Energy Tidbits

March 23, 2025

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Does Sinopec See Rising China Gasoline Sales Because PHEV Sales are 1.5 BEV Sales and PHEVs are Just Fuel-Efficient ICE?

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. A key question from Sinopec's just released Q4 is why doe they keep seeing increasing gasoline sales? Is it because PHEVs sales are 1.5x BEV sales and PHEVs are really just more fuel-efficient ICE? [click here]

2. Chinese consumers #1 asset, their homes, have now had >21 consecutive months of declining MoM values. [click here]

3. Canada is expected to see an election called later today for an Apr 28 vote and the Liberals could win a majority govt. [click here]

4. Seems like neither Trump or Khamenei want to see an escalation between Iran and US over the Houthis. [click here]

5. Tourmaline's Jamie Heard reminds of potential big upside to AECO for winter 2025/2026. [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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Natural Gas: +9 bcf build in US gas storage, now -624 bcf YoY

+9 bcf build in US gas storage

For the week ending Mar 14, the EIA reported a +9 bcf build, which is the first build in gas storage since early November [LINK]. Total storage is now 1.707 tcf, representing a deficit of -624 bcf YoY compared to a deficit of -628 bcf last week. For much of 2024, storage figures exceeded the 5-year range but moved back into the 5-yr range as winter approached and continues to be within the 5-yr range. The week of Mar 14 saw storage at -190 bcf below the 5-yr average, up from last week's deficit of -230 bcf to the 5-yr average. 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.

Figure 1: US Natural Gas Storage

	Stocks billion cubic feet (Bcf)				Historical Comparisons: Year ago (03/14/24)		5-year average (2020-24)	
Region	03/14/25	03/07/25	net change	implied flow	Bcf	% change	Bcf	% change
East	295	307	-12	-12	407	-27.5	358	-17.6
Midwest	366	370	-4	-4	552	-33.7	457	-19.9
Mountain	165	165	0	0	166	-0.6	109	51.4
Pacific	193	196	-3	-3	216	-10.6	168	14.9
South Central	688	660	28	28	990	-30.5	804	-14.4
Salt	181	161	20	20	299	-39.5	234	-22.6
Nonsalt	508	499	9	9	692	-26.6	571	-11.0
Total	1,707	1,698	9	9	2,331	-26.8	1,897	-10.0

Source: EIA

Figure 2: Previous US Natural Gas Storage

Previous 8 weeks (Bcf)				
Week Ended	Gas in Storage	Weekly Change	Y/Y Diff	Diff to 5 yr Avg
Jan/24	2,571	-321	-144	-111
Jan/31	2,397	-174	-208	-111
Feb/07	2,297	-100	-248	-67
Feb/14	2,101	-196	-386	-118
Feb/21	1,840	-261	-561	-238
Feb/28	1,760	-80	-585	-224
Mar/07	1,698	-62	-628	-230
Mar/14	1,707	9	-624	-190

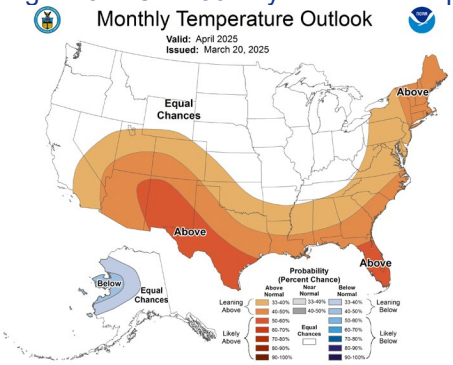
Source: EIA

Natural Gas: NOAA forecasts warmer than normal temps for April in South and East

NOAA monthly temp outlook

April is the shoulder season for natural gas where there really isn't any strong weather-related demand for natural gas. There are always exceptions but, as a norm, April is generally not cold enough to drive big natural gas home heating demand and generally not hot enough to drive big air conditioning demand. Its mostly what we have always called leave your windows open temperature. On Thursday, NOAA posted its 30-day forecast for April and the temperature probability calls for warmer than normal temperatures through the South and East coast for the Lower 48 [LINK]. The rest of the Lower 48 is forecasted to have equal chances of above or below average temperatures, while Alaska has western patches of below normal temperature forecasts. We recognize that weather forecasts are far from 100% accurate, but near-term forecasts tend to have greater accuracy. Below is the NOAA temperature probability outlook forecast for April released on March 20.

Figure 3: NOAA 30-day forecast for April

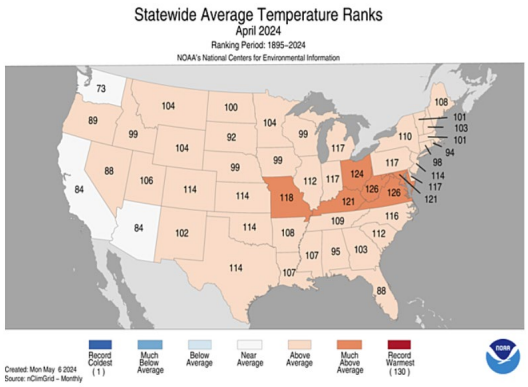


Source: NOAA

05/12/25: NOAA, 12th warmest April in last 130 years in the US

Here is what we wrote in our May 12, 2025, Energy Tidbits memo about April 2024's temperatures: "*April is shoulder season so there is normally very little weather driven natural gas demand although there is often early April cold in the north that leads to some modest natural gas demand. On Wednesday, the NOAA published their April recap for assessing the U.S. Climate, which revealed April 2024 was the 12th warmest the US has seen in the past 130 years. In the news release [LINK], the NOAA wrote "The average temperature of the contiguous U.S. in April was 53.8°F, 2.7°F above average, ranking 12th warmest in the 130-year record. April temperatures were above average across much of the contiguous U.S., while near- to below-average temperatures were observed in parts of the West, northern Plains, Upper Midwest, Southeast and in small pockets of the Northeast. Virginia and West Virginia each had their fifth-warmest April on record.… For January–April, the average contiguous U.S. temperature was 43.0°F, 3.8°F above average, ranking fifth warmest on record for this period". Below is a picture of statewide average temperature ranks in April.*"

Figure 4: NOAA Historical US Temperature Ranks by State – April 2024



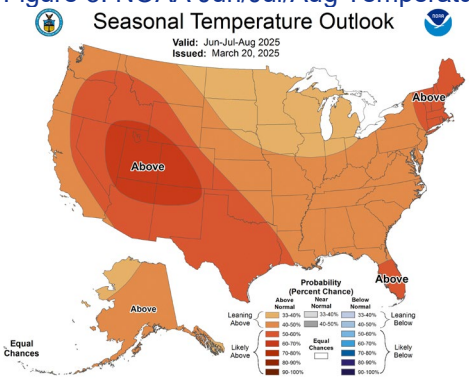
Source: NOAA

Natural Gas: NOAA forecasts warmer than normal temperatures for Jun/Jul/Aug

NOAA Jun/Jul/Aug temp forecast

We recognize that weather forecasts, even near term, are far from 100%, but, on Thursday, NOAA released its monthly update to its seasonal temperature forecasts [LINK]. However, the late March, April and May tend to be what we look at as shoulder season where there isn't any significant weather driven natural gas demand. So, the next weather driven natural gas demand period will be summer. Summer is still a couple months away so it's early for most to focus on natural gas and summer. On Thursday, we posted [LINK] "*Looks like Lower 48 temperatures should be positive for weather driven #Electricity #NatGas consumption. Updated @NOAA seasonal forecast calls for another hot Jun/Jul/Aug. But reminder Jun/July/Aug 2024 was 4th warmest in 130 yrs. #OOTT.*" It didn't change much from the early look they issued on Feb 20; the outlook for the start of summer JJA still calls for warmer than normal temperatures across the Lower 48. There is no bigger variable for natural gas price than winter temperatures, but a hot summer normally provides support for natural gas prices. Below is NOAA's Mar 20 temperature probability map for JJA.

Figure 5: NOAA Jun/Jul/Aug Temperature Probability Forecast

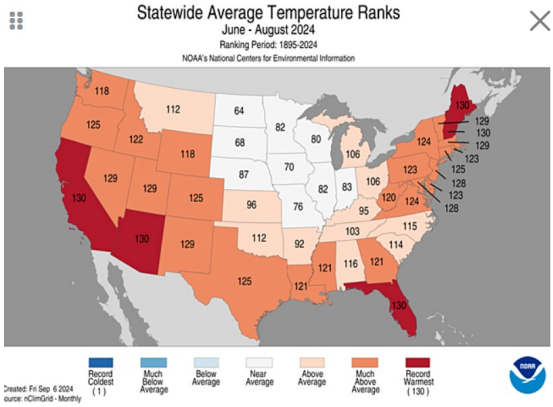


Source: NOAA

NOAA, Jun/Jul/Aug 2024 was 4th hottest in the last 130 years

Here is what we wrotein our Sept 15, 2024 Energy Tidbits memo. "*NOAA, Jun/Jul/Aug was 4th hottest in the last 130 years. It's been a really hot summer in the US, which has helped make a big reduction in the YoY gas storage surplus. NOAA's updated Aug temperature outlook above, when combined with June and July, makes Jun/Jul/Aug as the 4th hottest Jun/Jul/Aug in the last 130 years. Below is the NOAA's Statewide Average Temperature Ranks map for Jun/Jul/Aug 2024.*"

