Russia oil exports to China slightly below average April levels

It's been about five months where Russia's oil exports to China have been down. Russia oil shipments to China averaged 1.36 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 above report this week highlighted the four-week average of Russia oil shipments to China were down - 0.600 mmb/d to 1.310 mmb/d for the week ending October 6, up from last week's 1.370 mmb/d for the week of September 29. The week up to September 15 was the first figure to come in above 1.3 mmb/d in months. We have not seen any reports of pricing discount, but we have to believe Russia has given some sort of discount 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 [\[LINK\]](#) 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 -

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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 41: 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
September 1, 2024	1.23	1.73	0.00	0.00	0.00	2.96
September 8, 2024	1.27	1.67	0.00	0.00	0.00	2.94
September 15, 2024	1.39	1.67	0.00	0.00	0.00	3.06
September 22, 2024	1.27	1.59	0.00	0.08	0.00	2.94
September 29, 2024	1.37	1.53	0.00	0.21	0.00	3.11
October 6, 2024	1.31	1.49	0.00	0.23	0.10	3.14

Source: Vessel tracking data compiled by Bloomberg Bloomberg

Source: Bloomberg

Oil: Ukraine reviews Victory Plan with UK, France, Italy & Germany

We continue to be of the view that Zelensky is well aware he is in a critical time period to take advantage of Biden's support before Biden steps down and certainly as soon as possible as the election is still a toss up. So he was likely hugely disappointed that Biden cancelled his Europe trip this week so Zelensky wasn't able to hold his face-to-face meeting with all the major western leaders to discuss his Victory Plan. Yesterday, BBC reported "According to him [Zelensky's chief of staff], President Zelensky had very profound conversations with the leaders of the UK, France, Italy and Germany in recent days. "They understand everything, they understand why this plan is needed," he said. He added that the "victory plan" was "about creating conditions so that we can really move forward towards ending the war, ending the war on terms that would be acceptable, first and foremost, for Ukraine; this is a victory plan that is needed to continue to move faster towards implementing [Ukraine's] peace formula". Recall Zelensky had a face-to-face with Biden and Harris in late September wherein he reportedly reviewed his Victory Plan.

Zelensky's Victory Plan

Is there more to the story of Ukraine allowing foreigners to serve as officers?

We recognize the watch on Israel expected attack on Iran is capturing all the attention. It hasn't got any attention but, on Thursday, Ukraine passed a bill that allows foreigners to serve as officers in their international legion. This seems like a smart strategic move by Zelensky assuming that he can get foreigners who have been officers in the west in areas like missile deployment, radar, etc. ie. those items that allow Zelensky to say to Biden give us the permission to use and the long range weapons and associated required equipment like radar and, with these foreign officers, we can use them properly and right away. At a minimum, it will put Biden in

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a moment that he has to make a make it or break it decision. What isn't clear to us is if Ukraine already has long range missiles but those are only in a control situation by western advisors. So we wonder if Ukraine's move to have foreigners serve as officers will allow Biden to at least distance himself from US forces operating and holding the trigger for any long range attacks in Russia. The other reason we ask this issue is that it is a big wildcard for what Putin does if Ukraine starts using more advanced long range missiles to attack Russia.

Oil: Waiting on Israel's strike on Iran

As of our 7am MT news cut off, we have not seen any reports of Israel's promised retaliation on Iran. Israel has continued to bomb Lebanon and can do so more or less at will knowing Hezbollah doesn't have the capability to shoot down F-16s. It's much like Hamas in the Gaza, Israel can hit at will. But for the event the world is watching/waiting on, there is no specific update. It isn't clear if Israel would try to hit Iran with jets or missiles but, we have to believe Israel is trying to keep Iran confused as to where, when and how Israel will retaliate. Below are the key items linked to Israel's promised attack Israel.

Waiting on Israel attack on Iran

Netanyahu "historic opportunity that should not be missed" on Iran nuclear/oil

On Thursday, we tweeted [\[LINK\]](#) "WOW! "According to our political correspondent Moti Castel, the outgoing president demanded that Netanyahu not attack Iran's nuclear or oil facilities, while the latter replied that it was "a historic opportunity that should not be missed" and refused to commit to meeting his demands."

@Now14Israel [\[LINK\]](#)." Brent was +\$2.84 on Thursday on the Channel 14 (Israel news) report on what Netanyahu reportedly said to Biden on his call with Biden and Harris on Thursday. Channel 14 reported that Biden asked or demanded that Israel not target Iran's nuclear or oil facilities as "The US administration is concerned about the possibility that they will have to involve American soldiers in the war, but more so about the increase in oil and gas prices and Trump's use of the issue in the final stretch of the campaign." Then the comment that drove up oil, Channel 14 wrote "According to our political correspondent Moti Castel, the outgoing president demanded that Netanyahu not attack Iran's nuclear or oil facilities, while the latter replied that it was "a historic opportunity that should not be missed" and refused to commit to meeting his demands." Our Supplemental Documents package includes the Channel 14 report.

US officials tell NBC Israel focus is on Iran military & energy infrastructure

No one outside Netanyahu and his inner circle knows where and how Israel will hit Iran. Biden has reportedly been trying to push Netanyahu to not hit Iran's nuclear and oil facilities. As noted above, Netanyahu's reply to Biden was the this was an historic opportunity to hit Iran's nuclear and oil facilities. And the question for any anonymous officials or sources is if the information is accurate or if the information is being given to message something. That is always a risk so we try to using reputable news sources. Yesterday, we tweeted [\[LINK\]](#) "Israel strike on Iran "could happen at any time, U.S. and Israeli officials told NBC News, and could come during this weekend's Yom Kippur holiday. U.S. officials believe Israel has narrowed down what they will target in their response to Iran's attack, which these officials describe as Iranian military and energy infrastructure" @ckubeNBC #OOTT." If the unnamed

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US officials aren't trying to message something to Israel, the NBC report would suggest that Israel isn't going after Iran's nuclear facilities but Iran's oil facilities are on Israel's target list. Our Supplemental Documents package includes the NBC report.

10/06/24: Israel has duty to respond & plans “serious and significant” response

Here is what we wrote in last week's (Oct 6, 2024) Energy Tidbits memo. *“Israel has ‘the duty’ to respond & plans ‘serious and significant’ response to Iran. We have believe the risk premium in oil should stay at least for the very near term as Israel warns yesterday they are going to retaliate against Iran. And Israel's track record to date is that their military actions warnings are warnings on something to come and not a veiled threat. Earlier this morning, we tweeted [LINK](#) ‘Continued wildcard of Israel/Iran risk to #Oil #LNG #natgas. Netanyahu: Israel has duty and right to hit back at Iran for missile attack, will do so. @Lazar_Berman. IDF planning ‘serious and significant’ response to Iranian ballistic missile attack. @manniefabian #OOTT.’ Our tweet included two Times of Israel reports with clear messages. They reported [LINK](#) ‘The military on Saturday said that the response to the Iranian missile attack would be ‘serious and significant,’ and that it was devoting much of its time to planning it. On Wednesday, IDF Chief of Staff Lt. Gen. Herzl Halevi said that Israel would respond to the missile attack, vowing that the military could ‘reach and strike any point in the Middle East.’ Note the clear warning they say they can hit anywhere in Iran by saying they can ‘reach and strike any point in the Middle East’. They also reported [LINK](#) ‘Prime Minister Benjamin Netanyahu on Saturday repeated his promise to strike back against Iran for its ballistic missile attack earlier in the week, saying Israel has an obligation to retaliate and will do so. Speaking from the Kirya military headquarters in Tel Aviv, Netanyahu said: ‘No country in the world would accept such an attack on its cities and citizens, and Israel won't either. ‘Israel has the duty and the right to defend itself and respond to these attacks — and it will do so.’”*

07/24/24 Netanyahu told Congress it's not if but when Israel hits Iran nuclear

No one knows if Netanyahu would attack Iran's nuclear and/or oil facilities but it makes sense that he would consider to do so. And, in fact, Netanyahu told the US Congress in July that it was a matter of when, not if, Iran would hit Iran's nuclear facilities. On Thursday, we tweeted [LINK](#) *“Reminder. Netanyahu told congress it's not if but WHEN Israel takes action vs Iran nuclear program. See 🗨️ July 24 tweet. [LINK](#) #OOTT.”* Our July 28, 2024 Energy Tidbits memo was titled *“Netanyahu tells Congress it's not if but when Israel takes action to prevent Iran from developing nuclear weapons.”* Here is what we wrote in our July 28, 2024 Energy Tidbits memo. *“Netanyahu tells Congress it's not if but when Israel acts on Iran nuclear program. of our 7am MT news cut off, there hasn't been any direct retaliation on Iran for Iran's missile attacks on Israel this week. (i) On Wednesday, Biden was clear and said he wouldn't support an Israel attack on Iran's nuclear facilities. The White House posted the transcript of Biden's comments. The question was ‘Would you support an attack on the — would you support an attack on Iran's nuclear sites by Israel?’ Biden replied ‘The answer is no. And I think there's things — we'll be discussing with the Israelis what they're going to do, but they — every- — all seven of us agree that they have a right to respond, but they should respond in proportion.’ (ii) But we remind*

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Netanyahu told Congress on July 24 that it was question of when not if Israel would attack Iran's nuclear facilities. And we have been regularly writing that we don't if Netanyahu will use any subsequent counter attack as an opportunity to go after Iran's nuclear program. Here is what we wrote in our July 28, 2024 Energy Tidbits memo on Netanyahu's warning to congress. "We understand the focus was on Israel vs Hamas, but we are still surprised that Netanyahu's clear warning to Congress on Iran's nuclear program didn't get much attention. On Wednesday, we tweeted [LINK](#) "Netanyahu tells congress. it's not if but when Israel takes action vs Iran nuclear program! Overlooked geopolitical & #Oil wildcard/risk! 'And one more thing. When Israel acts to prevent Iran from developing nuclear weapons, nuclear weapons that could destroy Israel and threaten every American city, every city that you come from, we're not only protecting ourselves. We're protecting you." Netanyahu to congress. See 📌 07/21 tweet. Blinken: Iran now 1 or 2 weeks from breakout capacity to produce nuclear material for a weapon. Thx @TimesofIsrael #OOTT." Netanyahu seemed clear it was a question of when they take action against Iran's nuclear program, not if. We don't think anyone knows how this would play out but it doesn't seem to be an issue on geopolitical risk or oil risk screens. As a reminder, the Biden Admin has been consistent that they won't let Iran develop a nuclear weapon. Israel's bar is lower as they won't let Iran have the potential to develop a nuclear weapon and reaching break out capability would appear to do so."

07/19/24: US says Iran is 1 or 2 weeks from breakout to produce fissile material

Here is another item from our July 28, 2024 Energy Tidbits memo. "The reason why we were surprised US media and politicians didn't make more of Netanyahu's July 24 warning on Iran nuclear program is Blinken warned two weeks prior to that that Iran was 1 or 2 weeks from reaching breakout potential for nuclear capability. Here is what we wrote in our July 21, 2024 Energy Tidbits memo. "Earlier this morning, we tweeted [LINK](#) "Go Time for Israel? Overlooked major geopolitical and #Oil risk factor! Blinken: Iran now 1 or 2 weeks from breakout capacity to produce nuclear material for a weapon. If Israel won't let Iran reach breakout potential, when will it take action? #OOTT." An overlooked geopolitical risk item is Iran's nuclear advancement and when will Israel do something to prevent Iran from reaching breakout. It didn't get much attention but, on Friday, Secretary Antony Blinken spoke at the Aspen Security Forum Fireside Chat and he highlighted how close Iran is to having the capacity to produce fissile material for a nuclear weapon. Blinken said "Iran, because the nuclear agreement was thrown out, instead of being at least a year away from having the breakout capacity of producing fissile material for a nuclear weapon, is now probably one or two weeks away from doing that. Now, they haven't developed a weapon itself --." We weren't surprised by the progress but surprised by how he framed it as he made it sound like the US didn't really have a good plan to stop Iran rather they had an idea and they tested it. Blinken noted the mistake of the Trump administration in throwing out the JCPOA so Biden admin had to find a way to put Iran back in a box "so we were testing the proposition about whether we could at least create something that looked like that". The reason why we were surprised by his framing is that that was 3.5 years ago and he is effectively admitting by the progress that the "test" didn't work. And then he continued the administration line that "Second, we of course have been maximizing pressure on

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Iran across the board. We've imposed more than 600 sanctions on Iranian persons, entities of one kind or another. We haven't lifted a single sanction." As noted earlier in the memo, there may be sanctions but Iran has cranked up its oil revenues and exports because the Biden administration hasn't really enforced sanctions ie. sanctions need to be enforced to be effective."

Oil: Israel was thinking ahead when it hit southern Syria radar/missile stations

We hadn't linked last week's Israel attack on some southern Syria radar/missile stations to Israel potential strike on Iran until we were reminded of this by one of our Twttier/X followers. And we replied "Agreed, the drone strikes in Southern Syria on the two radar stations west of Suwayda and one in Daraa province are timely in light of Netanyahu's comments." It makes sense that Israel would want to knock out southern Syria radar stations. It would still mean Israel likely have to go over some of Iraq land but it would significantly cut the distance if Israel went over southern Syria. At a minimum, it would cause Iran to have to prepare for the risk an air attack.