Figure 6: NOAA Statewide Average Temperature Ranks – Jun/Jul/Aug 2024



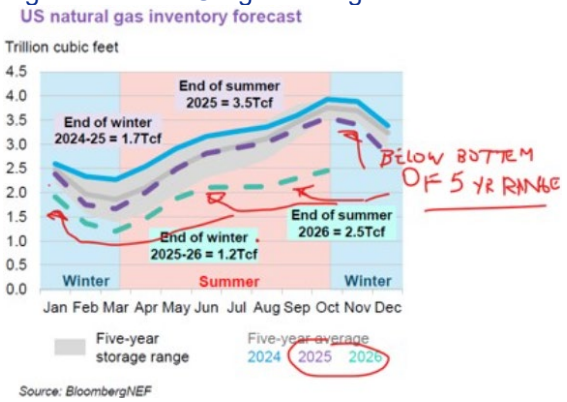
Source: NOAA

Natural Gas: BNEF forecasts gas storage below bottom of 5-yr range in Q4/25 & 2026

BNEF bullish US gas storage forecast

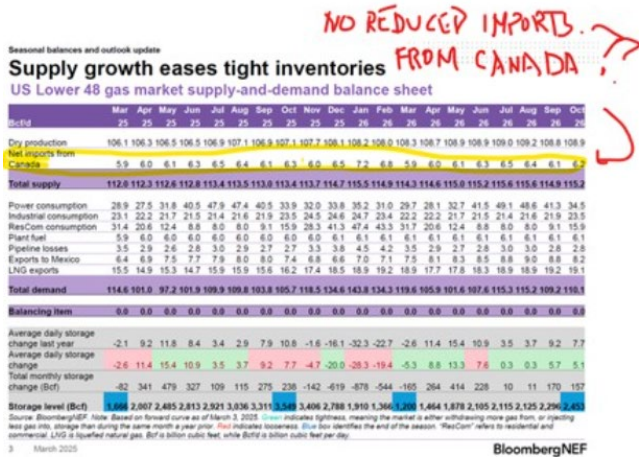
Henry Hub was -$0.12 WoW to close at $3.98 but there isn't any natural gas producer who called for HH to be this high as winter withdraw season comes to an end. The unexpected strong HH prices is why we remind of an item from last week's (Mar 16, 2025) Energy Tidbits memo on the bullish forecast for HH prices to end 2025. Here is what we wrote last week. "*BNEF forecasts gas storage below bottom of 5-yr range in Q4/25 & 2026. On Monday, we posted [LINK] "Bullish #NatGas Forecast. Weather is always the big wildcard BUT BNEF forecasts storage below bottom end of 5-yr range in Q4/25. AND this assumes no real change in imports from CAN despite start of #LNGCanada 1.8 bcf/d in mid 2025 & Alberta demand from oil sands, data centers, etc. Thx @BloombergNEF #OOTT." BloombergNEF had just posted its "US Gas Summer Outlook: Production Can't Keep Up With LNG". And the key items we always look at is what does their model forecast for US gas storage levels as we look ahead to the winter. Their new forecast for US gas storage is a bullish indicator for HH prices going into the winter 2025/2026 ie. in Q4/25. Weather, in particular how cold or hot it is in the winter, is always the huge wildcard for natural gas price forecasts. And BNEF says up front that "BNEF calculates 1,760Bcf of gas storage level variability attributable to weather between this month and the end of summer 2026." That's really BNEF reminding that winter 2025/26 temperatures are a huge wildcard. Weather aside, there is a bullish case for natural gas going into winter 2025/2026. And BNEF highlights the key factors in its report tile saying "Production Can't Keep Up With LNG". BNEF forecasts higher production but also see LNG exports increasing at a greater level. And the key to their forecast is that US gas storage falls below the bottom end of the 5-yr range in Q4/25 and continues to be so in 2026. Being below the bottom end of the 5-yr range is a bullish indicator for HH prices. Plus one of the BNEF forecast model assumptions would provide addition upside. All forecast models are all about assumptions but one that jumped out at us as potential upside is their assumption that there is no real change to US natural gas imports from Canada. This means that the BNEF is assuming Cdn natural gas production is increasing enough to offset the start of LNG Canada 1.8 bcf/d Phase 1, increasing natural gas consumption from oil sands and electricity such that there is no impact on Cdn natural gas exports to the US. Below are the two BNEF exhibits attached to our post."*

Figure 7: BNEF US gas storage forecast



Source: BloombergNEF

Figure 8: BNEF US supply/demand/storage forecast



Source: BloombergNEF

03/06/25: Big ramp in Cdn NatGas demand starts in 2025 with LNG Canada

We probably wouldn't have raised our questioning on the BNEF forecast assumption on US natural gas imports from Canada if we hadn't titled our Mar 9, 2025 Energy Tidbits memo *"Bullish for Cdn Natural Gas: Tourmaline CEO Sees Cdn Natural Gas Demand +50%, +9 bcf/d to ~27 bcf/d in 2030*" that included the reminder that LNG Canada 1.8 bcf/d Phase 1 starts commercial deliveries in mid-2025. Here is what we wrote in our Mar 9, 2025 Energy Tidbits memo on Tourmaline CEO's view for a 50% increase in Cdn natural gas demand by 2030 with the first big step ups starting in 2025. "*Tourmaline sees Cdn NatGas demand +50%, +9 bcf/d to 27 bcf/d in 2030. Tourmaline held its Q4 call on Thursday. We were surprised that no one focused on CEO Mike Rose's very bullish Cdn natural gas demand comments in the Q&A. Rose sees added Cdn natural gas demand up 50% or ~9 bcf/d by 2030. That is huge, moving from ~18 bcf/d to ~27 bcf/d by 2030. Rose basically did the math for the in-*

progress or widely expected items and it totals up to an additional ~9 bcf/d of natural gas demand for Cdn natural gas. It's why, on Thursday night, we posted [LINK] "Bullish for Cdn #NatGas. $TOU CEO has done the math. Stack up in progress + expected projects adds 9 bcfd of new NatGas markets for Cdn E&P. Half will be BC LNG if LNG Canada Phase 2 goes FID. Plus oil sands use of NatGas, data centers, pipelines, etc. Momentum on the added 9 bcfd starts is kick started in 2025 with LNG Canada 1.8 bcfd Phase 1. #OOTT." In the Q&A, Rose did not provide the detail but said "We believe on the gas side, if you include LNG Canada Phase 1 and Phase 2, because it's not quite on stream yet, and build one additional pipeline, a little optimizing on existing pipelines, we can grow our overall Industry natural gas production Canada by 50% by 2030 and that doesn't include a whole bunch of other growth projects that you can dream about. We're advocating on our front for buildout on the natural gas side and long and short of it, it's apparent we need to look after ourselves and we have lots of ways to do it." Half of the 9 bcf/d will be from LNG Canada Phase 1 & Phase 2 (assuming Phase 2 gets FID), Cedar LNG, Woodfibre LNG and Tilbury Phase 2 LNG expansion. Rose highlighted pipeline expansions and one additional pipeline. And we understand the other factors are the continuing increased use of natural gas for power as oil sands production keeps increasing, and the ramping up of data centers. These seem to us to be either in-progress or widely accepted very near-term items that are going to be happening quickly ie. data centers. Items like more natural gas for oil sands power generation and data centers are happening. Plus our post highlighted that the big step change up in natural gas demand starts in 2025 with the start of commercial operations at LNG Canada 1.8 bcf/d Phase 1, which by itself, is ~10% of BC/Alberta natural gas production."

Natural Gas: Trump definition of "mineral" increases probability for Natgas into NE US

Increasing probability for Trump's natural gas pipelines

We have been highlighting one of Trump's energy risks to Canada is that he will get natural gas pipelines into and within the NE US and that means there won't be Marcellus natural gas for export into Ontario. It looks like this week's critical minerals and rare earths actions include a definition of "mineral" that would cover natural gas, which we see as providing increasing probability for him to be successful. Yesterday, we posted [LINK] "*Worth a read of Trump's 👇definition this week of "mineral". May not specifically say #NatGas but would seem to cover NatGas. Would support Trump's intention to get Marcellus NatGas into NE US. If so, there would be less Marcellus NatGas exports into Ontario. #OOTT.*" On Friday, we posted [LINK] on Trump's Executive Order to "*increase American Mineral Production*". When Trump announced the EO, he stressed this for "*critical minerals and rare earths*" but the actual definition for the EO defined "mineral" in such a way that it could include just about everything and exclude almost nothing. Natural gas was not specifically mentioned and not specifically excluded. Given Trump's desire to get more natural gas pipelines into and within the NE US, we believe this just one more item that increases the probability for him to do so. Our Supplemental Documents package includes the executive order and the 30 U.S.C. 1606(a)(3) definition."

Will Trump use national energy emergency to get NatGas pipelines in NE

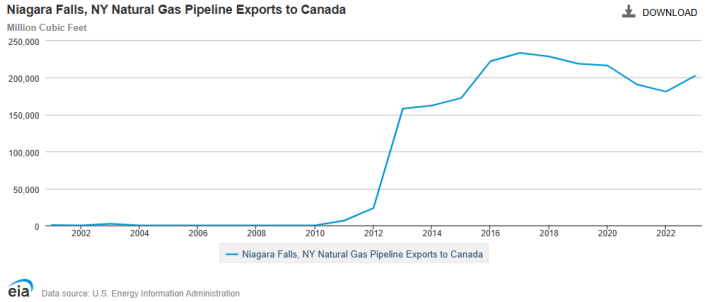
Here is what we wrote in last week's (Mar 16, 2025) Energy Tidbits memo on Trump using emergency authorization to get natural gas pipelines into the NE US. "*Will Trump use national emergency to get NatGas pipeliens into NE. One of the overlooked Trump themes is how he declared or will declare national emergency for items like energy. We were thinking about this seeing Trump's push on NY Governor Hochul to get onboard with natural gas pipelines to the NE US. And our first thought was that he would use emergency powers to get it done if Hochul doesn't get onside. Recall that one of his day one actions was "Declaring a National Energy Emergency" that included taking actions on non-Federal Lands. Section 2 said "Sec. 2. Emergency Approvals. (a) The heads of executive departments and agencies ("agencies") shall identify and exercise any lawful emergency authorities available to them, as well as all other lawful authorities they may possess, to facilitate the identification, leasing, siting, production, transportation, refining, and generation of domestic energy resources, including, but not limited to, on Federal lands. " On Thursday, Trump posted "If New York, Connecticut, and New England had their Pipelines, savings from Heating alone would go down $2,300 per family — When you add Air Conditioning, and other things, you would have a $5,000 savings per family. All we need is a simple approval from New York. Every other State in New England, plus Connecticut, wants this, in order to help the Environment, and save BIG money. We only need the final approval from New York State, whose people all want it. Otherwise, we'll have to use other authorities. New York State has held up this project for many years, but we won't let that happen any longer. We will use federal approval!"*

Trump wants Marcellus gas for New England, therefore not Ontario

We have been highlighting Trump's plan to get more natural gas pipelines int the NE US. Here is what we wrote in last week's (Mar 16, 2025) Energy Tidbits memo. "*Trump wants Marcellus gas for New England, therefore not Ontario. In the early days of Trump announcing the tariffs on Canadian oi l and natural gas, we were asked on whether Trump would stop US natural gas exports to Ontario, we said that it wasn't that Trump would stop the natural gas exports. Rather, it's Trump wanting to get natural as pipelines into and within New England so US natural gas can penetrate those markets. Our point was that, if so, that would mean less Marcellus/Utica natural gas for export. Here is what we wrote in our Feb 16, 2025 memo. "Trump wants Marcellus gas for New England, therefore not Ontario. Earlier this morning, we posted [LINK] on Trump's Friday Executive Order establishing his Energy Dominance Council and noted the winners/losers from the his mandate to the council. Our post included "#Marcellus #NatGas wins "approving the construction of natural gas pipelines to, or in, New England, California, Alaska, and other areas of the country underserved by American natural gas; " Note the "or in". Eastern Canada loses if Marcellus NatGas can stay in US and doesn't get exported to eastern Canada. ie. ~0.6 bcf/d via Niagara Falls." Trump wants to get natural gas pipelines to and into New England, which has been for a well over a decade something Marcellus producers have been trying to done but haven't been able to get approved federal and state regulators. We would expect Trump's federal regulators to be okay but then the question will be the states. And knowing Trump's*

style, there will be some sort of big threat to force the states to ultimately get onside. IF so and it is still an IF, then it will mean Marcellus/Utica natural gas can feed local regional markets and it should lead to lower Marcellus gas price differentials. Then the flip side is that IF Marcellus gas can stay regional, then it would mean less natural gas exports at Niagara Falls to Ontario. This was a big event 15 years ago when Marcellus natural gas started to be exports via Niagara Falls. It went from zero to its current ~0.6 bcf/d. Earlier this morning, we also posted [LINK] "Marcellus #NatGas exports ~0.6 bcf/d to Ontario via Niagara Falls export point per @EIAgov. IF and a big IF, Trump Energy Dominance Council can get pipelines to and IN New England, be better market for Marcellus than Canada. #OOTT." Our post included the below EIA graph of natural gas exports to Ontario at the Niagara Falls export point."

Figure 9: Niagara Falls, NY natural gas pipeline exports to Canada



Source: EIA

Natural Gas: Big upside potential for AECO in winter 2025/2026?

Big upside potential for AECO?

The big event for 2025 for the Cdn oil and natural sector is the mid-2025 expected start of commercial LNG cargos for the 1.8 bcf/d LNG Canada Phase 1. The big story for the Cdn oil and gas industry has been how the startup of the 590,000 b/d TMX oil pipeline to the BC coast for loading on tankers has materially narrowed WCS less WTI differentials. For years, I have highlighted how the startup of the 1.8 bcf/d LNG Canada Phase 1 LNG project should lead to narrowing of AECO differentials. Our reminder for years is that 1.8 bcf/d is ~10% of BC/Alberta natural gas production. On Wednesday, we posted [LINK] "*Will AECO diffs get the lift from LNG Canada 1.8 bcf/d Phase 1 that WCS-WTI diffs have got from 590,000 b/d TMX? 👇Near-term winter 25/26 upside case for AECO by @JamieHeard5 @TourmalineOil. I had the chance to recently sit down with Jamie to hear his views & analysts of #NatGs markets and recommend @JamieHeard5 to your must read Cdn #NatGas experts. #OOTT.*" Jamie is VP Capital Markets at Tourmaline Oil and I had a chance to recently sit down with Jamie to ask him about his views on Cdn & US natural gas markets from his seat at being at the #1 natural gas producer in Canada that sells/markets natural gas to all North American markets including for LNG out of the US. We forwarded his post [LINK] "*Sometimes it's as simple as it seems. LNG Canada cargo spotted and summer AECO is up 50c. In my view once it's evident that October is not a problem from a storage perspective I think we need to bring AECO basis in to make sure we have enough gas at home next march/april. I think that number is about 70-80c back from Chicago. Usually Chicago is about 0-20c back from hub (making normalized basis $0.75-$1.00) but recently*

hub has kind of been a 'bull island'. Right now cal25 Chicago is more like 45c back from hub. That makes normalized aeco basis more like 1.10-1.20. That would imply a winter AECO price that looks more like C$5 vs the current C$3.50." Below is the graph attached to Jamie's post.

Figure 10: AECO Hub for fixed float swap

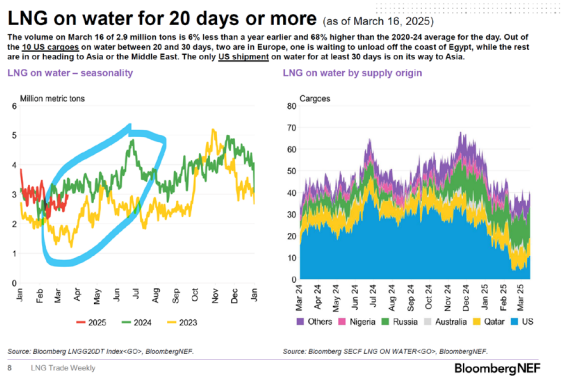
Source: Jamie Heard

Natural Gas: LNG on water reminds it's shoulder season for natural gas consumption

LNG on water for 20 days or more

Winter is effectively over for winter driven natural gas consumption and in all the key natural gas consuming regions such as US, Europe, Japan and China, it is what we call leave the windows open temperatures ie. no need for heat and no need for air conditioning. Below is BloombergNEF's graphs on LNG on water for 20 days or more. It reminds that spring is the normal seasonal period for increasing LNG on water, which we believe ties to spring being the leave the windows open temperatures. There are other factors besides temperature such as the need to refill EU natural gas storage more than normal. But the LNG on water for 20 days or more graphs remind that this is shoulder season for natural gas weather driven consumption.

Figure 11: AECO Hub for fixed float swap



Source: BloombergNEF

China Resources & Woodside 15 yr LNG supply deal

Natural Gas: China Resources signs 15-yr 0.08 bcf/d LNG supply deal with Woodside

On Monday, Woodside announced that it had signed a long-term LNG sales agreement with China Resources for a supply of up to 0.08 bcf/d for 15-years, with first deliveries to begin in 2027 [LINK]. This marks Woodside's fourth long-term LNG sales agreement into Asia since the start of 2024. The press release said, "*Woodside has signed a long-term sale and purchase agreement (SPA) with China Resources Gas International Limited (China Resources) for the supply of liquefied natural gas (LNG) to China. The SPA provides for the supply of approximately 0.6 million tonnes of LNG per year over 15 years on a delivered basis, commencing in 2027."* The Executive Vice President and CCO of Woodside, Mark Abbotsford, said: "*We are very pleased to have launched our relationship with China Resources, the country's leading gas utility. This marks the first time Woodside on a standalone basis has signed a long-term sale agreement with a customer in China, Asia's largest consuming market for LNG. And it is the first time China Resources has signed an agreement to procure LNG over a period of 15 years.*" Our Supplemental Documents Package includes the Woodside press release.