Israel hit Syria's radar/missile stations

Figure 42: Middle East map



Source: Google Maps

Oil: Iran FM "we have no red lines in defending our people and interests"

Earlier this morning, we tweeted [\[LINK\]](#) "Iran says no red lines in defending. Iran' FM "While we have made tremendous efforts in recent days to contain an all-out war in our region, I say it clearly that we have no red lines in defending our people and interests." Plea to US to try stop Israel? #OOTT." Our tweet forwarded the then just posted tweet this morning by Iran Foreign Minister with his quote on no red line. We don't think it is a coincidence that he tweeted this in light of the reports, like the NBC report above, that Israel is planning to go after Iran's military and oil facilities. The last thing Iran wants is something that could hurt their major source of revenue. As noted below, Platts estimates Iran loadings have been 1.7 mmb/d in 2024, which, based using \$60/b, would be \$37.2 billion a year. We recognize the no red lines is meant to be a warning to Israel but we have trouble believing it will impact Israel's decision on how, when and where to retaliate. Rather we tend to think it is more of a plea to the US to push Israel hard to try to minimize any Israel attack.

Iran says no red lines

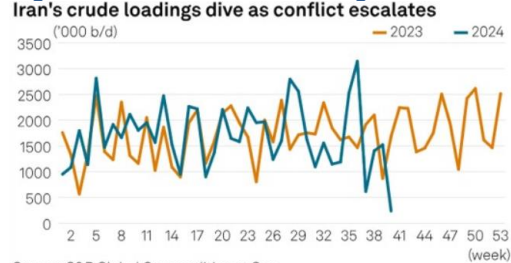
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Oil: Iran sees risk to Israel attack, oil loadings down to only 237,000 b/d in Oct 6 week

At least for the week ended Oct 6, it looks like Iran sees real risk to an Israel attack on its oil facilities including its major Kharg Island export facilities. On Wednesday, we tweeted [\[LINK\]](#) “Iran sees real risk Israel could attack its #Oil facilities. Iran’s oil loadings down to 0.237 mmb/d for Oct 6 week vs 1.700 mmb/d average in 2024. Great export loading graph & Iran oil infra map courtesy of @RobPana @AresuEqbali @SPGlobal #OOTT [\[LINK\]](#).” Our tweet included the Platts Iran’s crude oil loadings that noted Iran’s oil loadings were down to only 0.237 mmb/d for the Oct 6 week, which is only 14% of the 1,700 mmb/d average for 2024. Our tweet also included the below Platts map of Iran’s oil infrastructure.

Iran oil loadings down big

Figure 43: Iran’s crude loadings dive as conflict escalates



Source: S&P Global Commodities at Sea

Source: Platts

Figure 44: Iran’s oil infrastructure



Source: S&P Global Commodity Insights, OPEC, EIA; Credit: CI Content Design. Copyright © 2024 by S&P Global Inc. All rights reserved.

Source: Platts

Oil: Iran warns Saudi oil facilities at risk if Saudis let Israel use Saudi air space

On Thursday, we tweeted [\[LINK\]](#) “During meetings this week, Iran warned Saudi Arabia it could not guarantee the safety of the Gulf kingdom’s #oil facilities if Israel were given any

Iran warns Saudi et al on helping Israel

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assistance in carrying out an attack, a senior Iranian official and an Iranian diplomat told Reuters. Ali Shihabi, a Saudi analyst close to the Saudi royal court, said: "The Iranians have stated: 'If the Gulf states open up their airspace to Israel, that would be an act of war'." Thx @samianakhoul #OOTT [\[LINK\]](#)." What caught our interest in the early reporting was that the Saudi Crown Prince MBS met with Iran's Foreign Minister and that picture was prominently featured in the Saudi Press Agency reporting. It isn't the norm for MBS to meet ministers as opposed to heads of state. There wasn't much from the Saudi Press Agency and Iran state media reporting to raise our attention. However, the Reuters report on Thursday noted that Iran's warning to Saudi Arabia to not let Israel use its air space or else the Saudi oil facilities could be at risk. That seemed to be a clear warning to Saudi or any other Gulf States. Reuters wrote "During meetings this week, Iran warned Saudi Arabia it could not guarantee the safety of the Gulf kingdom's oil facilities if Israel were given any assistance in carrying out an attack, a senior Iranian official and an Iranian diplomat told Reuters. Ali Shihabi, a Saudi analyst close to the Saudi royal court, said: "The Iranians have stated: 'If the Gulf states open up their airspace to Israel, that would be an act of war'." The diplomat said Tehran had sent a clear message to Riyadh that its allies in countries such as Iraq or Yemen might respond if there was any regional support for Israel against Iran. A potential Israeli strike was the focus of talks on Wednesday between Saudi de facto ruler, Crown Prince Mohammed bin Salman, and Iranian Foreign Minister Abbas Araqchi, who was on a Gulf tour to rally support, Gulf and Iranian sources said." Our Supplemental Documents package includes the Reuters report.

Figure 45: Saudi Crown Prince meets with Iran's Foreign Minister



Source: Saudi Press Agency

Oil: Houthis hit a petroleum products tanker with drone in Red Sea

The reality of the Houthis attacks is that they continue disrupt shipping but their attacks on tankers and ships don't really move oil prices. This week, the Houthis hit a petroleum products tanker. The Maritime Executive reported "In the latest phase of the attacks on merchant ships, the Houthi militants continue to target tankers as well as vessels that they say are maintaining operations with Israel. They are claiming two new attacks, although only one has been reported to the UK Maritime Trade Operations. The confirmed attack came against a product tanker Olympic Spirit (24,000 dwt) between October 9 to 10. The vessel was southbound in the Red Sea reporting it was bound for Oman when it came under attack. It was reported to be 70 miles southwest of Hodeidah when it was struck by an unknown projectile. There were reports of minor damage but no injuries to the crew. The master reported a second attack about 40 minutes later with two additional projectiles which they

Houthis hit an oil tanker

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said came close to the ship. It was followed by a third explosion later also close to the vessel. Some reports indicate the vessel was hit up to four times. Houthi spokesperson Yahya Saree released a statement later Thursday reporting that they had launched a total of 11 ballistic missiles and two drones at the tanker which he called an "American oil tanker." He claimed the vessel was hit and severely damaged."

Oil: Maersk/Hapag-Lloyd to continue reroute via Cape of Good Hope at least until 2025

The Houthis hitting tankers may not be adding any risk premium to oil prices but it continues to make the major shipping companies continue rerouting away from the Red Sea to via the Cape of Good Hope. On Wednesday, we tweeted [\[LINK\]](#) "#Houthis attacks causing ships to reroute from Red Sea to Cape of Good Hope expected to continue at least into 2025.

👉 "There is currently no indication that we can expect the situation in the Red Sea to get better or resolved in the short term." Maersk & Hapag-Lloyd. #OOTT." Our tweet included the Maersk/Hapag-Lloyd release that said "There is currently no indication that we can expect the situation in the Red Sea to get better or resolved in the short term. However, there is also still some time until the phase in of the Network of the Future in February 2025, and the situation remains highly dynamic." Our Supplemental Documents package includes the Maersk release.

Maersk keeps reroute via Cape of Good Hope

Oil: Libya oil + condensate production of 1.279 mmb/d is almost back to Aug 1 levels

As expected, it's been a pretty quick restoration of Libya oil production following the agreement from all sides on the new mgmt at the central bank. And that means the Libya National Oil Corporation has been posting production updates. And production is almost back to Aug 1 levels. 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." Our tweet included the below Libya NOC production updates from Oct 12 and Aug 1.

Libya oil + condensate production 1.279 mmb/d

Figure 46: Libya oil, condensate & natural gas production, Oct 12 and Aug 1



Source: Libya National Oil Corporation

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Oil: China markets are back below Golden Week

The big market story has been the market pulling back on the huge enthusiasm for the China stimulus. Markets are still way more positive on China than a month ago, but have pulled back on the huge enthusiasm. China was closed for a week around Golden Week so didn't reopen until Tuesday Oct 8. The CSI 300 gave up and more all the initial gains when the stock markets reopened. On the last trading before Golden Week, the CSI 300 was 4017.85 on Sept 30. The CSI 300 popped up +5.9% on the Oct 8 reopening to close at 4256.10 on Oct 8. But the CSI 300 closed at 3887.17 on Friday to give up all plus more the gains post Golden Week.

CSI 300 back below Golden Week levels

Figure 47: CSI 300



Source: Bloomberg

Oil: China Finance Minister Sat briefing underwhelms

It will be interesting to see how the CSI 300 opens tonight post what was a highly anticipated press conference briefing by China Finance Minister Lan Fo'an yesterday. As of our 7am MT news cut off, we have not seen any global stock analyst views if this will be positive or negative to China stock markets. But, reading the various global media comments, there seems to be a consensus view that it was very disappointing press briefing. Australia's Financial Review started off "China's new stimulus underwhelms as 'big fat' numbers missing Tokyo | China's latest efforts to ramp up support for the stuttering economy have failed to win over economists and other experts, who warned hopes of a "big fat" injection of stimulus funding to shore up growth were fading." Bloomberg started off "China Puts Investor Patience to Test as Key Briefing Underwhelms. China's highly anticipated Finance Ministry briefing on Saturday lacked the firepower that equity investors had hoped for, indicating that the volatility that's gripped the market following a world-beating rally will likely extend. While Finance Minister Lan Fo'an promised more support for the struggling property sector and hinted at greater government borrowing to shore up the economy, the briefing didn't produce a headline dollar figure for fresh fiscal stimulus that the markets had sought. A lack of new incentives to boost consumption, which has been a weak link in the economy, is another reason why traders may feel disappointed. The ministry "tried its best," but there is a large gap between what was announced and what the market was expecting, said Shen Meng, a director at Beijing-based boutique investment bank Chanson & Co. "So the overall sentiment for investors is negative." Reuters started off "China's stimulus message leaves investors wanting. China's highly anticipated announcement of financial stimulus plans on Saturday was big on intent but low on the measurable details that investors need to ratify their recent return to the world's second-biggest stock market."

China Finance Minister briefing

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Oil: Fake news or did Chinese step up new home buying over Golden Week?

We probably won't see any data for another month or more to try to sort thru if we are seeing the first steps in a bottoming of the China home market or was just China wanted to message buyers have come back to buy houses as a confidence builder to the Chinese and to markets. Chinese media reported on the big pickup in prospective buyers. On Monday, we tweeted [\[LINK\]](#) "*1st step to China home values bottoming post 15 mths of declines? Chinese stepped up home buying during National Day weeklong holidays. See 📌 @krystalchia. Beijing: expressions of interest double in Oct 1-3. Shenzhen, new homes sales jumped >10 times Oct 1-6. See 09/13 tweet, most important asset for Chinese consumers, its home values declined MoM for >15 mths. #OOTT.*" Bloomberg reported "*In cities with residential projects running promotions, visits by prospective homebuyers climbed at least 50% from a year earlier, CCTV news reported, citing the Ministry of Housing and Urban-Rural Development. About 130 cities across 20 provinces have rolled out various perks to entice buyers. Beijing city saw expressions of intent to buy new homes double in the first three days of October, the state broadcaster said. In Shenzhen, sales of new homes jumped more than 10 times in the first six days of the month, while used-home transactions more than tripled, Caillan reported, citing Shenzhen Centaline Property figures. Real estate agents in Shanghai rolled out a "no closing hour" policy after visitors increased, while some buyers in Shenzhen even paid deposits for apartments without viewing them in person, according to the Securities Times. "It seems like the number of visitors to showrooms and transactions in first-tier cities has risen," Citic Securities Co. analysts including Chen Cong wrote in a report Monday. "Price declines in these cities have a chance of stopping this year."*" Our Supplemental Documents package include the Bloomberg report.

Are Chinese buying homes?

China home prices keep losing value, 15 mths for new & 16 mths for old,

Our Monday tweet on the increased Chinese home buyer interest included our Sept 13 tweet on China new home and 2nd hand home values for August. The Sept data is to be released on Wednesday. Here is what we wrote in our Sept 15, 2024 Energy Tidbits memo. "*China home prices keep losing value, 15 mths for new and 16 mths for old. The big negative to the Chinese consumer is that they keep losing value in their homes, their biggest asset value keeps decreasing month after month. On Friday, we tweeted [\[LINK\]](#) "No wonder Chinese consumer is still on sidelines. Their most important asset, home values keep going lower. New home prices: 15th straight MoM % drop. Aug -0.73%. July -0.65%. June -0.67%. 2nd hand home prices: 16th straight MoM % drop. Aug -0.95%. July -0.80%. June -0.85%. Thx @business #OOTT."* Just like in North American, the home is the most important asset for most Chinese is their home and all the Chinese have seen is the value of their homes decline month after month with no end in sight. In Aug, Chinese new home and 2nd home prices were down MoM vs July. China new home prices were -0.73% MoM and that is the 15th consecutive month of MoM declines. China 2nd hand home - 0.95% MoM and that is the 16th consecutive MoM decline. prices Below are the Bloomberg graphs with the July data."

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Figure 48: China new home prices MoM % change incl Aug 2024



Source: Bloomberg, National Bureau of Statistics

Figure 49: China 2nd hand home prices MoM % change incl Aug 2024

Source: Bloomberg, National Bureau of Statistics

Oil: Accor says Chinese are traveling but spending less

It looks like we are seeing a net increase in Chinese spending on travel. The Chinese consumer is travelling more, which is a good indicator that they are coming off the sidelines. But they are spending less so the Chinese consumer is still a little cautious. They are travelling more but spending less. One of the big holdbacks to a recovery in the Chinese economy has been that the Chinese consumer has been cautious. One of the key indicators we follow is how Chinese have been adding to savings at record amounts. But, based on their travel data, Accor sees increasing travel by the Chinese but they are spending less. We see this as likely being a net positive ie. there is a net increase in spending on travel. (i) On Monday, we tweeted [\[LINK\]](#) "Positive China indicator. Chinese consumer sentiment for travel is up post stimulus. "There's no question" "people have money, they have disposable income, their saving, their savings right now are huge" says @Accor Greater China CEO. Key to recovery if Chinese consumers start to spend their record savings. See 📌 09/21 tweet. #OOTT Thx @DavidInglesTV @YvonneManTV." Our tweet included a clip of the CEO where he also said that "outbound [travel] was surging" "as long as there are tickets available, people are purchasing them". (ii) On Tuesday, we tweeted [\[LINK\]](#) "Chinese consumers are travelling & out spending but spending less. "Golden Week is always a great time for celebration ... we saw record volumes ... some of the challenging side of that is spending is necessarily not the same as last year which was a peak year for hotel rates" @Accor Greater China CEO. Key to China recovery is getting consumer to spend their record savings. See 📌 09/21 tweet. #OOTT Thx @DavidInglesTV @YvonneManTV." Our tweet

**Cautious
Chinese
consumer**

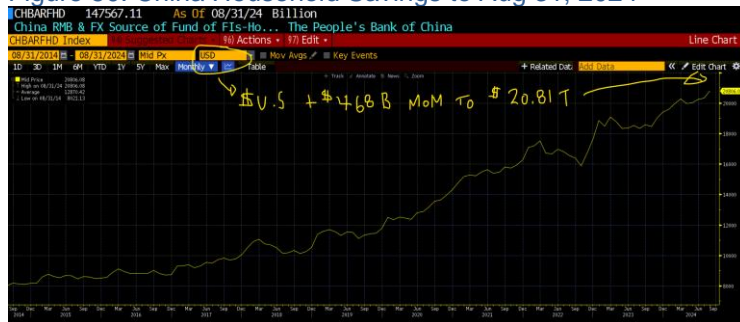
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included the quote from Accor Greater China CEO who was clear the Chinese are travelling more but spending less.

Chinese household savings record MoM \$468b increase in Aug

Our Accor tweet included Sept 21 tweet on Chinese having record savings in August. Here is what we wrote in our Sept 22, 2024 Energy Tidbits memo on the Sept 21 reporting of record MoM increase in Chinese household savings in Aug. Here is what we wrote in our Sept 22 memo. *“Chinese household savings record MoM \$468b increase in Aug. Yesterday, we tweeted [\[LINK\]](#) “Big negative China indicator. Chinese consumers aren’t out spending. Added record +\$468b MoM to savings to \$20.81t in Aug. MoM: Aug 24: +468b. Aug 23: -\$188b. Aug 22: -\$236b. Aug 21: +\$3b. Aug 20: +\$294b. Aug 19: -\$398b. Aug 18: +\$26b. Aug 17: +22b. Aug 16: +\$4b. Thx @business #OOTT.” This was a record by far for largest MoM increase in savings at +\$468 billion MoM in Aug and it compares against the last two Aug that saw big MoM decreases in savings with Aug 23 -\$188b and Aug 22 -\$236b. One of the biggest reasons for the weak China recovery is that consumers have been on the sidelines and therefore keep adding to savings instead of spending. The increasing savings fits with the commentary that Chinese consumers are not yet confident in economic recovery to start to spend more. And they are also feeling poor with stock markets down (as noted above) and with their primary asset, house values down MoM every month for well over a years. No wonder the Chinese consumer wants to save money. Chinese household savings were +468b MoM to end Aug at \$20.81t. This is a huge number that works out to ~\$325 added to saving for each Chinese citizen, assuming a population of 1.425b. below is the Bloomberg household saving graph that was attached to our tweet.”*

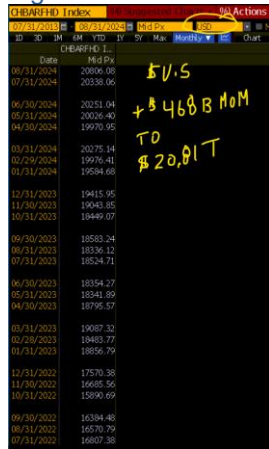
Figure 50: China Household Savings to Aug 31, 2024



Source: Bloomberg

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Figure 51: China Household Savings



Source: Bloomberg

Oil: Positive across-the-board MoM China steel indicators

We recognize it is still very early days on the new China stimulus and there are still details to come and that China may have to do more to keep any momentum. Steel is always viewed as a key indicator for economies. On Friday, BloombergNEF posted its “Industrial Metals Monthly”, which was subtitled “Stimulus Boost Short-Lived” This is a good BloombergNEF monthly report for how industrial metals give insight on China. And we agree that it’s only the early days off the stimulus and the key will be all the details on the stimulus and if China will keep following thru with more stimulus if needed. On Friday, we tweeted [LINK](#) “Positive initial reaction to China stimulus. Across-the-board positive MoM China steel indicators. Steel industry PMI, Output, New Orders, New Export Orders & Raw Materials Inventories indicators all up. Finished Goods Inventories indicator down MoM. Great recap table @BloombergNEF #OOTT.” No surprise, the steel industry looks to have had a strong initial reaction to the China stimulus. And the key will be if China can continue positive stimulus momentum on the economy. But so far, the steel industry indicators were all positive MoM with increases to the Steel Industry PMI, Output, New Orders, New Export Orders and raw materials inventories. And also positive was the MoM decline in Finished Goods Inventories. As a reminder, the across the board positive MoM indicators in Sept is the exact opposite of the across the board negative MoM indicators in Aug. Our tweet included the below BloombergNEF chart.

Positive MoM China steel indicators

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Figure 52: China's steel industry activity

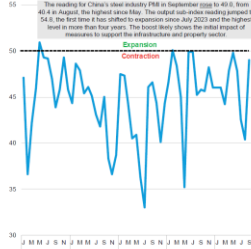
China's steel industry activity

Output sub-index surges to expansion, hitting highest level since July 2020

China steel industry PMI breakdown

Indicator	Sept 24	Aug 24	Jul 24	Jun 24	May 24	Apr 24	Mar 24	Feb 24
China Steel industry PMI	49.0	49.4	42.5	47.8	49.8	47.9	44.2	46.0
Output	54.8	34.9	38.5	45.9	50.6	49.7	37.7	45.2
New orders	47.2	38.5	40.3	49.4	49.6	47.4	44.4	41.4
New export orders	44.0	41.3	47.0	46.0	52.2	53.0	54.3	47.0
Finished goods inventories	45.7	50.6	54.4	47.4	43.4	34.9	38.4	52.8
Raw materials inventories	43.7	49.3	44.2	48.0	50.3	46.7	44.0	53.4

China steel industry PMI



Source: BloombergNEF, National Bureau of Statistics (NBS), China Federation of Logistics and Purchasing, Jichen New Line, Bloomberg News. Note: China's purchasing managers' index for the steel industry is a composite index based on the diffusion indexes for the five major components with the following weightings: new orders (20%), output (20%), employment (20%), supplier delivery times (15%), and inventories (15%). An index reading above 50 indicates an expansion of the steel industry, while below 50 suggests contraction.

Source: BloombergNEF

Oil: Baidu China city-level congestion drops significantly for Golden Week holiday

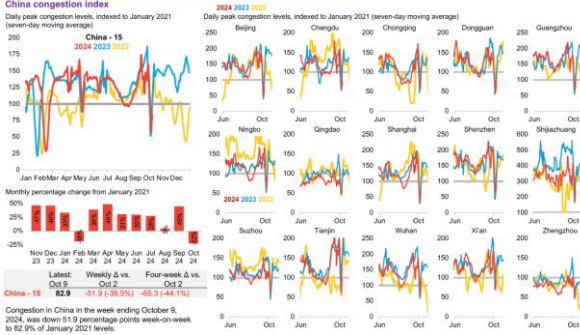
In our Sept 29, 2024, Energy Tidbits memo we highlighted China's Golden Week holidays, and to expect a drop in China city-level road congestion. On Friday, BloombergNEF posted its China Road Traffic Indicators Weekly Oct 10 report, which includes the Baidu city-level road congestion for the week ended Oct 9. Golden Week is Oct 1 thru Oct 7 and we saw a significant fall in congestion during the period, exceeding last weeks -5.9% WoW drop. This week, BloombergNEF reported Baidu city-level road congestion was down by -38.5% WoW to 82.9% of Jan 2021 levels. The WoW fall was expected as the week was impacted by the national holiday, Golden Week, which sees people leave the cities for holidays. October MTD saw average daily peak congestion down -40.0% YoY when compared to October 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 "Congestion plummets during Golden Week". Below are the BloombergNEF key figures.

China city-level road congestion drops

Figure 53: China city-level road congestion for the week ended October 9, 2024

China's city-level road congestion

Traffic plunges during the Golden Week holiday



Source: Bloomberg

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Figure 54: China city-level road congestion for the week ended October 9, 2024

	Indexed to January 2021 = 100													Indexed to the same month in previous year = 100												
	Oct 23	Nov	Dec	Jan 24	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Oct 23	Nov	Dec	Jan 24	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
China-15	130	146	146	133	81	138	148	130	129	127	104	144	77	126	155	187	151	55	100	114	110	96	104	87	94	60
Beijing	159	167	161	145	73	151	169	143	141	146	123	171	72	149	214	275	135	42	92	113	103	93	106	90	95	45
Chengdu	121	123	116	120	68	134	140	125	119	126	98	135	70	117	131	124	144	51	106	107	115	91	116	85	104	58
Chongqing	112	122	116	111	80	112	138	122	129	119	75	119	78	130	365	228	158	64	101	125	125	112	113	85	94	70
Dongguan	130	141	144	121	52	129	138	138	138	126	103	141	67	109	104	156	288	41	99	127	120	108	108	101	96	51
Guangzhou	160	178	181	161	76	171	195	174	170	162	158	179	88	146	317	307	199	45	99	127	127	107	107	106	98	55
Ningbo	118	146	142	127	79	144	146	120	128	121	94	140	84	95	101	127	203	59	115	140	121	112	106	81	110	71
Qingdao	92	99	103	78	51	71	78	72	75	91	80	87	57	96	124	195	175	62	94	97	98	87	95	76	82	62
Shanghai	127	155	150	115	79	146	152	130	132	119	93	151	60	115	93	172	156	54	98	117	105	101	98	76	93	47
Shenzhen	151	169	170	149	68	160	164	172	163	162	155	184	90	108	97	156	189	41	96	120	132	99	113	106	102	60
Shijiazhuang	343	491	451	484	350	400	390	311	329	334	368	364	215	120	459	296	156	69	93	85	81	77	89	70	75	63
Suzhou	108	127	136	118	79	134	137	113	112	105	96	115	74	91	88	157	171	60	111	130	117	97	99	88	88	69
Tianjin	150	169	190	133	85	160	165	145	132	106	98	186	91	109	137	244	136	60	114	121	119	100	96	86	107	61
Wuhan	143	159	159	167	105	174	171	146	144	141	117	168	100	199	192	187	151	55	94	100	97	85	95	86	88	70
Xian	135	156	155	152	98	141	147	129	123	135	107	145	90	149	139	152	132	66	110	112	105	91	110	97	96	67
Zhengzhou	80	97	108	110	85	95	96	80	78	86	66	91	59	171	284	164	119	76	98	102	90	82	98	72	86	73

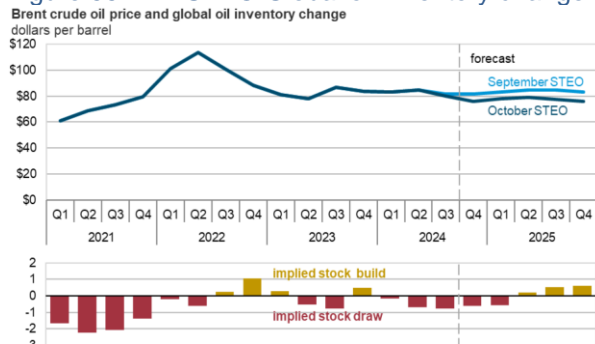
Source: Bloomberg

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

On Tuesday, the EIA STEO also included their forecast for changes in global oil stocks [\[LINK\]](#). (i) The EIA forecasts OPEC production in October 2024 at 31.89 mmb/d and for Dec 2025 at 32.18 mmb/d. It isn't 100% clear but it seems the EIA is building a return of some, but not all of the voluntary OPEC+ cuts. The EIA forecasts OPEC production is 32.02 mmb/d in Q4/24 is +0.70 mmb/d YoY to 32.72 mmb/d in Q4/25. The EIA forecasts OPEC+ is 42.37 mmb/d in Q4/24 is +1.21 mmb/d YoY to 43.58 mmb/d in Q4/25. The EIA only said "We also assess that OPEC+ producers are likely to continue to limit production below recently announced targets in 2025." So we don't know how much of the voluntary cuts are coming back on. (ii) The EIA forecasts continued global stock declines thru Q1/25. The EIA forecasts global oil stocks declined by -0.80 mmb/d in Q3/24 with continued declines in Q1/25 before returning to oil stocks build in H2/25. The EIA wrote "OPEC+ production cuts continue to mean less oil is being produced globally than is being consumed, and oil is being withdrawn from inventories. We estimate that global oil inventories fell by 0.8 million barrels per day (b/d) in the third quarter of 2024 (3Q24), and we expect inventories will fall by 0.6 million b/d through 1Q25. As a result, we expect Brent prices will rise from \$74/b in September to average \$79/b in 1H25, which is about \$6/b lower than in last month's STEO".