There have been 28.70 bcf/d of long-term LNG supply deals since July 1, 2021

It's been a busy last five years of long-term LNG deals and, even though high-profile calls, such as the IEA are for peak natural gas consumption by 2030, buyers continue to lock up long-term LNG supply. This 5-year big wave of LNG deals started in July 2021, and we highlighted this in our July 14, 2021, 8-pg "*Asian LNG Buyers Abruptly Change and Lock in Long Term Supply – Validates Supply Gap, Provides Support for Brownfield LNG FIDs*". We continue to update that table, which now amounts to 28.70 bcf/d of long-term LNG deals since July 1, 2021. 65% of the deals have been by Asian LNG buyers. Note in our non-Asian LNG deals, major LNG players (i.e. Chevron, Shell, etc.) are buying for their LNG portfolio supply. China has been particularly active in this space, accounting for 42% of all Asian LNG buyers in long term contracts since July 1, 2021. There have been so many long-term LNG deals since the market changed back to long-term LNG deals in the spring of 2021 that we have now summarized on a per quarter basis. But our Supplemental Documents package includes our detailed by deal table for all long-term LNG deals since July 1, 2021.

Figure 12: Long-Term LNG Quarterly Buyer Deals Since July 1, 2021

Long-Term LNG Quarterly Deals Since July 1, 2021						
Quarter	Deals	Volume	Average deal length	Asian buyers	European buyers	Other buyers
	(#)	(bcf/d)	(years)	(%)	(%)	(%)
Q3 2021	6	1.6	15.3	83.8%	16.3%	0.0%
Q4 2021	13	2.1	15.4	94.8%	5.2%	0.0%
Q1 2022	8	2.3	19.5	77.1%	0.0%	22.9%
Q2 2022	18	3.7	18.6	44.0%	42.1%	13.9%
Q3 2022	9	1.8	19.3	54.1%	7.3%	38.6%
Q4 2022	7	1.4	17.4	55.4%	44.6%	0.0%
Q1 2023	7	1.3	17.1	69.1%	30.9%	0.0%
Q2 2023	9	2.0	18.4	69.6%	26.5%	3.9%
Q3 2023	9	1.1	14.1	37.8%	9.2%	53.0%
Q4 2023	10	2.2	20.8	33.6%	58.7%	7.7%
Q1 2024	10	2.1	15.7	93.9%	6.1%	0.0%
Q2 2024	10	2.1	14.3	41.3%	8.9%	49.8%
Q3 2024	13	2.7	13.7	77.5%	19.3%	3.2%
Q4 2024	9	1.6	14.0	78.5%	5.0%	16.6%
Q1 2025	7	0.7	12.7	70.4%	0.0%	29.6%

Source: SAF

Natural Gas: India February natural gas production basically flat MoM, down -3.4% YoY

India natural gas production

India domestic natural gas production peaked in 2010 at 4.60 bcf/d, and then ultimately declined to average 2.80 bcf/d in 2020-2021. India returned to modest growth in 2021/2022, which was followed by several months of relatively flat production, but modest production growth returned in 2023. Recently, it has been back from flat to modestly down in 2024 and early 2025. On Monday, India's Petroleum Planning and Analysis Cell (PPAC) released their monthly report for February's natural gas and oil statistics [LINK]. India's domestic natural gas production for February was 3.47 bcf/d, which was immaterially changed -0.7% MoM from January. On a YoY basis, natural gas production was down -3.4% from 3.59 bcf/d in February 2024. Our Supplemental Documents package includes excerpts from the PPAC monthly.

Natural Gas: India LNG imports up +11.8% MoM to 3.88 bcf/d in Feb, up +30.3% YoY

India LNG imports

It has taken years longer than expected but new LNG infrastructure is allowing for increasing LNG imports. For the past several years, India has increased LNG imports to meet increasing natural gas consumption as domestic natural gas production has been mostly flat or decreased. But the overriding factor for India tends to be price; if price is high, India pulls back on LNG imports and will normally turn to coal. If prices are low, like was seen in 2024 for the most part, then India tends to pick up spot cargoes. India is an opportunistic LNG spot buyer. However, what is playing out in 2025 and going forward is that there has been new LNG infrastructure that is allowing increasing LNG imports. On Monday, India's Petroleum Planning and Analysis Cell (PPAC) released their monthly report for February's natural gas and oil statistics [LINK]. Over the past 3 years, India's LNG imports have declined from a 2020-2021 peak of 3.84 bcf/d in Oct 2020 to just 2.85 bcf/d in Jan 2021 and lower in 2022. Starting in H2 of 2023, solid growth began and has continued through 2024 and into early 2025. February LNG imports were 3.88 bcf/d, which is up +11.8% MoM from 3.47 bcf/d in January. LNG imports are now up +30.3% YoY from 2.98 bcf/d in February 2024.

Natural Gas: Japan LNG stocks down WoW, up YoY; down against the 5-yr avg

Japan LNG stocks down WoW

The late winter cold was a boost to electricity and natural gas demand and that was refleced in the late winter drop in LNG stocks. As a result, we should see some Japan spot LNG cargo buying in March with Japan LNG stocks dipping below the 5-yr range. Japan's LNG stocks are down WoW, up YoY, and down when compared to the 5-year average. On Wednesdays, Japan's METI releases its weekly LNG stocks data [LINK]. LNG stocks on March 16 hit its lowest point since March 2024 at 74.9 bcf, down -12.4% WoW from 85.5 bcf on March 9, and up +5.4% from a year ago. Stocks are well below the 5-year average of 97.5 bcf. Below is the Japanese LNG stocks graph from the METI weekly report.

Figure 13: Japan LNG Stocks

Source: METI

Natural Gas: Sinopec, China "*domestic demand for natural gas grew rapidly*"

China rapid natural gas demand growth

Later in the memo, we highlight Sinopec's Q4 release this morning and hos Sinopec is seeing increasing gasoline sales in the face of strong growth in New Energy Vehicles. Another highlighted item from Sinope was "*the domestic demand for natural gas grew rapidly*" ,"*We stepped up effort in gas refueling and EV battery charging and swapping businesses. Over one thousand gas-refueling stations and more than 10 thousand battery charging and swapping stations were built.*" and "*looking forward to 2025, as China's economy continues to recover and improve, domestic demand for natural gas and chemical products is expected to maintain growth, and that for refined oil products will remain influenced by alternative energy*." Sinopec also highlighted they are reducing the diesel to gasoline mix in their refineries ie. diesel demand is decreasing. Sinopec didn't break down the sectors leading to the rapid increase in natural gas demand or the future growth. But, by also highlighting the natural gas refueling stations, it looks like they are including how increasing LNG-fueled medium & heavy duty trucks are reducing diesel demand.

06/25/24: LNG trucks, China peak diesel demand sooner than expected

Here is what we wrote in our June 30, 2024 Energy Tidbits memo when we first raised how the rapid increase in LNG-fueled heavy duty trucks would lead to China reading diesel demand sooner than expected. "*On Tuesday, we saw the rationale for why China should hit peak diesel demand sooner than expected. Mackenzie said something we, and it seems many others, hadn't realized in that 25% of new heavy-duty trucks in China are now LNG fueled and not diesel fueled. We say others must be realizing because we saw comments later this week on this very subject of 25% of heavy-duty trucks being LNG fueled so we suspect they also saw the Wood Mackenzie comments. We assume that this didn't go from zero to 25% overnight so there has been some buildup of this LNG truck sales. Diesel is driven by trucks so this will have a direct impact on diesel demand. And if China reaches peak diesel demand, it also points to peak oil demand as diesel demand is roughly 25% of China's 16 mmb/d oil consumption. And on early Tuesday morning, we tweeted [LINK] "Good China insights from @WoodMackenzie Alan Gelder. Chinese distillate demand is not particularly great. so negative indicator for economy today. But decoupling of China diesel demand vs economy indicator is starting for mid-term as 25% of new heavy duty trucks are LNG fuel so "that decouples the manufacturing & movement of goods from diesel demand"' Would also be a factor to China oil*

demand peaking sooner than prior forecasts. #OOTT @gulf_intel." Our tweet included the transcript we made of comments by Alan Gelder (Downstream Global SME, VP Refining, Chemicals & Oil Markets, Commodities Research, Wood Mackenzie) on Gulf Intelligence's Daily Energy Markets June 25 podcast. [LINK] Items in "italics" are SAF Group created transcript. At 10:40 min mark, Gelder "The Chinese economy hasn't materially returned to growth. So there is a degree to which how you measure that. We look at Chinese distillate demand – it's not particularly great, not particularly strong. There is a challenge in that actually there is a akin to what China has done around electrification of the passenger car fleet. They are shifting trucks onto LNG. So something like 25% of new heavy duty truck purchases are LNG. So in a sense, we are having that move decouples the manufacturing and movement of goods from diesel demand. Just that activity of changing their fuel type."

Diesel consumption will become less of an economy indicator in China

Our June 25, 2024 tweet noted above on diesel demand included the note that this mean diesel consumption will be less of an indicator for the economy. Many look at diesel consumption as an indicator for the China economy and increasing LNG heavy duty trucks will delink this relationship. Wood Mackenzie's Alan Gelder said "*They are shifting trucks onto LNG. So something like 25% of new heavy duty truck purchases are LNG. So in a sense, we are having that move decouples the manufacturing and movement of goods from diesel demand. Just that activity of changing their fuel type."*

China natural gas production

Natural Gas: China natural gas production +3.7% YoY in Jan-Feb to 25.9 bcf/d

Well before Covid, our concern in 2019 was that China's LNG imports were going to change from strong YoY growth in LNG imports to a period of zero to very low growth in LNG imports in the 2020s. The reason was primarily the startup of the big Power of Siberia natural gas pipeline from Russia and a return in the 2000's to modest growth in China domestic natural gas production. And since LNG is the most expensive natural gas, it would be and is the marginal natural gas/LNG supply. That concern has played out over the past few years and increasing domestic natural gas production and increasing cheaper natural gas pipeline imports from Russia squeezed out LNG imports in 2022 and 2023. On Monday, Bloomberg reported that China natural gas production was up to 25.9 bcf/d over Jan-Feb, up +3.7% YoY from 24.5 bcf/d in Jan-Feb 2024. December 2024 was 24.8 bcf/d. Note that the Chinese government website [LINK] also noted that China's average natural gas production reached 23.77 bcf/d in 2024, resulting in an average annual growth of approx. +1.26 bcf/d in the last six years.