EIA global oil stock draws thru Q1/25

Figure 55: EIA STEO Global oil inventory change



Source: EIA

Oil: Vortexa crude oil floating storage est 57.56 mmb at Oct 11, +10.52.08 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

Vortexa floating storage

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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 Oct 5 at 9am MT. (i) Yesterday, we tweeted [LINK](#) "Vortexa crude #Oil floating storage +10.52 mmb WoW but still only 57.56 mmb at Oct 11. Only been 6 wks <60 mmb since Covid. 4 of which were in last 7 wks. Oct 4 only revised +2.54 mmb to 47.05 mmb, still the only wk <50 mmb since 09/17/19. Thx @vortexa @business #OOTT." Floating storage has been low for the last two months. (ii) As of 9am MT Oct 12, Bloomberg posted Vortexa crude oil floating storage estimate for Oct 11 at 57.56 mmb, which was +10.52 mmb WoW (rounding of 0.1 mmb) vs revised up Oct 4 of 47.05 mmb. Note Oct 4 of 47.05 mmb was revised +2.54 mmb vs 44.51 mmb originally posted at 9am MT on Oct 5. Only been six weeks since Covid below 60 mmb, four of which were in the last seven weeks. (iii) As a reminder, Oct 4, even at the revised up of 47.05 mmb, is the only week below 50 mmb since Covid with the last time being Sept 27, 2019 at 44.29 mmb. (iv) Revisions. The revisions were modest in any week with the largest being +2.54 mmb to Oct 4 and -2.30 mmb to Sept 13. The rest were very small + or – revisions. Here are the revisions for the past seven weeks compared to the estimates originally posted on Bloomberg at 9am MT on Oct 5. Oct 4 revised +2.54 mmb. Sept 27 revised +0.55 mmb. Sept 20 revised -0.82 mmb. Sept 13 revised -2.30 mmb. Sept 6 revised -0.66 mmb. Aug 30 revised -0.26 mmb. Aug 23 revised -1.55 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 58.76 mmb vs last week's then seven-week rolling average of 60.05 mmb. This is the only time 7-week moving average has been below 60 mmb. (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) Oct 11 estimate of 57.56 mmb is -72.05 mmb vs the 2023 peak on June 25, 2023 of 129.61 mmb. Recall Saudi Arabia stepped in on July 1, 2023 with its voluntary cuts. (ix) Oct 11 estimate of 57.56 mmb is -8.40 mmb YoY vs Oct 13, 2023 at 65.96 mmb. Below are the last several weeks of estimates posted on Bloomberg as of 9am on Oct 12, Oct 5, and Sept 29.

Figure 56: Vortexa Floating Storage Jan 1, 2020 – Oct 11, 2024, posted Oct 12 at 9am MT



Source: Bloomberg, Vortexa

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Figure 57: Vortexa Estimates Posted 9am MT on Oct 12, Oct 5, and Sept 28

Posted Oct 12, 9am MT					Oct 5, 9am MT					Sept 28, 9am MT				
ID	3D	1M	6M	YTD	ID	3D	1M	6M	YTD	ID	3D	1M	6M	YTD
Fr	10/11/2024			57563	Fr	10/04/2024			44513	Fr	09/27/2024			61486
Fr	10/04/2024			47047	Fr	09/27/2024			64593	Fr	09/20/2024			60182
Fr	09/27/2024			65143	Fr	09/20/2024			60693	Fr	09/13/2024			63920
Fr	09/20/2024			59874	Fr	09/13/2024			63611	Fr	09/06/2024			61061
Fr	09/13/2024			61309	Fr	09/06/2024			61403	Fr	08/30/2024			58513
Fr	09/06/2024			60742	Fr	08/30/2024			59871	Fr	08/23/2024			65966
Fr	08/30/2024			59621	Fr	08/23/2024			65740	Fr	08/16/2024			76765
Fr	08/23/2024			64194	Fr	08/16/2024			77272	Fr	08/09/2024			75124
Fr	08/16/2024			76071	Fr	08/09/2024			76091	Fr	08/02/2024			65290
Fr	08/09/2024			75550	Fr	08/02/2024			66097	Fr	07/26/2024			90792
Fr	08/02/2024			63168	Fr	07/26/2024			90339	Fr	07/19/2024			88232
Fr	07/26/2024			88333	Fr	07/19/2024			88421	Fr	07/12/2024			84604

Source: Bloomberg, Vortexa

Oil: Vortexa crude oil floating storage WoW changes by regions

Bloomberg also posts the 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 Oct 4 was revised +2.54 mmb with the only revision to note being Other revised +1.73 mmb. (ii) Total floating storage at Oct 11 of 57.56 mmb was +10.51 mmb WoW vs the revised up Oct 4 of 47.05 mmb. The major WoW changes were Asia +6.33 mmb and Europe +2.88 mmb. (iii) Oct 11 estimate of 57.56 mmb is -72.05 mmb vs the 2023 high on June 23, 2023 of 129.61 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 -49.04 mmb and Other -21.06 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 Oct 4 that was posted on Bloomberg at 9am MT on Oct 5.

Vortexa floating storage by region

Figure 58: Vortexa crude oil floating by region

Region	Original Posted			Recent Peak		
	Oct 11/24	Oct 4/24	WoW	Oct 4/24	Jun 23/23	Oct 11 vs Jun 23/23
Asia	24.44	18.11	6.33	17.39	73.48	-49.04
North Sea	0.73	0.95	-0.22	0.98	5.23	-4.50
Europe	5.77	2.89	2.88	3.42	6.01	-0.24
Middle East	6.00	7.40	-1.40	7.03	6.76	-0.76
West Africa	10.92	8.89	2.03	8.89	7.62	3.30
US Gulf Coast	1.27	1.60	-0.33	1.32	1.02	0.25
Other	8.43	7.21	1.22	5.48	29.49	-21.06
Global Total	57.56	47.05	10.51	44.51	129.61	-72.05

Vortexa crude oil floating storage posted on Bloomberg 9am MT on Oct 12
Source: Vortexa, Bloomberg

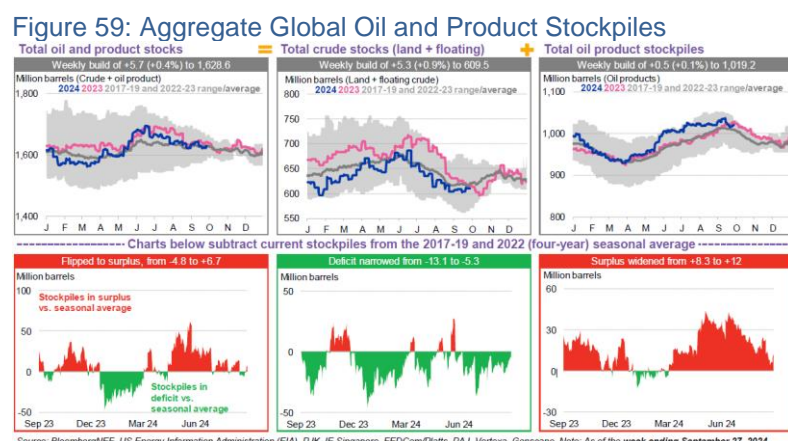
Oil: Global oil & product stocks flipped to surplus of +6.700 mmb from -4.800 mmb

On Tuesday, BloombergNEF posted its “Oil Price Indicators” weekly, which provides good charts depicting near-term global oil demand and supply indicators. (i) Note BloombergNEF uses different periods to determine the surplus/deficit, sometimes using a four-year average for 2017-2019 + 2022-2023, and other times using a five-year average 2017-2019 + 2022-2023. In both cases they do not include 2020 and 2021 in the averages. (ii) The global

Bloomberg Weekly Oil Indicators

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stockpile for crude oil and products flipped to a surplus of +6.700 mmb for the week ending September 27, from a deficit of -4.800 mmb for the week ended September 20. (iii) Total crude inventories (incl. floating) saw a build of +0.9% WoW to 609.500 mmb, while the stockpiles deficit narrowed, from a deficit of -13.100 mmb to a deficit of -5.300 mmb. (iv) Land crude oil inventories increased +0.1% WoW to 541.600 mmb, narrowing their deficit from -13.200 mmb to -13.100 mmb against the five-year average (2017-2019 + 2022-23). (v) The gas oil, and middle distillate stocks increased +0.3% WoW to 236.100 mmb, with the surplus against the four-year average flipping to a surplus to +1.000 mmb from -2.400 mmb. Jet fuel consumption by international departures in the week starting October 8, is set to decrease by -0.031 mmb/d WoW, while consumption by domestic passenger departures is forecast to increase by +0.021 mmb/d WoW. Below is a snapshot of aggregate global stockpiles.



Source: BloombergNEF

Oil: Europe airports daily traffic 7-day moving average is -1.7% below pre-Covid

Yesterday, we tweeted [\[LINK\]](#) "Daily Europe air traffic closer but still stuck below pre-Covid. 7-day moving average as of: Oct 10: -1.7% below pre-Covid. Oct 3: -2.9%. Sept 26: -2.9%. Sept 19: -2.8% Sept 12: -3.0%. Sept 5: -2.8%. Aug 29: -3.1%. Aug 22: -2.8%. Aug 15: -2.2%. Aug 8: -1.3%. Thx @eurocontrol #Oil #OOTT." Other than over Christmas, European daily traffic at airports has been stuck just 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 -1.7% below pre-Covid as of Oct 10, which followed -2.9% as of Oct 3, -2.9% as of Sept 26, -2.8% as of Sept 19, which followed -3.0% as of Sept 12, which followed -2.8% as of Sept 5, which followed -3.1% as of Aug 29, -2.8% as of Aug 22, -2.2% as of Aug 15, and -1.3% as of Aug 8. 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 60: Europe Air Traffic: Daily Traffic Variation to end of Oct 10



Source: Eurocontrol

Oil: Delta Air Lines warns on travel pause a week or two before/after the US election

On Thursday, Delta Air Lines CEO Bastian was on CNBC after the Q3 release. He made some interesting comments about travel leading up to and just after the US election. He noted that booking were down in the week before and the week after the election. On CNBC, Bastian said “we can see that it in our booking data. October is doing well. We can see this discrete period a week or two ahead of the election, a week or two after the election, being somewhat a bit of a pause, which makes sense if you think of all the uncertainty, all the rhetoric.” At first, it seemed like he was clearly warning that people aren’t flying around the election for risk of something bad happening ie. protests etc and people would want to avoid that. But then he seemed to move off that by implying it was more linked to uncertainty on policy as people don’t want to “invest” in items like plane tickets until there is some certainty. It didn’t come out in the Q3 call and it’s too bad CNBC didn’t ask him if there were specific areas that people don’t want to fly into because if he has said places like Washington, then there would be a clearer link to travel concern.

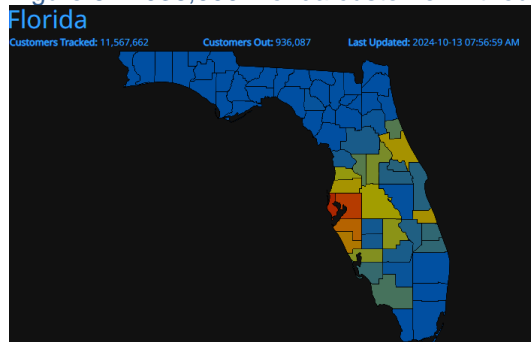
Delta Air Lines CEO on election travel

Oil & Natural Gas: Still 936,000 customers without power in Florida post Helene/Milton

It’s still too early to tell how bad the cumulative damage from Hurricane Milton following Hurricane Helen will be in Florida. And in speaking to some of the many Canadians living in Florida, it is tough for some who have just come thru two hurricanes. It’s going to be tough and what makes it tough for people is that there are still widespread power outages. People need power to start to clean up and restore. As of our 7am MT news cut off, there are still 936,000 customers without power in Florida.

936,000 Florida customers without power

Figure 61:: 936,000 Florida customer without power



Source: Power Outage US

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Oil & Natural Gas: Helene/Milton will put power equipment in short supply

We had an Electricity 101 reminder this week from a former power executive post Hurricanes Helene and Milton. He reminder that there will be a much tighter market for power equipment and people. And it will be more of an impact this year as the US electricity industry is in strong growth whereas it was in a period of basically no growth for years. So there has already been big demand for any equipment for electricity generation prior to the hurricanes. And the hurricanes have damaged some generation so that will add to an already strong demand. Plus there will be a demand on engineers and other specialists for power generation. The bottom line for the Electricity 101 reminder is that there will be added pressure on costs for equipment and services on electricity/power projects and challenge for people will inevitably add delays.