China natural gas and LNG imports

Natural Gas: China Feb LNG imports down MoM, natural gas pipeline imports up MoM

On Tuesday, the China's General Administration of Customs ("GACC") released their pipeline, LNG split for natural gas for January and February [LINK]. Our Mar 9, 2025 Energy Tidbits memo highlighted the total China natural gas imports (LNG imports plus natural gas pipeline imports) but this week China provided the split of LING imports vs pipeline gas imports for each month. We continue to highlight that, where possible, China favors imports of cheaper natural gas from pipelines over more expensive LNG imports but will take advantage of lower LNG spot pricing when possible. (i) LNG imports. GACC reported that

over Feb, China imported 7.79 bcf/d of LNG, down -17.1% MoM from 9.39 bcf/d in Jan and down -22.9% YoY from Feb 2024. (ii) Natural Gas via pipeline imports. GACC reported that over Feb, China imported 8.59 bcf/d of natural gas via pipeline, which is up +18.0% MoM from 7.28 bcf/d in Jan and +7.6% YoY from Feb 2024.

China natural gas imports -7.7% YoY, 31.5 bcf/d during Jan-Feb period

Here is what we wrote in our Mar 9, 2025, Energy Tidbits memo when the GACC had only released cumulative natural gas imports that were not split up into LNG and pipeline gas for Jan-Feb. "*On Friday, China's General Administration of Customs (GACC) reported combined natural gas import data for Jan-Feb [LINK]. China's natural gas imports (LNG and pipeline gas) were down -7.7% YoY to 20.3 million tons over Jan-Feb 2025 vs 22.0 million tons over Jan-Feb 2024. This is approx. 16.5 bcf/d in Jan-Feb 2025 vs 17.6 bcf/d in Jan-Feb 2024. Note Jan-Feb 2024 had 60 days due to the leap year. As of our 7am MT news cut off, China has not posted the split of natural gas imports into impacts via pipeline vs LNG imports. That split typically comes out a week or so later. But with consistently higher YoY natural gas pipeline imports and higher YoY domestic natural gas production, we expect to see relatively flat YoY LNG imports.*"

China prioritizes Russian pipeline gas imports as it is cheaper than LNG

Here is what we wrote in our June 9, 2024 Energy Tidbits memo. "*For years, we have warned that how Chinese natural gas pipeline imports from Russia would be prioritized over LNG imports due to the cheap cost of Russian pipeline gas. On Monday, we tweeted [LINK] "It's way cheaper! And why China prioritizes imports of RUS #NatGas via pipeline vs #LNG imports. 2019-21: China only paid $4.40/mmbtu for RUS pipeline gas vs RUS charged Europe ~$10/mmbtu. See 👇 @maxseddon @NastyaStognei @HenryJFoy @leahyjoseph report. #OOTT." The FT report "Russia-China gas pipeline deal stalls over Beijing's price demands" was focused on China wanting too low a natural gas price for the next expansion of Russian pipeline natural gas to China. But what jumped out at us was the reminder that China is currently getting cheap natural gas from Russia. FT wrote "China already pays Russia less for gas than to its other suppliers, with an average price of $4.4 per million British thermal units, compared with $10 for Myanmar and $5 for Uzbekistan, the CGEP researchers calculated from 2019-21 customs data. During the same years Russia exported gas to Europe at about $10 per million Btu, according to data published by the Russian central bank." Our Supplemental Documents package includes the FT report."*

Natural Gas: Significant damage to key Sudzha natural gas intake station

Significant damage to Sudzha

Yesterday, we posted [LINK] "*Here's why Russia #NatGas to EU won't return as quickly as might be expected with a Trump RUS/UKR deal. "The [Sudzha] facility suffered significant damage as a result of explosion". 👇TASS. Recall Sudzha was shipping 1.5 bcf/d to EU via Ukraine up until yr end 2024. #OOTT."* As a reminder Russia continued to ship ~1.5 bcf/d at the Sudzha intake station to EU via Ukraine to year end 2024 even after Ukraine captured and took control of Sudzha last summer. Another reason why the return of Russian natural gas to Europe won't be as quick as might have been expected is that Ukraine reportedly blew

up the key Sudzha natural gas intake station and TASS said "*The facility suffered significant damage as a result of the explosion*." We haven't see any detail on the significant damage, what is required to repair it or how long it could be out of commission. But, depending on what Trump allows (or even EU allows) in any deal, the damage could be long lasting in terms of how long and how much of the volumes can be impacted for longer. For example if the big turbines were blown up, under current sanctions wouldn't allow Russia to get the big western gas turbines from Baker Hughes, Siemens or others. On Friday, TASS reported "*Kiev deliberately blew up the Sudzha gas metering station through which Russian gas is pumped to Europe, the ministry said. The Ukrainian troops used the facility as a secure logistics point while the station was under their control. The Russian Defense Ministry called the blowing up of the gas metering station a "deliberate Ukrainian provocation" that should be seen as part of a general series of recent attacks on Russia's energy infrastructure aimed at derailing US President Donald Trump's peace initiatives,"* And TASS reported "*The facility suffered significant damage as a result of the explosion."* Below is a 2018 map from Oxford Institute for Energy Studies showing Sudzha. Our Supplemental Documents package includes the TASS report.

Figure 14: The Ukrainian pipeline system

Source: Oxford Institute for Energy Studies

Natural Gas: Much more on Trump/Putin call from Kremlin report vs Trump posts

Trump/Putin Tues call

Everyone has their view on what will happen and when it will for a Trump led Russia/Ukraine deal. But the one thing that is clear is that Trump is trying to push forward a deal and we believe his priority is to do as quickly as possible. So we continue to be of the view that a near-term Russia/Ukraine deal will be coming. And when we believe someone's priority is to do a deal quickly and are trying to jam thru a deal quickly, we always expect them to give more than they might want to give as their primary objective is to get to a deal as quickly as possible. It is why we still expect Trump will ultimately give in more to Putin. (i) Trump and Putin had their call on Ukraine on Tuesday. Trump posted on the call and it sounded like big progress. Trump said it was very good and productive call. And "*we agreed to an immediate Ceasefire on all Energy and Infrastructure, with an understanding that we will be working quickly to have a Complete Ceasefire and ultimately, an END to this very horrible war…*" On Tuesday, we posted [LINK] "*Way more insight on Putin must have's from Kremlin readout of Putin/Trump! "The key condition for preventing the escalation of the conflict and working towards its resolution by political and diplomatic means should be the complete cessation of*

foreign military assistance and the provision of intelligence information to Kyiv." No agreement on 30-day truce. Rather, "The parties identified a number of essential points regarding the provision of effective control over a possible ceasefire along the entire line of combat contact, the need to stop forced mobilization in Ukraine and rearmament of the Armed Forces of Ukraine." Putin agrees to with Trump proposal to not "strike energy infrastructure facilities for 30 days." and Putin "immediately gave the Russian military the appropriate command." Putin ready to work with Trump "And, of course, take into account the unconditional the need to address the root causes of the crisis, Russia's legitimate security interests. Putin "reacted constructively to the idea expressed by Donald Trump implementation of the well-known initiative concerning the safety of navigation in the Black Sea." #OOTT." Our Supplemental Documents package includes the Trump post and Kremlin readout.

Big downside risk to TTF & LNG if Russia pipeline gas returns to Europe

Earlier, we noted the unknown significant damage to the Sudzha intake natural gas station. This has the potential to be a holdback to bringing back 1.5 bcf/d of Russian pipeline natural gas to Europe. So if there is a long term inability to repair the facility, it will reduce the potential negative to TTF and LNG prices. That aside, here is what we wrote in our Feb 16, 2025 Energy Tidbits memo. *"Big downside risk to TTF & LNG if Russian pipeline gas returns to Eruope. For the past few years we warned on how Germany cutting off Russian pipeline natural gas would hammer their industrial economy, thought they were the weak link to give so have been surprised Germany has hung in solidly with Ukraine and Europe on no Russian pipeline natural gas. And that a return of Russian pipeline natural gas would be a big negative to TTF and LNG prices. It's hard not to see the last few days reporting and not believe Trump and Putin have likely agreed on the outline of a deal and that there is big momentum to papering such deal to happen soon ie. within weeks and not months. Our view has been that we see the return of Russian pipeline natural gas and, pre-Trump, that would likely include some sort of allocation of revenues to help in some sort of Ukraine rebuild support. However, with Trump, we aren't convinced that Russia will be forced to contribute out of natural gas to some sort of rebuild. Regardless of the natural gas money split, we still expect a Russia/Ukraine peace deal will see the return of Russian pipeline natural gas to Europe as it will reduce energy costs and Europe needs all the help it can get to stimulate their economy. And if Russian pipeline natural gas comes back, it's a big negative to TTF and LNG prices."*

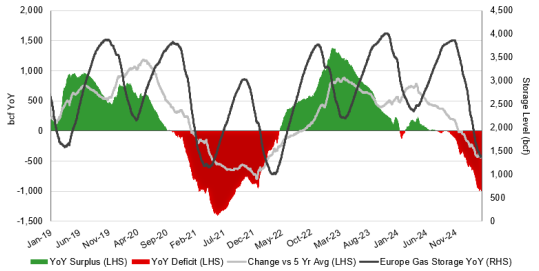
Natural Gas: Europe storage down -1.7% WoW to 33.9% full, down -25.4% YoY

Europe gas storage at 33.9%

It has been a good Q1/25 so far for EU natural gas, which was helped by multiple periods of very low wind generation when wind generation is normally at its seasonal high in the winter. This has also been a big plus to coal generation in Germany to help fill the void. And as a reminder, the YoY comparison is to a hot Mar 2024 in Europe. The good news for Europe was that storage was fairly full to start the winter. It would have been full if Europe had not cut back on LNG imports in Q2 and Q3 for fear of being full early. But with some colder temperatures and low wind in Dec, storage draws picked up. This week, on Mar 20, Europe storage was down -1.7% WoW to 33.9% vs 35.5% on Mar 13. Recall that winter 2023/24 was one of the hottest winters in Europe. Storage is now down -25.4% from last year's levels of 59.3% on Mar 20, 2024, and down against the 5-year average of 45.5%. Below is our graph

of European Gas Storage Level.

Figure 15: European Gas Storage Level



Source: Bloomberg, SAF

Ukraine storage is currently 2.7% of total Europe gas storage volume

We don't have detailed reports, but the reports from a few weeks ago were that there were multiple Russian missile attacks on Ukraine natural gas and energy infrastructure. We have been breaking out Ukraine gas storage levels since the Mar/Apr Russian bombing of the Ukraine natural gas storage, which only impacted some above ground natural gas infrastructure. But it also reminded of the risk to Europe gas storage from Russia attacks. We broke out the Ukraine storage data from the above Europe data we monitor weekly from the GIE AGSI website [LINK], and, on Mar 20, natural gas in Ukraine storage was at 3.5% of its total capacity, down compared to 4.5% of its total capacity on Mar 13. Last winter, Ukraine storage as of Nov 1, 2023, was at 39.4%. Right now, Ukraine makes up about 2.7% 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 16: Ukraine Gas Storage Facilities as of June 2023

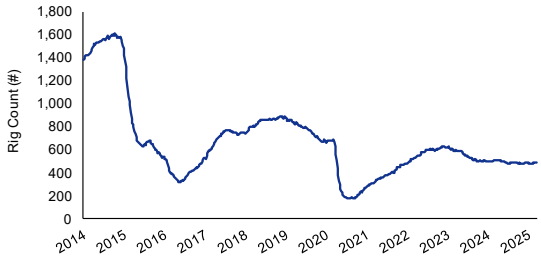
Source: Bloomberg

Oil: US oil rigs -1 rig WoW, down -23 rigs YoY; gas rigs up +2 rigs WoW

US oil rigs down WoW

We have been highlighting the consistent comments from the service companies that they are expecting relatively flat or some small decline in US rig levels in 2025 as the oil and gas companies stay in their capital disciplined + return of capital to investors mode. We are a little surprised that oil rigs, in total, continue to be hanging in there despite WTI prices staying below $70, but we expect to see some oil rig declines in the coming weeks. 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 US oil rigs were down -1 rig WoW as of Mar 21. Total US oil rigs are now down -23 oil rigs YoY to 486 rigs, which is above the recent low seen in the week of Jan 24. (iii) Note we can see the basin changes but not by type of rig; the WoW changes at the major basins were as follows: Permian -1 rig WoW, Cana Woodford -2 rigs WoW, Granite Wash -1 rig WoW, Williston -1 rig WoW, Ardmore Woodford +3 rigs WoW, and Arkoma Woodford +1 rig WoW. (iv) The overlooked US rig theme is the YoY declines, which have begun to taper as Q4 2023 saw activity leveling off, however, it is still important to note the YoY change. Total US gas and oil rigs are down -33 rigs YoY to 588 rigs including US oil rigs down -23 rigs YoY to 486 rigs. And for the key basins, the Permian is -15 rigs YoY, Haynesville is -7 rigs YoY, DJ-Niobrara is -6 rigs YoY, Marcellus is -6 rigs YoY, Granite Wash is +6 rigs YoY, Eagle Ford is -7 rigs YoY, Barnett is +1 rig YoY, Ardmore Woodford is +5 rigs YoY, Arkoma Woodford was flat YoY, Cana Woodford is -1 rig YoY, Mississippian is -2 rigs YoY, Utica is -1 rig YoY, and Williston is -1 rig YoY. (v) US gas rigs were up +2 rigs WoW to 102 gas rigs and down -10 rigs YoY. We believe US gas rigs will need to increase over the next several months as more US LNG capacity comes onstream in 2025. Lastly, US miscellaneous rigs were flat WoW at 5 rigs and +2 rigs YoY.

Figure 17: Baker Hughes Total US Oil Rigs



Source: Baker Hughes

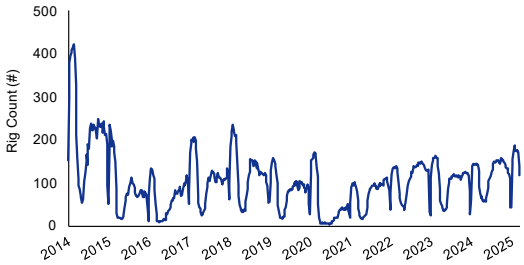
Oil: Total Cdn oil rigs down -21 rigs WoW, in line with end of winter drilling season

Cdn oil rigs down WoW

Winter drilling season has ended, evident in the large WoW seen in the last two weeks. On Friday, Baker Hughes released its weekly North American drilling rig data. This week's total oil and gas rig count was down -20 rigs WoW to 179 rigs on Mar 21 and are up +10 rigs YoY. We expected to see the large decrease in rigs this week and expect another decline to come next week. It was cold in Feb, which allowed companies to keep rigs going a little longer than normal and drill a couple extra wells to take advantage of stronger than expected natural gas prices into the end of Feb. But winter drilling season has pasted as we have entered in

spring. Oil rigs are down -21 rigs WoW to 118 and up +27 rigs YoY. Gas rigs are up +1 rig WoW at 61 rigs and are down -17 rigs YoY, and miscellaneous rigs are +1 rig WoW and +1 rig YoY to 1 rig total. As a reminder Baker Hughes changed their reporting format which does not allow us to see the provincial breakouts.

Figure 18: Baker Hughes Total Cdn Oil Rigs



Source: Baker Hughes

US weekly oil production

Oil: US weekly oil production little changed WoW to 13.573 mmb/d, up YoY

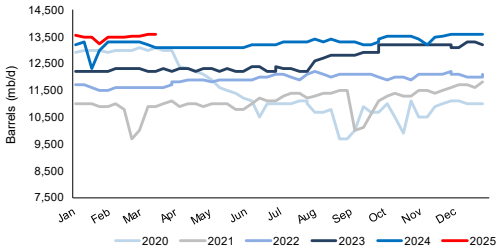
The EIA estimated US oil supply was immaterially changed from last week's numbers after the previous week's increase. We don't place as much emphasis on the EIA weekly oil supply estimates as others do because we recognize the near impossibility for anyone to post an accurate estimate on a Wednesday for the totality of US oil production for the week ended the prior Friday [LINK]. We have to give the EIA credit for putting out weekly oil supply estimates for the prior week, that can't be easy so no one should be surprised that the EIA weekly oil supply estimates, based on the Form 914 actuals, will regularly require re-benchmarking; sometimes the re-benchmarking can be significant and other times, it is relatively small. The EIA does not provide any commentary. This week, the EIA's production estimate was slightly down -0.002 mmb/d WoW to 13.573 mmb/d for the week ending Mar 14. This is getting close to the 2024 highs of 13.631 mmb/d in the week of Dec 6, 2024. This is up +0.473 mmb/d YoY from 13.100 mmb/d for the week ended Mar 15, 2024. Alaska production figures were down -0.003 mmb/d WoW at 0.436 mmb/d, and the Lower 48 were up +0.001 to 13.137 mmb/d. Below is a table of the EIA's weekly oil production estimates.