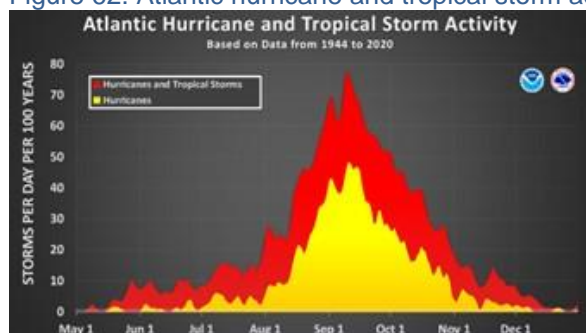
Power equipment will be in short supply

Oil & Natural Gas: Past the normal Sept peak of Atlantic hurricane month

There is going to be some major reflection from hurricane forecasters on what happened so far this year in the relatively low level of hurricanes when all the major forecasters called for more active than normal Atlantic hurricane season. Even with the recent Hurricane Francine, Hurricane Helene and Hurricane Milton, it has been a less than expected Atlantic hurricane season. This is not the norm as the normal peak hurricane season is mid-Aug thru mid-Oct and that 90% of the Atlantic hurricanes typically come after Aug 1. The peak of peak hurricane season is normally mid-Sept and September normally sees 45% of Atlantic hurricanes. And don't forget all the hurricane forecasters are calling for a more active than normal hurricane activity. Here is what we wrote in our Aug 6, 2023 Energy Tidbits memo. *"90% of Atlantic hurricanes come after Aug 1, peak is normally mid-Sept It may already be the hottest time of the year, but we always remind that 90% of Atlantic hurricanes typically come after Aug 1. And August normally marks the start of the ramp up of hurricane season with high hurricane activity typically from mid-Aug thru mid-Oct with a normal peak in mid-Sept. Below is NOAA's graph showing the distribution of Atlantic hurricanes and tropical storms based on data from 1944 to 2020. [LINK]."*

Sept is normally the busiest hurricane month

Figure 62: Atlantic hurricane and tropical storm activity by month



Source: NOAA

Oil & Natural Gas: Prior to this year, only 23 Atlantic hurricanes in Oct since 2010

The peak month for Atlantic hurricane season is September that normally sees ~45% of Atlantic hurricanes and the peak is normally right around mid-Sept. October is not the peak month but normally sees at least one Atlantic hurricane every year. Below is a table from

Normally see at least one Hurricane in Oct

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NOAA's data that shows there were 23 Atlantic hurricanes since Jan 1, 2010 including four Cat 4's and one Cat 5.

Figure 63: Atlantic hurricanes in October since Jan 1, 2010

Landfall Date	States Affected and Category by States	Highest Saffir-Simpson U.S. Category	Central Pressure (mb)	Max Wind (kt)	Name
Aug 27, 2011	NC, 1	1	952	75	Irene
Aug 28, 2012	LA, 1	1	966	70	Isaac
Oct 29, 2012	NY, 1	1	942	65	Sandy
Jul 3, 2014	NC, 2	2	973	85	Arthur
Sep 2, 2016	FL, NW1	1	981	70	Hermine
Oct 8, 2016	FL, NE2; GA, 1; SC, 1; NC, 1	2	963	85	Matthew
Aug 25, 2017	TX, C4	4	937	115	Harvey
Sep 10, 2017	FL, SW4, SE 1	4	931	115	Irma
Oct 7, 2017	LA 1, MS 1	1	983	65	Nate
Sep 14, 2018	NC, 1	1	956	80	Florence
Oct 10, 2018	FL, NW5, I-GA, 2	5	919	140	Michael
Jul 13, 2019	LA, 1	1	993	65	Barry
Sep 1, 2019	NC, 2	2	956	85	Dorian
Jul 25, 2020	TX, S1	1	973	80	Hanna
Aug 3, 2020	NC, 1, SC, 1	1	986	80	Isaias
Aug 27, 2020	LA, 4, TX, N1	4	939	130	Laura
Sep 16, 2020	AL, 2, FL, NW2	2	965	95	Sally
Oct 9, 2020	LA, 2	2	970	85	Delta
Oct 26, 2020	LA, 3, MS, 2, I-AL, 1	3	970	100	Zeta
Aug 29, 2021	LA, 4	4	931	130	Ida
Sep 14, 2021	TX, H1	1	991	65	Nicholas
Sep 28, 2022	FL, SW4, I-FL, SE1, FL, NE1, SC, 1	4	941	130	Ian
Aug 30, 2023	FL, NW3, I-GA1	3	950	100	Idalia

Source: NOAA

Oil & Natural Gas: Q3 will be worse for Cdn natural gas producers than Q2

Q3 reporting will be starting in the next couple weeks in Canada. And 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 64: 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	CS 2.42
Q2/19	US\$ 69.19	US\$ 59.93	US\$ 54.39	US\$ 47.34	US\$ 2.56	CS 1.05
Q3/19	US\$ 62.23	US\$ 56.41	US\$ 52.35	US\$ 43.84	US\$ 2.38	CS 0.96
Q4/19	US\$ 64.19	US\$ 56.98	US\$ 50.75	US\$ 37.94	US\$ 2.39	CS 2.34
Q1/20	US\$ 51.63	US\$ 46.10	US\$ 39.04	US\$ 28.10	US\$ 1.92	CS 1.93
Q2/20	US\$ 29.71	US\$ 27.97	US\$ 22.25	US\$ 18.39	US\$ 1.70	CS 1.90
Q3/20	US\$ 44.38	US\$ 40.88	US\$ 36.84	US\$ 31.09	US\$ 1.96	CS 2.14
Q4/20	US\$ 45.17	US\$ 42.80	US\$ 38.03	US\$ 31.36	US\$ 2.47	CS 2.52
Q1/21	US\$ 61.15	US\$ 57.91	US\$ 54.39	US\$ 46.06	US\$ 3.39	CS 2.97
Q2/21	US\$ 68.05	US\$ 66.16	US\$ 62.17	US\$ 53.31	US\$ 2.91	CS 2.93
Q3/21	US\$ 73.24	US\$ 70.59	US\$ 66.94	US\$ 57.70	US\$ 4.31	CS 3.40
Q4/21	US\$ 79.04	US\$ 77.29	US\$ 73.79	US\$ 60.91	US\$ 4.71	CS 4.48
Q1/22	US\$ 101.80	US\$ 94.93	US\$ 93.84	US\$ 82.29	US\$ 4.63	CS 4.53
Q2/22	US\$ 113.86	US\$ 108.85	US\$ 107.12	US\$ 93.39	US\$ 7.47	CS 6.89
Q3/22	US\$ 100.62	US\$ 91.81	US\$ 89.95	US\$ 71.19	US\$ 7.96	CS 4.16
Q4/22	US\$ 88.64	US\$ 82.61	US\$ 79.71	US\$ 54.91	US\$ 5.54	CS 5.01
Q1/23	US\$ 81.17	US\$ 76.10	US\$ 73.75	US\$ 56.94	US\$ 2.66	CS 3.08
Q2/23	US\$ 78.30	US\$ 73.61	US\$ 70.56	US\$ 60.29	US\$ 2.16	CS 2.30
Q3/23	US\$ 86.70	US\$ 82.19	US\$ 79.76	US\$ 66.16	US\$ 2.59	CS 2.48
Q4/23	US\$ 84.22	US\$ 78.46	US\$ 71.01	US\$ 55.67	US\$ 2.74	CS 2.19
Q1/24	US\$ 83.04	US\$ 76.99	US\$ 68.71	US\$ 60.03	US\$ 2.31	CS 2.23
Q2/24	US\$ 84.84	US\$ 80.80	US\$ 72.80	US\$ 68.28	US\$ 2.07	CS 1.12
Q3/24	US\$ 80.32	US\$ 75.52	US\$ 68.11	US\$ 62.20	US\$ 2.11	CS 0.66

Source: Bloomberg

Source: Bloomberg, SAF Group

Energy Transition: More solar + wind = need for increasing NatGas generation

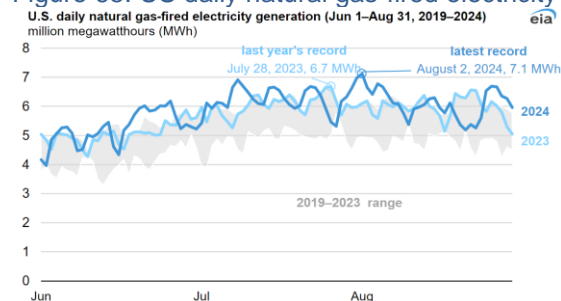
We recognize that everyone wants to maximize solar and wind generation but we still see many who don't understand that this will not lead to less natural gas consumption for the foreseeable future. And what many still don't accept is that the more solar and wind that is

**NatGas share of
summer
electricity keeps
increasing**

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added, the more natural gas generation will need to be added. This is the reality of what is happening and the EIA, on Tuesday, highlighted this very point and that natural gas generation in the US in the summer keeps increasing its share of total US natural gas generation. It reminds that, even though the US adds the huge amounts of solar and wind generation, they are intermittent and more natural gas is needed to fill in. The EIA blog is titled “U.S. natural gas-fired electricity generation set new daily records in summer 2024”. And the EIA notes the EIA is increasing its “share” of US electricity generation. So even though the US is adding these huge amounts of solar and wind capacity, natural gas is increasing its share of US electricity. On Thursday, we tweeted [LINK](#) “Electricity 101. Increasing Solar + Wind Generation = Need for Increasing #NatGas Generation. “As electric generation capacity from renewable sources grows, natural gas is used increasingly to balance the intermittent nature of electricity produced from wind and solar. Since 2014, the share of U.S. electricity generation from natural gas in the summer has increased every year except 2021, increasing from 29% in 2014 to 45% in 2024.” @EIAgov. #NatGas is needed for 24/7 power. #OOTT.” Our Supplemental Documents package includes the EIA blog.

Figure 65: US daily natural gas-fired electricity generation



Data source: U.S. Energy Information Administration, Hourly Electric Grid Monitor

Source: EIA

Energy Transition: BNEF, more NatGas Coal needed to meet data center growth

On Tuesday, BloombergNEF posted its “How Significant Will AI Data Centers’ Electricity Demand Be?” It’s another who is coming out with the same conclusion – AI data center electricity demand is quickly and strongly growing and will increase its relative share of a growing electricity demand outlook. And BNEF also reminds that this explosive growth will need all the wind and solar it can get and also all the natural gas and coal to meet this demand. (i) On Friday, we tweeted [LINK](#) “Bullish #NatGas #Coal. @BloombergNEF also sees massive relative growth of data center electricity demand. Data center demand will take all the #Wind #Solar it can. But absent long duration multi-day storage send out capacity, what NEW sources can provide near term (next 10 yrs) 24/7 baseload electricity in scale other than #NatGas and #coalecroux #OOTT.” (ii) Our tweet included the below slide “Data center power demand is likely to exceed that of electric vehicles”. BloombergNEF forecasts data center low, med and high electricity consumption cases and the med and high forecasts are the largest new electricity demand areas. (iii) We remind that the big growth in data center electricity requires all the wind and solar generation that can be added BUT, it also means that, until there is long duration multi day send out capacity for storage and not just multi hour, there is really no near term (next 10 yrs) NEW source of 24/7 baseload electricity

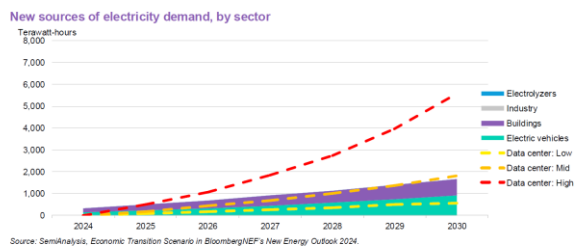
**BNEF sees more
NatGas & Coal is
needed**

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in any size other than natural gas and coal. It also means that energy providers will have no choice but to try to avoid retirement of existing coal and nuclear power. Our tweet included the below BloombergNEF chart that says “coal and gas generation will grow to meet new power demand”. That is more than just not retiring coal, BloombergNEF sees the need for coal generation to grow. Our Supplemental Documents package includes excerpts from the BloombergNEF report.

Figure 66: Data center power demand is likely to exceed that of EVs

Data center power demand is likely to exceed that of electric vehicles

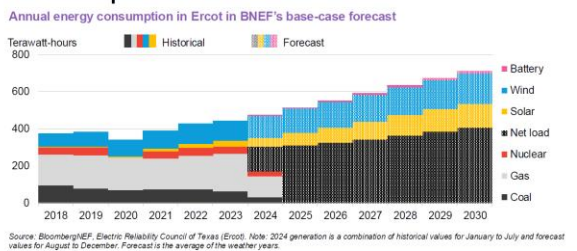


Source: SemiAnalysis, Economic Transition Scenario in BloombergNEF's New Energy Outlook 2024. BloombergNEF

Source: BloombergNEF

Figure 67: Coal and gas generation will grow to meet new power demand

Coal and gas generation will grow to meet new power demand



Source: BloombergNEF, Electric Reliability Council of Texas (ERCOT). Note: 2024 generation is a combination of historical values for January to July and forecast values for August to December. Forecast is the average of the weather years. BloombergNEF

Source: BloombergNEF

Energy Transition: Polestar “going from showing to actively sell [EV] cars”

It was a reality check time for EV maker, Polestar, when they came out with the Oct 11 bad news release that has materially lower YoY EV sales and forcing the company to go into a review of their strategy and operations. (i) On Friday, we tweeted [\[LINK\]](#) “EVs reality check. “A key to our future success will be the development of our commercial capabilities: going from showing to actively selling [EVs] cars.” Polestar CEO. YTD Sept 30 EV sales -23% YoY. “conducting a review of our strategy & operations” “engaged in constructive dialogue with its club loan lenders...” #OOTT.” (ii) EV sales outside of China have to the most part been disappointing and Polestar was in that camp. Polestar reported Q3 sales of 11,900 EVs and YTD Sept 30 EV sale were down -23% YoY to 32,300 (was 41,844). (ii) The CEO said “Together with the management team, we are conducting a review of our strategy and operations, to set out a clear path for Polestar’s development.” So it sounds like it is a mgmt review at this time and not a board direction. (iii) Note the specific language on the lenders,

Polestar EVs sales -23% YoY

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who are supportive “regarding the loan covenants”. Polestar said “*Given market conditions and the Company’s anticipated performance in 2024, the Company, alongside Geely, is engaged in constructive dialogue with its club loan lenders, who remain supportive, regarding its loan covenants.*” (iv) Let’s hope it’s a question of not so great drafting and that they haven’t just been showing off their sharp looking EVs and aren’t just now starting to focus on actively selling EVs. But Polestar said “*A key to our future success will be the development of our commercial capabilities: going from showing to actively selling cars. Adopting a more active sales model is already supporting our ambitions, as the first markets to implement it are showing solid order intake.*” Our Supplemental Documents package includes the Polestar release.

Energy Transition: Volvo “adjusts” leadership

It looks like Volvo picked the fall guy for having to backtrack on their recent reduction in their BEV ambition. On Wednesday, Volvo announced “*Volvo Cars adjusts leadership*” [\[LINK\]](#) because “*The automotive industry is currently challenged by different headwinds driven by geopolitical and macroeconomic uncertainties that impact the entire industry, including market sentiment, rapid technology shifts and supply chains. Volvo Cars is taking a further step in gearing up to navigate this environment with speed and agility.*” Volvo said “*jörn Annwall, current Chief Commercial Officer & Deputy CEO will step out of his role and support the transition of the new organisation before taking his next step outside of Volvo Cars. Over the past nine years, Björn has established a strong team around him that will continue the important work ahead, and I look forward to working closely together with him to enable this transition. I would also like to extend my warmest thanks to Björn for his tremendous contribution to Volvo Cars over the years, including the pivotal part he played in our successful listing on the stock market, advancing our shift towards electrification and our expansion into new markets,*” said Jim Rowan, CEO, Volvo Cars.” We can’t help believe Annwall is taking the fall for the EVs strategy not working. This is a craftily written press release. This is the type of crafty drafting that we have seen many times where the CEO wants to make people think someone is to blame. The big negative on Volvo was having to backtrack on their electrification. They are saying the Deputy Chair played “*the pivotal role*” in “*advancing our shift towards electrification*”. It makes it seem like he was the EV guy. But advancing the shift means he was the executive who drove forward the electrification shift. But it doesn’t mean it was his idea to push it. So it seems he is likely the fall guy. Don’t forget that if he was to blame for the BEV failure, he wouldn’t be sticking around to help in transition.

Volvo “adjusts” leadership

09/04/24: Big reduction in Volvo’s BEV ambition

Here is what we wrote in our Sept 8, 2024 Energy Tidbits. “*Big Reduction in Volvo’s BEV ambition. Volvo was another major car manufacturer to announce a big reduction in their BEV ambition this week. (i) On Wednesday, we tweeted [\[LINK\]](#) “Big reduction to Volvo BEV ambition. WAS: “.. be fully electric by 2030”. NOW: “.. 90 to 100% of its global sales volumes by 2030 to consist of electrified cars, meaning a mix of both fully electric and plug-in hybrid models”. Didn’t give PHEV vs BEV split. PHEVs are really just way more fuel-efficient ICE. Volvo says its PHEVs around 1/2 of km driven are in battery mode ie. 1/2 in gasoline/diesel mode. Reduced/adjusted BEV ambition due to “changing market conditions and customer demands”. #OOTT.”*”

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(ii) The Volvo backtrack is a bigger backtrack than most initially thought. On the surface, people will see they are only putting HEV to 0-10% of their 2030 sales and still not including any ICE in their 2030 sales is not a huge backtrack. However, there is also an inferred big shift to PHEV. Volvo is moving from the prior ambition for the line up to be “fully electric by 2030”, which infers all BEV. And now they say “Volvo Cars aims for 90 to 100 per cent of its global sales volume by 2030 to consist of electrified cars, meaning a mix of both fully electric and plug-in hybrid models – in essence, all cars with a cord.” I.e. some portion of the 90% will be PHEV cars that are electrified but run at least half the time on gasoline or diesel. (iii) Volvo didn’t disclose what percentage of the 90% will be PHEV. But in the press release, Volvo says their PHEVs run half the time on battery mode. “Volvo Cars’ most recent data shows that around half of the kilometres covered by the latest plug-in hybrid Volvo cars are driven on pure electric power. (iv) So Volvo has moved from 100% BEV in 2030 to 10% HEV and some undisclosed percentage of the 90% electrified being PHEV. Our Supplemental Documents package includes the Volvo release. “

Energy Transition: Volkswagen sees fall in BEV & ICE sales, PHEV sales remain strong

No one should be surprised to see the trends in Volkswagen’s YTD Sept 30 car sales. It fits the trends from the Sept 27 press release with BEV and ICE sales down but PHEV sales up. Note Volkswagen only split out BEV in its tables and only made some commentary about PHEV so we could not split out ICE vs PHEV. On Friday Volkswagen released a memo which reported total car sales were down -7.1% YoY, which is -167,000 to 2,176,300 in Q3/24. The YTD figures on September 30, 2024, were down -2.8% and -191,100 YoY to 6,524,300. BEV’s sales were down -9.8% YoY, which is down -20,500 YoY to 189,400, the YTD BEV figures were down -4.7% and -25,000 YoY to 506,500, with growth from China being outweighed by falling sales in the U.S. and Europe. Regarding PHEV’s, Volkswagen did not provide a period, but said “192,000 vehicles worldwide PHEV deliveries are around 9 percent higher than in the same period last year... Demand for vehicles with modern second-generation plug-in hybrid drives (PHEV) and purely electric ranges of up to 143 km is increasing”. Our Supplemental Documents Package includes the press release.

Volkswagen reports lower BEV & ICE sales

09/27/24: No surprise, Volkswagen lowers car sales guidance again

Here is what we wrote in our Sept 29, 2024 Energy Tidbits memo on Volkswagen’s lowered guidance. “No surprise, Volkswagen lowers car sales guidance again. No one should be surprised to see Volkswagen’s Friday press release that it was lowering its financial guidance for the 2nd time in the last couple months. We say no surprise given last week’s AECA data that showed Germany BEV sales were -68.8% YoY in Aug. We would have assumed Volkswagen would have made a specific comment on EVs but Volkswagen did not provide separate how much of the downgrade was from EVs vs ICE. Rather Volkswagen said [\[LINK\]](#) “In light of a challenging market environment and developments that have fallen short of original expectations, particularly at Brand Volkswagen Passenger Cars, Volkswagen Commercial Vehicles and Tech. Components, Volkswagen AG is updating its forecast for the 2024 financial year as follows: The company now expects deliveries to customers to be around 9 million vehicles (2023: 9.24 million vehicles; previous forecast: increase of up to 3 percent). Volkswagen now expects Group sales revenue to be around 320 billion euros (2023: 322.3 billion euros; previous forecast: increase

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of up to 5 percent).” Volkswagen did not say how much of this was due to EVs but we suspect EVs was a key part in light of the ACEA Aug new car sales data for Germany that showed BEV sales in Germany (not just VW) in Aug were down 68.8% YoY”.

Volkswagen BEV sales are doing worse than total industry Europe BEV sales Y

Volkswagen’s BEV sales data this week only provided BEV sales in Europe in total and not by country. Volkswagen noted its BEV sales in Q3/24 were 109,200, which was -11.9% YoY and its YTD Sept 30, 2024 BEV sales were 293,300, which was -14.0% YoY. The Volkswagen data is for YTD Sept 30, 2024 and we are expecting the ACEA data this week for total industry BEV sales to Sept 30. All we have right now is the ACEA data for YTD Aug 31, 2024. But if we compare Volkswagen YTD Sept 30, 2024 vs ACEA data for YTD Aug 31, 2024, Volkswagen is doing worse than the total for Europe BEV sales. Our Sept 22, 2024 Energy Tidbits memo was titled “EU Aug BEV sales -43.9% YoY, EU Auto Industry Calls for Urgent Action as Demand for BEVs Declines.” The ACEA data for YTD Aug 31, 2024 was that total EU BEV sales were 902,011, which was down 8.3% YoY vs 983,718 EU BEV sales in YTD Aug 31, 2023. Below is the ACEA car sales for YTD Aug 31, 2024.

Figure 68: EU Aug new car registrations by power source

EU August New Car Registrations by Power Source						
	Aug-24	Aug-23	% Change	YTD Aug 24	YTD Aug 23	% Change
BEV	92,627	165,204	-43.9%	902,011	983,718	-8.3%
PHEV	45,590	58,660	-22.3%	501,266	527,697	-5.0%
HEV	201,552	189,114	6.6%	2,138,474	1,765,893	21.1%
Others	18,634	19,687	-5.3%	224,692	213,537	5.2%
Petrol	213,057	257,139	-17.1%	2,504,457	2,580,076	-2.9%
Diesel	72,177	98,008	-26.4%	909,592	1,007,279	-9.7%
Total	643,637	787,812	-18.3%	7,180,492	7,078,200	1.4%

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

Sources ACEA

Source: ACEA

Energy Transition: BloombergNEF charts for “End of the hydrogen hype cycle?”

We believe in hydrogen BUT our view on hydrogen scaling up has been consistent that the glowing growth forecasts from the past few years were nowhere near happening because the costs, in particular green hydrogen, were way too expensive so buyers in scale wouldn’t step up. And without buyers in scale who are prepared to pay up, any growth in hydrogen will be modest at best and nowhere near Net Zero aspirations/goals. (i) On Wednesday, we tweeted [\[LINK\]](#) “Great charts from @BloombergNEF Sami Alisawi. - Funding for hydrogen in 2024 (annualized) is 1/4 of 2023 levels. - BNEF cut its hydrogen demand in 2030 by 70% vs 2021 & by 22% vs 2022 fcast. - Electrolyzer costs proving to be ~60% higher than estimated. - Green hydrogen production costs are ~100% higher than expected. - Only 5% of announced production volumes to 2030 have actually reached FID. - Developers are cancelling projects such as 🗑️ Oct tweet. Hydrogen nowhere near aspirations for Peak #Oil #NatGas by 2030. #OOTT.” (ii) “End of the Hydrogen Hype Cycle?” was the name of BloombergNEF’s hydrogen update that laid out a series of charts that were negative on all the key items that are needed to ramp up hydrogen and this has meant a way less than expected ramp up in hydrogen. It’s a good recap of all the negatives and it’s hard to see the

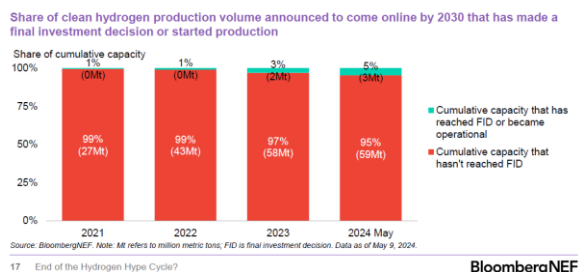
“End of the hydrogen hype cycle?”

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hydrogen market going much lower but the question is when it can it start to get on any sustained bounce of the bottom. (iii) Here are a few of the negatives. Project funding for YTD Apr 30, 2024 was only \$11.3b, which compares to \$139.6b in 2023 and \$129.7b in 2022. That is a huge drop in funding and funding drives the actual moving ahead on projects. BloombergNEF's new forecast for hydrogen demand in 2030 is 390 million metric tonnes per year, which is down 70% from its 2021 forecast of 1,318 mtpa and even down 22% from the 2021 forecast. Electrolyzer project costs were underestimated in all parts of the world and it looks like the updated project costs are ~60% higher than the prior cost estimates. There is a lack of buyers with only 12% of clean hydrogen capacity having identified offtakers. This is the problem that Saudi Aramco has raised for years – there aren't any buyers of size to get hydrogen suppliers to commit to spend the capex. Here is the big reason why hydrogen will disappoint for its growth to 2030 – only 5% of announced production volumes until 2030 have reached a FID. So projects announced their hydrogen project will be onstream by 2030 but 95% of the volume hasn't taken a final investment decision. There are more slides on the same theme. (iii) It's hard to see how hydrogen quickly goes on a sustained run up. BloombergNEF ends with a slide of the steps to success. They start with the easy one – finalize policies. But then step thru the reality check problems to date – reduce costs, increase offtake and increase investment. Then they can start building. Our Supplemental Documents package includes excerpts from the BloombergNEF "End of the hydrogen hype cycle?" report.

Figure 69: Only 5% of announced production volume until 2030 has reached a FID

Only 5% of announced production volume until 2030 has reached a final investment decision



Source: BloombergNEF

Energy Transition: Florida warned on EVs fire risk post Hurricane Milton

On Wednesday, we tweeted [LINK](#) "Hope EVs owners in Florida saw @JimmyPatronis ⚠️ warning on Milton preparations. Post Helene "nearly 50 fires caused by lithium-ion batteries with 11 of those fires being caused by EVs. Floridians living on the coastline who own EVs are at risk of those EVs being inundated with saltwater storm surge which presents a dangerous fire threat..." Florida is #2 in US with 254,878 registered #EVs. #OOTT." Our tweet included Florida's Oct 7 "***FIRE SAFETY ALERT** CFO & State Fire Marshal Jimmy Patronis Calls on EV Manufacturers to Take Steps to Protect Lives for Milton". [LINK](#) Florida's Fire Safety Alert was based on what happened after Hurricane Helene "The CFO's Division of State Fire Marshal has confirmed 48 lithium-ion battery fires related to storm surge from Hurricane Helene, with 11 of those fires associated with EVs. Consumer items containing lithium-ion batteries include cars, scooters, hover boards, golf carts or children's toys." And they warned "Floridians living on the coastline who own EVs are at risk of those

Florida warns on EVs fire risk

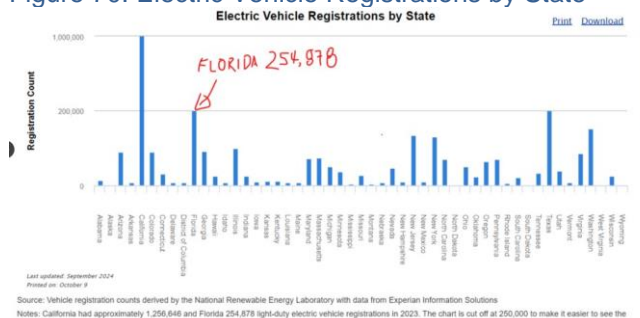
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EVs being inundated with saltwater storm surge which presents a dangerous fire threat to Florida families and their homes. If you have one of these vehicles including cars, scooters, hover boards, golf carts or children's toys that have been compromised by flooding, please unplug the vehicle or device, and move it safely away from your home or apartment into a clear open space." Our Supplemental Documents package includes the Florida Fire Safety Alert.