Figure 19: EIA's Estimated Weekly US Field Oil Production (mb/d)

	Week 1		Week 2		Week 3		Week 4		Week 5	
Year-Month	End Date	Value	End Date	Value	End Date	Value	End Date	Value	End Date	Value
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	12,300	01/26	13,000		
2024-Feb	02/02	13,300	02/09	13,300	02/16	13,300	02/23	13,300		
2024-Mar	03/01	13,200	03/08	13,100	03/15	13,100	03/22	13,100	03/29	13,100
2024-Apr	04/05	13,100	04/12	13,100	04/19	13,100	04/26	13,100		
2024-May	05/03	13,100	05/10	13,100	05/17	13,100	05/24	13,100	05/31	13,100
2024-Jun	06/07	13,200	06/14	13,200	06/21	13,200	06/28	13,200		
2024-Jul	07/05	13,300	07/12	13,300	07/19	13,300	07/26	13,300		
2024-Aug	08/02	13,400	08/09	13,300	08/16	13,400	08/23	13,300	08/30	13,300
2024-Sep	09/06	13,300	09/13	13,200	09/20	13,200	09/27	13,300		
2024-Oct	10/04	13,400	10/11	13,500	10/18	13,500	10/25	13,500		
2024-Nov	11/01	13,500	11/08	13,400	11/15	13,201	11/22	13,493	11/29	13,513
2024-Dec	12/06	13,631	12/13	13,604	12/20	13,585	12/27	13,573		
2025-Jan	01/03	13,563	01/10	13,481	01/17	13,477	01/24	13,240	01/31	13,478
2025-Feb	02/07	13,494	02/14	13,497	02/21	13,502	02/28	13,508		
2025-Mar	03/07	13,575	03/14	13,573						

Source: EIA

Figure 20: EIA's Estimated Weekly US Oil Production



Source: EIA

Oil: North Dakota January oil production down MoM to 1.172 mmb/d

North Dakota oil production

On Friday, the North Dakota Industrial Commission posted its monthly Director's Cut, which includes January's oil and natural gas production data as well as other data such as well completions, DUCs, number of producing wells, etc. [LINK]. North Dakota's oil production in January was down MoM -0.020 mmb/d to 1.172 mmb/d from a revised 1.192 mmb/d in December and is up +6.3% YoY against 1.103 mmb/d in January 2024. Similar to December, the MoM decrease was expected as January production had been affected by colder winter temperatures. January well completions were down to 78 compared to December's 89 wells completed. Our Supplemental Documents package includes excerpts from the NDIC Director's Cut.

Figure 21: North Dakota Oil Production by Month

(b/d)	2019	2020	2021	2022	2023	2024	2025	YoY%
Jan	1,403,808	1,430,511	1,147,377	1,088,613	1,060,708	1,102,976	1,172,286	6.3%
Feb	1,335,591	1,451,681	1,083,554	1,089,091	1,158,837	1,252,102		8.0%
Mar	1,391,760	1,430,107	1,108,906	1,122,640	1,122,693	1,229,536		9.5%
Apr	1,392,485	1,221,019	1,123,166	900,597	1,133,435	1,243,678		9.7%
May	1,394,648	859,362	1,128,042	1,059,060	1,135,009	1,198,086		5.6%
June	1,425,230	893,591	1,133,498	1,096,783	1,166,604	1,186,394		1.7%
July	1,445,934	1,042,081	1,076,594	1,072,632	1,180,611	1,169,499		-0.9%
Aug	1,480,475	1,165,371	1,107,359	1,075,307	1,223,617	1,179,728		-3.6%
Sept	1,443,980	1,223,107	1,114,020	1,121,063	1,280,052	1,199,764		-6.3%
Oct	1,517,936	1,231,048	1,111,910	1,121,754	1,254,475	1,177,986		-6.1%
Nov	1,519,037	1,227,138	1,158,622	1,098,389	1,278,909	1,225,303		-4.2%
Dec	1,476,777	1,191,429	1,144,999	957,864	1,274,869	1,192,248		-6.5%

Source: NDIC, NDPA

02/23/25: Cold snap in Feb shut in 40-70,000 b/d for a week in North Dakota

We also remind that North Dakota oil production in Feb was also hit by cold weather. Here is what we wrote in our Feb 23, 2025 Energy Tidbits memo. "*We reiterate that it must be very tough for the EIA to come up with weekly US oil production estimates. As noted above, one example is the recent cold that has shut in some North Dakota oil production. Here is what we wrote in last week's (Feb 16, 2025) Energy Tidbits memo. "Cold snap in Feb has shut in about 40-70,000 b/d for about a week or so. We listened to the 22-min Feb 2025 Director's Cut monthly webcast on the North Dakota NDIC Director's Cut and NDPA Monthly report [LINK]. One of the question asked was how much North Dakota oil was shut-in due to the cold snap. NDIC Director Nathan Anderson said it was about 40-70,000 b/d. We assume he was just talking about oil and there would be a separate volume of shut-in natural gas. Then later in the Q&A, North Dakota Pipeline Authority Director Jusin Kringstad said the shut-in is typically for about a week."*

Oil: North Dakota crude by rail down MoM to 130,038 b/d in January

North Dakota CBR

On Friday, the North Dakota Pipeline Authority posted its Monthly Update "*March 2025 Production & Transportation"* [LINK] containing January's data. Please note that we always go to the backup excel sheets from the North Dakota Pipeline Authority that provide low and high estimates for Williston crude by rail exports. While the NDPA's chart shows a high and low estimate by month, we always take the midpoint when summarizing the update. In the backup excel, the NDPA estimates crude by rail in January from a low of 115,038 b/d and a high of 145,038 b/d for an average of 130,038 b/d. There was an upward revision to December's figures, which previously had an average of 126,763 b/d, but is now 135,596 b/d. The NDPA did not comment on the MoM changes. Below is a chart showing the crude by rail volumes since 2014. Our Supplemental Documents package includes excerpts from the NDPA Monthly Update.

Figure 22: Estimated North Dakota Rail Export Volumes

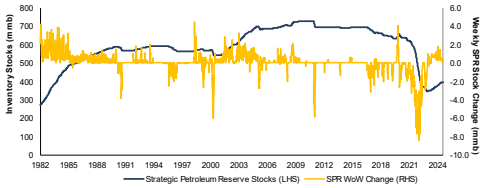
Source: NDPA

Oil: US SPR less commercial reserve deficit widens, now -41.105 mmb

US SPR reserves

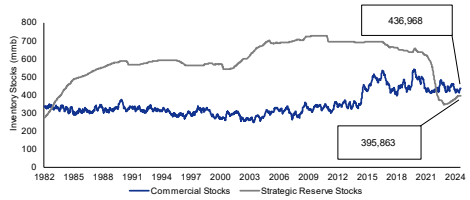
The SPR will be increasingly on the watch with Trump's stated plan to fill the SPR to the brim. The US Strategic Petroleum Reserves (SPR) continues to be much lower than total US commercial crude oil reserves. The SPR went back below commercial for the first time since 1983 in the week of Sep 16, 2022. This week, saw a build on both the SPR side and the commercial side. The EIA's weekly oil data for Mar 14 [LINK] saw the SPR reserves up +0.275 WoW to 395.863 mmb following the same increase to reserves as last week, with sweet being unchanged at 143.3 mmb and sour increasing +0.3 mmb to 252.5 mmb**.** Commercial crude oil reserves increased +1.745 mmb to 436.968 mmb. There is now a -41.105 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.

Figure 23: Strategic Petroleum Reserve Stocks and SPR WoW Change



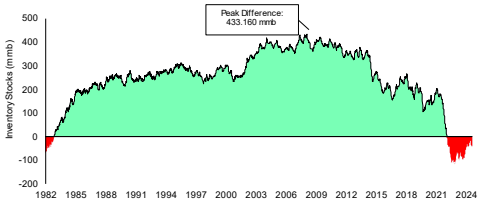
Source: EIA

Figure 24: US Oil Inventories: Commercial & SPR



Source: EIA

Figure 25: US Oil Inventories: SPR Less Commercial



Source: EIA

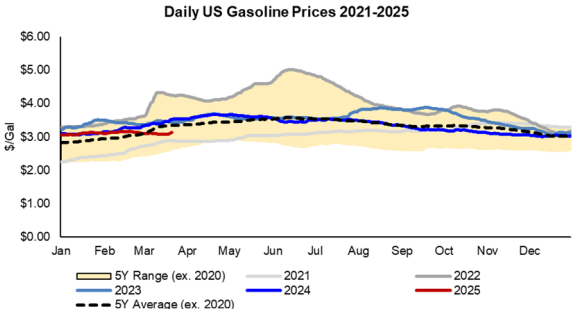
Oil: AAA US national average gasoline +$0.05 WoW, California -$0.01 WoW

US gasoline prices

So far there have been no real impacts from the upcoming Trump tariffs on imports of Cdn oil and petroleum products. However, it looks like the normal seasonal increase to gasoline prices is starting to hit some states. This happens as refineries start to switch over to more costly to refine (and tougher emissions standards) summer gasoline blends. Yesterday, we posted [LINK] *"AAA National average gasoline prices +$0.05 WoW to $3.13 on Mar 22, -$0.02 MoM and -$0.40 YoY. California average gas prices are -$0.01 WoW to $4.65, -$0.19MoM, =$0.32 YoY. Better but still >$4.47 on Feb 1, when Martinez refinery went down. Illinois +$0.16 WoW to $3.41, Texas was +$0.11 WoW to $2.76. Thx @AAAnews #OOTT."* Yesterday, AAA reported that US national average prices were $3.13 on Mar 22, which was +$0.05 WoW, -$0.02 MoM and -$0.40 YoY. We were surprised that the national average was +$0.05 in light of California -$0.01 WoW. We looked at the big states and Illinois was +$0.16 WoW and Texas was +$0.11 WoW and there were several other states that had >$0.10 WoW gasoline price increases. The negative for Californians over the past six weeks was the Feb 1 fire that led to an unplanned shut down of the Martinez refinery being down. The morning of Feb 1, AAA reported average California gas prices of $4.47 and two weeks later were $4.84 on Feb 15.. As noted later in the memo, there is still no forecast for when the

Martnez refinery will return to operations. California gasoline prices had jumped up but it looks like California is somewhat adjusting its gasoline supply chain to recent pull back in gasoline prices over the last two weeks. We should note there is risk to California gasoline prices being hit right away by the Mar 13 incident at the 160,000 b/d Torrance Refinery in California. Yesterday, AAA also reported California average gasoline prices were $4.65 on Mar 15, which was -$0.01 WoW, -$0.19 MoM and -$0.32 YoY. Below is our graph of Bloomberg's National Average weekly gasoline prices.