Florida is #2 with 254,878 registered EVs

Our Florida EVs fire risk tweet included the US Department of Energy, Alternative Fuels Data Center, below graph of electric vehicle registrations by state that reminds there are a lot of EVs but we don't know where the EVs are distributed within the state. California leads the way by far with 1,256,646 registered EVs and Florida is #2 with 254,878 registered EVs.

Figure 70: Electric Vehicle Registrations by State



Source: Alternative Fuels Data Center

Energy Transition: Danish hydrogen pipeline potential start delayed from 2028 to 2032

After reading Denmark's comments/criticism, we have to believe there is a big risk that the Danish green hydrogen pipeline project ever gets done. On Tuesday, we tweeted [\[LINK\]](#) "Blunt criticism and great doubt from Denmark on Danish green hydrogen pipeline to Germany w/ startup delay from 2028 to 2032. "The timeline that has now been presented to us is not what we expected, and it comes with great risks. That is not satisfactory. " Minister for Climate, Energy and Utilities Lars Aagaard" #NatGas will be needed for longer in Germany. Can Green Hydrogen scale up economically? #OOTT." Our tweet included the Denmark govt release on the pushing back the potential start date of the Danish hydrogen pipeline that will transport green hydrogen produced in Denmark to Germany. The Danish govt was clear not happy with the delay especially as Denmark sees big risk and uncertainty to the project. It certainly seems Denmark is worried the project will never get done. Here are a couple of quotes from the Denmark release. Denmark was presented with a delay in the start up from 2028 to 2032. Denmark wrote "The timeline that has now been presented to us is not what we expected, and it comes with great risks. That is not satisfactory. Therefore, we have initiated work with the aim of making Energinet's schedule more secure and limiting the delay. This is to ensure interaction between the large amounts of green power from the offshore wind supply, the production of green hydrogen and the German demand," says Minister for Climate, Energy and Utilities Lars Aagaard." Our Supplemental Documents package includes the Denmark release.

Danish hydrogen pipeline at risk

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Energy Transition: Is IEA backing off peak natural gas demand by 2030?

IEA peak natural gas demand

We were a little surprised that the IEA's changed views on Oct 3 on natural gas demand didn't get any attention. Here is what we wrote in last week's (Oct 6, 2024) Energy Tidbits memo. *"Is IEA backing off peak natural gas demand by 2030? On Thursday, we tweeted [\[LINK\]](#) "Is IEA setting up to push back its peak #NatGas consumption this decade? Seems to acknowledge more, not less, #NatGas is needed for #EnergyTransition. Today: increased 2024/25 consumption forecasts, says #NatGas returned to more pronounced growth, "the decarbonisation of the global energy system will require the deployment and scaling up of low-emissions gases." #OOTT." The IEA has changed its tone on natural gas demand to the positive, which feels to us as a set up to back off its stated view for natural gas demand to peak by 2030. (i) On Thursday, the IEA posted its "Global Gas Security Review 2024", which had a hugely different (positive) view on the demand for natural gas in the coming years vs its latest medium term natural gas outlook from Oct 2023. We expect the new medium term natural gas outlook to be released in the coming weeks. (ii) IEA increased its global natural gas consumption forecast for 2024 to 405.3 bcf/d (was 399.0 bcf/d) and for 2025 to 415.4 bcf/d (was 407.7 bcf/d). (iii) There was a huge change in messaging. This year, IEA said "Following the gas supply shock of 2022/23, natural gas markets have returned to more pronounced growth, with global gas demand expected to reach new all-time highs in both 2024 and 2025." Last year, the IEA said "The energy crisis triggered by Russia's invasion of Ukraine marketed a turning point for global natural gas markets. Growth in global gas demand is set to slow down significantly over the medium term (2022-2026). This follows a decade of strong expansion." (iv) Given the IEA is expected to release its annual medium term outlook for natural gas in the coming weeks, it seems this was a set up report of backing off their peak natural gas demand by 2030. Our Supplemental Documents package includes excerpts from this week's Global Gas Security Review 2024 report and last year's Medium term outlook for natural gas report in Oct 2023."*

09/12/23: IEA peak demand for oil, natural gas & coal before 2030

The IEA is significant as it is the energy agency for the western governments and the western governments use the IEA forecast for their driving on the energy transition. And on Sept 12, 2023, IEA Executive Director Fatih Birol set the stage for COP28 with the IEA view that peak demand of oil, natural gas and coal would be before 2030. Here is what we wrote in our Sept 17, 2023 Energy Tidbits memo. *"IEA peak demand for oil, natural gas and coal before 2030. On Tuesday (local time), the Financial Times front page story was "World at beginning of end of fossil fuel era, says IEA." The FT posted an op-ed by IEA Executive Director Birol titled "Peak fossil fuel demand will happen this decade" [\[LINK\]](#). (i) The difference to other calls is that Birol is calling for peak demand for oil, coal and natural gas. Birol wrote "There's a taboo in the traditional energy sector against suggesting that demand for the three fossil fuels — oil, gas and coal — could go into permanent decline. Despite recurring talk of peak oil and peak coal over the years, both fuels are hitting all-time highs, making it easier to push back against any assertions that they could soon be on the wane. But according to new projections from the International Energy Agency, this age of seemingly relentless growth is set to come to an end this decade, bringing with it significant implications for the global energy sector and the fight against climate change. Every year, the IEA's World Energy Outlook maps out potential pathways the global energy system could take in the coming decades to help inform*

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decision-making. This year's report, to be released next month, shows the world is on the cusp of a historic turning point. Based only on today's policy settings by governments worldwide — even without any new climate policies — demand for each of the three fossil fuels is set to hit a peak in the coming years. This is the first time that a peak in demand is visible for each fuel this decade — earlier than many people anticipated.” (ii) We don't think anyone will disagree that the world is on track to have demand for each of the fossil fuels peak sometime. But it comes down to when. Not many would disagree with peak coal demand by 2030. The debate on peak oil demand is generally around 2030 with oil bulls more like mid 2030s, and oil bears just before 2030. But not many would expect peak natural gas demand before 2030. (iii) Birol doesn't really emphasize it, but we suspect a significant factor in the new IEA forecast for the timing of peak fossil fuels will be a very large assumed contribution from energy conservation and energy efficiency. (iv) One thing missing from Birol's op-ed is any concern on what this will do to the cost of energy ie. is the world looking at an era that energy will be higher forever? Birol doesn't say he sees these clean alternatives are able to provide reliable, available and affordable energy. (v) Birol gave himself the out to say he warned that there can still be spikes. But he is clearly inferring it isn't a higher price energy environment. Birol says “The declines in demand also won't be linear. Although fossil fuels are set to hit their peaks this decade in structural terms, there can still be spikes, dips and plateaus on the way down.” (vi) And of course, Birol says there will still be a need for investment in oil and gas supply even in the face of peak oil and gas demand. Birol says “And even as demand for fossil fuels falls, energy security challenges will remain as suppliers adjust to the changes. The peaks in demand we see based on today's policy settings don't remove the need for investment in oil and gas supply, as the natural declines from existing fields can be very steep. At the same time, they undercut the calls from some quarters to increase spending and underline the economic and financial risks of major new oil and gas projects — on top of their glaring risks for the climate.” Our Supplemental Documents package includes the Birol op-ed.”

OPEC: “thinking on fossil fuels is ideologically driven, rather than fact-based”

On Sept 14, 2023, OPEC responded to the IEA Fatih Birol Sept 12 op-ed. Here is what we wrote in our Sept 17, 2023 Energy Tidbits memo. “OPEC, “thinking on fossil fuels is ideologically driven, rather than fact-based. It really is a shame for people that there can't be a coming together of the best minds as to how to tackle reducing emissions. Two days after the IEA Birol blog, OPEC wrote “On the International Energy Agency's recent Op-Ed published on 12 September 2023, asserting that fossil fuel demand would peak before 2030, OPEC notes that consistent and data-based forecasts do not support this assertion.” [\[LINK\]](#) It is a short release and an easy read. OPEC presents a simple case – the IEA blog on the peaking of fossil fuels demand is not fact based. OPEC says “This thinking on fossil fuels is ideologically driven, rather than fact-based”, describes the policies as “experimental net zero policies”, and describes them as “predictions”. And OPEC is concerned that as opposed to prior predictions that didn't come true for peak oil demand, this time it's dangerous because there is the call to stop investing in oil and gas. OPEC writes “the difference today, and what makes such predictions so dangerous, is that they are often accompanied by calls to stop investing in new oil and gas projects. “Such

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narratives only set the global energy system up to fail spectacularly. It would lead to energy chaos on a potentially unprecedented scale, with dire consequences for economies and billions of people across the world,” says OPEC Secretary General, HE Haitham Al Ghais.” Our Supplemental Documents package includes the OPEC release.”

02/19/24: Macron, IEA is “our armed wing of implementing” Paris agreement

We think that it’s hard for anyone to look at the IEA’s forecasts as being independent especially as France President Macron stated the IEA is not independent. Rather the IEA’s forecasts are really there to support the western government’s desire to eliminate fossil fuels. Here is what we wrote in our Feb 25, 2024 Energy Tidbits memo. *“Macron, IEA is “our armed wing of implementing” Paris agreement. We were shocked by France President Macron’s comment on the IEA. On Monday, we tweeted [\[LINK\]](#) “The IEA has become, so to speak, our armed wing of implementing the Paris agreement” Macron. The IEA has no guns, is Macron saying analysis/fcasts are their weapons to implement Paris as opposed to analyzing energy! Saudi Energy Minister Abdulaziz will say I told you so! #OOTT.”* Macron made the keynote speech at the IEA Ministerial Meeting in Paris that also celebrated the IEA’s 50th anniversary. *We were surprised that Macron made such a direct comment that made it clear the IEA’s focus is on implementing the Paris Agreement on behalf of the western governments that fund the IEA. This was not an accident, rather it looked like a prepared speech Macron read from a teleprompter. So, for some reason, Macron wanted the world to know the IEA is there to the “armed wing” for their western country funders to implement the Paris agreement. And not an agency that provides analysis for their western governments to make the right policy decisions. But, if we take Macron at his words, the IEA’s analysis is there to support policy or provide the impetus for their western government funders to make policy to support the conclusions of the analysis. And to provide the western governments with the rationale for why they make policies for Paris Agreement. It was a major hit to the IEA credibility and we just don’t understand why Macron did it unless he wanted to hurt the IEA’s credibility. Here is the transcript we made of Macron’s comments that was attached to our tweet. Note that we made the transcript from the IEA’s posting of Macron’s speech. The IEA just didn’t include the full Macron quote. At 0:52 min mark, Macron “We are also very proud that since its creation, the Agency has been able to profoundly shift its mandate. From an agency dedicated to managing strategic oil reserves, it has now become a global hub for debate, collective action to meet the challenge of the energy transition. The IEA has become, so to speak, our armed wing of implementing the Paris agreement, given that energy accounts for more than 75% of global greenhouse gas emissions.”*

IEA’s prior view on their “analysis”

Here is another item from our Feb 25, 2024 Energy Tidbits memo on the IEA’s independence. *“Every fall, the IEA posts their major report Oil and the year ie. Oil 2023, which is their analysis and forecast for the next five years. The last time they included a foreward by Executive Director Birol was in their Oil 2019 report. Here is the last paragraph of his foreward “The IEA’s core mandate has always been energy security. Our mission has expanded over the years and the definition of energy*

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security has also evolved beyond oil to include natural gas and electricity. But oil market analysis remains a central focus of the IEA, which we demonstrate through our vigilant analysis of market developments and their consequences. We hope this report contributes to a better understanding of the sector and helps develop policies supporting the longer term transition to a more secure but also a more sustainable energy future.”

Canada uses IEA scenarios as if they are data- based

Here is what we wrote in our Feb 18, 2024 Energy Tidbits memo on how countries like Canada use the IEA works as if it an unbiased analysis and forecast. We then wrote “*We continue to see one of our concerns play out – western leaders use the IEA scenarios as if they are forecasts. And despite these being scenarios of what if’s, the western leaders want use these scenarios to support their policies, in this case the push to net zero. And that is why we have warned for several years that the Energy Transition will take way longer, cost way more and be a bumpy/rocky road. The question is do they not read the IEA work or just choose to use it as something it isn’t. Either way, the Energy Transition plans aren’t based on data but based on what if’s. Canada’s Energy & Natural Resources Minister, Jonathan Wilkinson, gave a good reminder of this in his interview with Bloomberg on Wednesday morning. Its like the western leaders are using scenarios based on what they are saying is policy to set policy. We tweeted [\[LINK\]](#) “Unfortunately, a big difference between data driven forecast vs a scenario based on stated policies! ca Energy Minister, “when the IEA SAYS that #Oil #NatGas #Coal utilization is gong to peak this decade, that is based on the data that show actually much of this is becoming uneconomic” IEA WEO 2023 peak demand was based on a “Stated Energy Policies Scenario” #OOTT @ManusCranny @daniburgz.” Wilkinson gave the perfect example and it seems like his staff never read the assumptions when IEA Fatih Birol came out in Sept in his call for peak oil, natural gas and coal demand by 2030 that he said would be detailed in IEA big World Energy Outlook 2023 in Oct. Wilkinson said that the IEA call for peak oil, natural gas and coal demand is NOT based on policy. We made a transcript of his comments. At 3:23 am MT, Wilkinson “But I would say that a lot of this is just being driven by straight economics and by the financial markets. Like when the IEA says that oil, gas and coal utilization is going to peak this decade, that is based on the data that shows that actually much of this is becoming uneconomic for a whole range of different reasons”. His staff didn’t read the IEA executive director Birol FT op-ed or IEA world energy outlook key findings. Our tweet included the FT Fatih Birol op-ed and the excerpt from IEA World Energy Outlook Oct 2023 that both indicate the call for peak oil, natural gas and coal this decade is based on policy statements coming true. The IEA WEO wrote “The analysis does not present a single view of the future but instead explores different scenarios that reflect current real-world conditions and starting points. The Stated Policies Scenario (STEPS) provides an outlook based on the latest policy settings, including energy, climate and related industrial policies.” And “We are on track to see all fossil fuels peak before 2030. A legacy of the global energy crisis may be to usher in the beginning of the end of the fossil fuel era: the momentum behind clean energy transitions is now sufficient for global demand for coal, oil and natural gas to all reach a high point before 2030 in the STEPS. The share of coal, oil and natural gas in global energy supply – stuck for*

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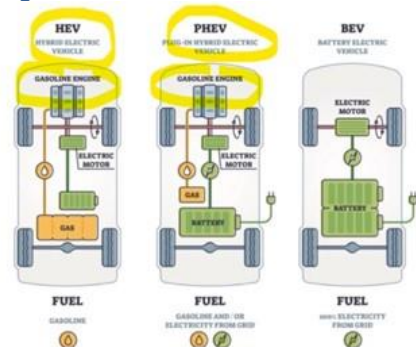
decades around 80% – starts to edge downwards and reaches 73% in the STEPS by 2030. This is an important shift. However, if demand for these fossil fuels remains at a high level, as has been the case for coal in recent years, and as is the case in the STEPS projections for oil and gas, it is far from enough to reach global climate goals

Energy Transition: HEVs & PHEVs are really just more fuel efficient ICE vehicles

The big winner in the EU cars sales in 2024 continues to be hybrids. And, as noted above, PHEVs are the bright spot amidst the weak Volkswagen car sales. No one can deny an HEV will burn less gasoline or diesel than its ICE counterpart. However, we still find many don't understand that HEVs and even PHEVs are really just more fuel-efficient ICE vehicles and, in particular, for PHEVs that are generally lumped in with EVs for an electrified car group. HEVs and PHEVs run on gasoline or diesel for likely at least half of the time for PHEVs and probably 90% for HEVs. Here is what we tweeted on Sept 4, 2024. [\[LINK\]](#) "HEV/PHEV 101 - They are really just more fuel efficient ICE. Ford: HEV F150 does 23 mpg vs ICE150 at 19 mpg. Volvo: PHEVs km driven are split 1/2 using battery, 1/2 using petrol/diesel. #OOTT." For an HEV vs ICE comparison, Our tweet included the EPA rated mileage for the Ford F150 ICE vs Hybrid. The EPA rates the Hybrid fuel efficiency as being only 4 mpg more than the ICE. That increased fuel efficiency would be reduced if it was a full apples-to-apples comparison. The ICE has a much larger towing capacity. The F150 ICE 3.5L cyl F-150 does 19 MPG with a tow capacity of 13,500 lbs. The F150 HEV 3.5L 6 cyl F-150 does 23 MPG with a tow capacity of 11,200 lbs. And for a good reminder on PHEVs being used in ICE mode, the reality is that a lot of PHEV is driven in ICE mode. As we have previously noted, Volvo recently backed off its fully electric plans and its press released noted "Volvo Cars' most recent data shows that around half of the kilometres covered by the latest plug-in hybrid Volvo cars are driven on pure electric power." So based on the "most recent data", Volvo PHEVs are driven around 50/50 between km driven in battery mode vs ICE mode. Given the press release was Volvo having to back away from its electrified goals, we have to believe the "around half" driven by PHEV is likely below half. We also believe that Volvo has likely picked the best time period for PHEVs driving in battery mode. We would assume the most recent data is referring to some spring/early summer period and it does not include winter months where the PHEVs will be driven more in their ICE mode.

HEVs/PHEVs are just fuel efficient ICE vehicles

Figure 71: HV vs PHEV vs BEV



Source: Engineering Infrastructure

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Capital Markets: Canada's PBO updated analysis of the cost of Liberals carbon tax**Canada's carbon tax**

On Thursday, we tweeted [\[LINK\]](#) "*Liberals Carbon Tax Analysis by PBO. IF only consider "fiscal" impact only, average household to see a net gain. BUT "fiscal + economic impact" average household sees a net cost. "Given that the fuel charge lowers employment and investment income, which makes up a larger share of total income for higher income households, their net cost is higher."* #OOTT." Canada's Parliamentary Budget Officer posted his report "*A Distributional Analysis of the Federal Fuel Charge – Update.*" The Federal Fuel Charge is what everyone calls the Carbon Tax. The report hasn't received a lot of attention as the bigger Cdn political chatter continues to be on low Liberal polling numbers and the rumors of increasing backbencher discontent with Trudeau. The PBO report gave two conclusions. The first was liked by the Liberals as it only included the fiscal impact ie. how much is paid by the carbon tax vs how much is gained in the rebate. This is what the PBO calls the fiscal impact. PBO wrote "*Considering only the fiscal impact of the federal fuel charge, PBO estimates that the average household in each of the backstop provinces (that is, all provinces except Quebec and British Columbia) in 2030-31 will see a net gain, receiving more from the Canada Carbon Rebate than the total amount they pay in the federal fuel charge (directly and indirectly) and related Goods and Services Tax. Relative to household disposable income, the fiscal-only impact of the federal fuel charge is progressive. That is, lower income households face lower net costs (larger net gains) compared to higher income households, reflecting the per capita nature of the Canada Carbon Rebate.*" The second is what the Conservatives like and it takes into account the impact of the carbon tax on people. The PBO wrote "*In 2030-31, taking into consideration both fiscal and economic impacts, PBO estimates that the average household in each of the backstop provinces will see a net cost, paying more in the federal fuel charge and related Goods and Services Tax, as well as receiving lower incomes (due to the fuel charge), compared to the Canada Carbon Rebate they receive and lower net taxes they pay (due to lower incomes). PBO estimates of household net cost (fiscal and economic impacts) of the federal fuel charge show a more progressive impact compared to the fiscal-only impact estimates. Given that the fuel charge lowers employment and investment income, which makes up a larger share of total income for higher income households, their net cost is higher.*" Our Supplemental Documents package includes excerpts from the PBO report.

Demographics – Sydney (AUS) 3-bedroom condo shortage is playing out in Canada**Shortage of 3 bedroom condos?**

Last week, Bloomberg posted a story "*Sydney Doesn't Have Enough Three-Bedroom Apartments for Boomers. Australian baby boomers looking to downsize from their large family homes are increasingly asking the same question: Where are all the three-bedroom apartments? Cashed-up older homeowners seeking to leave houses with empty bedrooms and high-maintenance gardens are finding their options are fewer than expected. In Sydney, there's almost triple the amount of two-bedroom apartments on the market as three-bedders, which is seeing the price of the larger properties soar three times the rate of the smaller ones— the biggest premium on record.*" It sounds like this is also playing out in cities like Toronto and also in Calgary and is an issue for people younger than boomers who just want a big condo, especially one on a single level. We don't know the Toronto condo market closely but on a recent trip, some younger than boomer Toronto contacts were lamenting on the lack of big condo's in Toronto and they ended up with smaller condo's than targeted. It won't be a huge issue but it feels like there will be more demand than supply for large three

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bedroom condos over the coming years. Our Supplemental Documents package includes the Bloomberg report.

Demographics – Chinese 65 & over are now 217 million or 15.4% of total population

We remind China is ageing and ageing fast. Plus it is always important to remember demographics are predictive and the direction of travel can't be changed for years. It's Senior's Day in China or the Double Ninth Festival. On Friday, Xinhua (state media) [\[LINK\]](#) reported "China's population aged 60 and above reached nearly 297 million in 2023, accounting for 21.1 percent of the total, as the country works to tackle the challenges of an ageing society, according to an official report released Friday. Released jointly by the Ministry of Civil Affairs and China National Committee on Ageing, the report on the development of the country's work on aging in 2023 stated that the number of people aged 65 and above reached 216.76 million, accounting for 15.4 percent of the total population."

China's ageing population

Demographics: Cdn cities no longer make top 10 friendliest cities in the world

Last week, Conde Nest Traveller released their yearly "Friendliest cities in the world: Readers' Choice Awards" list [\[LINK\]](#). In 2023, the readers' choice list was dominated by Canadian cities, seeing 4 cities make the top 10; Calgary AB, came in at #1, Edmonton #2, Victoria #3, and Quebec City at #5. However, the 2024 list did not have a single Canadian city in the top 10; Singapore came in at #1, Sydney #2, Las Vegas #3. Bangkok #4, Cape Town #5, Tokyo #6, Marrakech #7, Hong Kong #8, Chicago #9 and New York #10. We suspect we weren't the only ones surprised to see Hong Kong, Chicago and New York to be in the top 10 friendliest cities. Conde Nest Traveller said: "Last year, Canadian cities received the most votes, although 2024 saw the spotlight move across the border to the US, with New York, Chicago and Las Vegas all ranking in the top 10".

Top 10 friendliest cities

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

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.

Movie prop houses can be built really quickly

Yesterday, we tweeted [\[LINK\]](#) "Here's how an empty lot on the Elbow River like on the right is an almost finished 2-story home in just 4-wks. Turns out, it is prop house for filming of JonBenet Ramsey mini-series starting the great @melissamccarthy & Clive Owen. Maybe we will see @benfalcone!" We have been watching across the

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river on how it looked like a house was being built in unbelievable speed, going from an empty lot to an almost finished construction 2-story in about a month, maybe a little more. One of our friends told us it was because it was going to be the prop house for the upcoming mini-series being filmed in Calgary on Jon-Benet Ramsey starring Melissa McCarthy and Clive Owen. This lot and the empty lot to the right both had houses with probably 5 feet of water on their main floor in the great Alberta flood in June 2013. And since then, the lots were not allowed to have homes built on them. Our friend said after the filming, they have to take the house down and restore the land to a green space.

Figure 72: Prop house being built on what was an empty lot like on the right



Source: SAF Group

Wine of the week: CastelGiocondo Riserva 1993 Brunello di Montalcino

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 some good wine of the week bottles get opened especially as many are 20 to 40 years old. On Friday, I tweeted out the wine of the week, which was the CastelGiocondo Riserva 1993 Brunello di Montalcino. I decanted it for five hours and was drinkable but no question past its prime. It had a beaten up label as the wine was in the cellar during the great Alberta flood of 2013. We had to take every bottle, take off the foil cover and disinfect the wine.

Figure 73: CastelGiocondo Riserva 1993 Brunello di Montalcino



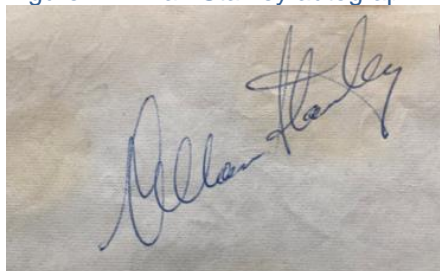
Source: SAF Group

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Former Toronto Maple Leafs star Allan Stanley passed away Oct 18, 2013

Didn't realize until this summer that one of our friends was the nephew of former Toronto Maple Leafs star, defenceman Allan Stanley, from the Stanley Cup winning teams of the 60s. But hockey came up in conversation and this tidbit came out. Allan Stanley was on the top defense pair, playing left defense alongside right defenseman Tim Horton. The other famous defense pair at the time was Bobby Baun and Carl Brewer. Allan Stanley passed away on Oct 18, 2013 at the age of 87. In the 60s, the Leafs would sometimes practice at the Tam O'Shanter rink at Kennedy Road and Sheppard Ave in Toronto. Mom would pick us up at lunchtime so we could eat our sandwich while watching the Leafs practice. And we would get autographs. Here is Allan Stanley from the 1963-64 Toronto Maple Leafs who won the Stanley Cup that season.

Figure 74: Allan Stanley autograph 1963-64



Source: SAF Group

NFL Commissioner teases Super Bowl could be played outside of US

The NFL is playing back-to-back weeks in London with today's Jacksonville Jaguars vs Chicago Bears about to kick off at 7:30am MT. NFL Commissioner Roger Goodell is in London and at a fan forum yesterday, he teased the Super Bowl could be held outside the US. ESPN reported "Goodell also spoke about growing the game outside the United States, including potentially holding a Super Bowl outside of the U.S. for the first time. He has shot down the idea in the past but told the fan forum Saturday that it's a possibility. "We've always traditionally tried to play a Super Bowl in an NFL city. That was always sort of a reward for the cities that have NFL franchises," Goodell said in response to a question about moving the neutral-site game internationally. "But things change. It wouldn't surprise me at all if that happens one day." It's hard to see that happening. There are 32 NFL cities who want to host a Super Bowl, 15 of which have never hosted a Super Bowl. Arguably, most of those are northern cities that big risk for snow and, other than the recent 2014 Super Bowl in New Jersey, the Super Bowl is held in warm cities or cities with dome stadiums. But in those 15 cities, there are the homes for Carolina Panthers, Seattle Seahawks and Tennessee Titans. It seems like a big tease to us.

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