Figure 26: AAA National Average Gasoline Prices



Source: AAA, Bloomberg

AAA reminded Feb is the normal start to seasonal increasing gasoline prices

As noted above, it looks like some states are starting to see the normal seasonal increase in gasoline prices as refiners have started to switch to more costly summer gasoline blends. This year is a good reminder that oil prices are the key factor for gasoline prices as the weaker oil prices in March led to lower gasoline prices and lower oil prices can work to offset the normal seasonal move up in gasoline prices in the spring. We are expecting the upcoming Trump tariffs to see an immediate shift up in gasoline prices in a number of regions such as the NE, Midwest and Rocky Mountains. And this should be happening at the time of year when US gasoline prices normally seasonally increase. Here is what we wrote in our Feb 16, 2025 Energy Tidbits memo reminding that this is the normal seasonal period for increasing gasoline prices. "*AAA reminds Feb is the normal start to seasonal increasing gasoline prices. As we remind also on crack spreads and WCS less WTI differentials, there are normally seasonal trends. There are always unforeseen item that can impact the seasonal trends. But, on Thursday, AAA reminded that the seasonal trend for US gasoline prices is to move for the next few months. This shows up in our above US gasoline price graphs. AAA posted [LINK] "Right on Cue: Seasonal Trends Nudge Gas Prices Higher. As spring approaches, refineries are beginning their transition to summer blend fuel, which often results in higher prices this time of year. This week, gas prices rose by a few cents, bringing the national average to $3.16 per gallon. Routine seasonal maintenance and an offline refinery in Northern California are putting additional strain on supply. These factors are pushing gas prices up, which means consumers may see higher prices at the pump as warmer months approach."*

Oil: GasBuddyGuy sees tariff gasoline hits in NE, Great Lakes, Midwest, Rockies

GasBuddyGuy's initial call on tariffs hit

Here is what we wrote in our Mar 9, 2025 Energy Tidbits memo on the estimates by GasBuddyGuy (Patrick de Haan) on what he sees the impact from adding tariffs on Cdn oil and gasoline imports once they kick in. "*GasBuddyGuy sees tariff gasoline hits in NE, Great Lakes, Midwest, Rockies. We follow GasBuddyGuy (Patrick de Haan) for his data and views on US gasoline prices. On Tuesday, we posted [LINK] "See 👇@GasBuddyGuy's initial call on impact on NE, Great Lakes, Midwest, Rockies #Gasoline prices from Trump 10% tariff on Cdn #Oil imports. My 👇03/02 post. US refineries in Midwest & Rockies get 100% of oil imports from CAN, East Coast refineries get 23% from CAN. #OOTT." We forwarded De Haan's post and he also posted his blog "Beyond Tariffs: US Refineries and the Continued Reliance on Canadian Crude". [LINK] De Haan estimates the regional gasoline price impacts. NE (Maine, Rhode Island, Connecticut, Vermont, New Hampshire, Massachusetts, and Upstate New York) to have the largest impact as they import fuel from Irving Oil refinery in Saint=John. If you're filling up in the Northeast, you'll see price increases first and more significantly, as a significant portion of this region's refined products comes directly from the Irving Oil refinery in Saint John. "By mid-March 2025, the Northeast could expect fuel prices—including gasoline, diesel, and other petroleum products—to be 20-40 cents per gallon higher. For a typical 15-gallon fill-up, that's an additional $3-$6 every time you visit the pump." Midwest (North Dakota, Minnesota, South Dakota, Nebraska, Iowa, Kansas, Missouri), it's a crude oil import so the flow thru to pump takes a little longer. He expects "gasoline and diesel prices to rise by 5-20 cents per gallon." Great Lakes (Michigan, Wisconsin, Illinois, Indiana, Ohio, Pennsylvania). It's also crude oil import so flow thru to pump takes a little longer. De Haan expects "Residents across these states should prepare for price increases of 10-25 cents per gallon for both gasoline and diesel". Rockies (Montana, Idaho, Wyoming, Colorado, Utah) is also an oil import so will see a time lag before hitting the pumps. De Haan expects "fuel price increases of 10-20 cents per gallon " Other Regions (South, Southeast, Mid-Atlantic, Southwest and West Coast), he sees "negligible impact to other regions of the U.S., which are less reliant on Canadian crude oil. But with the typical seasonal shift ahead of us, prices are likely to increase in the weeks ahead just as they do every year with rising demand and temperatures, planned refinery maintenance, and the transition to summer gasoline in process across the entire U.S." Our Supplemental Documents package includes the GasBuddyGuy blog."*

Oil: Crack spreads +$0.84 WoW to $24.15 on Mar 21, WTI +$1.10 WoW to $68.28

Crack spreads closed at $24.15

On Fri, we posted [LINK] "*321 crack spreads +$0.84 WoW to $24.15 on Mar 21. WTI +$1.10 WoW to $68.28. WTI has been held below $70 driven by OPEC+ oil barrels coming back & concerns on China/Global economy with Trump tariffs. Reminder cracks normally start their seasonal move up in mid Feb thru June as refineries crank up processing for summer gasoline/jet fuel demand. Thx @business #OOTT."* Crack spreads were +$0.84 WoW to $24.15 on Mar 21 and WTI was +$1.10 WoW to $68.28. WTI Crack spreads of $24.15 are above the pre-Covid $15 to $20 range but the reality is WTI continues to be sub $70 with more concerns on economic growth in the US and around the world and the upcoming Apr 1 start of OPEC+ gradually adding back the voluntary cut barrels. Our post noted that mid-Feb is normally the time when crack spreads begin their seasonal move up as refineries move to process more oil for peak summer gasoline and jet fuel season. We have been highlighting that, for the past several months, for the most part WTI has been driven more by global

factors and not crack spreads. Crack spreads of $24.15 are still solid and should, in theory incentivize refiners to try to get some more crude for refining and that, under normal times, would tend to drag up WTI. The typical pre-Covid range was $15-20. Crack spreads of $24.15 on Mar 21, followed $23.31 on Mar 14, $22.93 on Mar 7, $25.02 on Feb 28, $26.48 on Feb 21, , $21.96 on Feb 14, $22.06 on Feb 7, $18.74 on Jan 31, $17.73 on Jan 24, $17.94 on Jan 17, $16.47 on Jan 10, $16.48 on Jan 3, $16.05 on Dec 27, and $16.44 on Dec 20.

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

Crack spreads and WTI prices moved this week in line with more traditional moves ie. crack spreads move higher tends to pull up WTI. But it hasn't been normal times for oil markets in the last several months with a wide range of global factors. So for the most part, the last several months are a good example that global oil and market items impact WTI more than crack spreads. But in normal times, broad market factors aside, we have focused on crack spreads for since the 90s as they are an unchanged fundamental of refineries – wide/high crack spreads provide incentives for refineries to buy more crude because there are big profit margins to be made. We track US crack spreads but there is also an influence on global refining capacity on US crack spreads as the increasing global refining capacity has also tended to have downward pressure on US crack spreads especially with demand being less than most expect. So if crack spreads are wide/high like right now, 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 $24.15 on Mar 14.

Figure 27: Cushing 321 Crack Spread & WTI Mar 21, 2015 to Mar 21, 2025

Source: Bloomberg

Crack spreads normally move up mid-Feb into June for peak summer demand

Our Friday post highlighted "*Reminder cracks normally start their seasonal move up in mid Feb thru June as refineries crank up processing for summer gasoline/jet fuel demand."* We included the below Bloomberg chart that shows the seasonal moves in 321 crack spreads over the past five years. There are always items that impact the normal seasonal moves but, as a general rule, 321 crack spreads start to widen in mid-Feb into June as refineries crank up processing to have product for peak summer gasoline and jet fuel season.

Figure 28: Cushing 321 Crack Spread – Seasonality to Mar 21, 2025 close

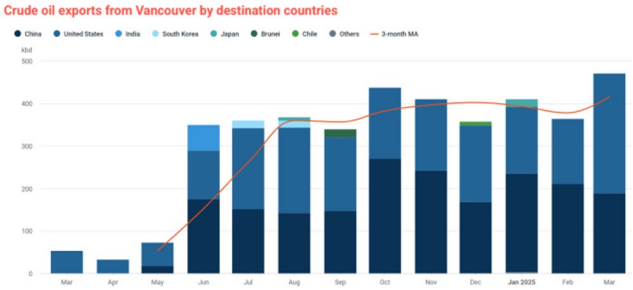
Source: Bloomberg

Oil: TMX tanker loadings hit 550,000 b/d in Mar 1-10, WCS less WTI diffs narrow

WCS-WTI diffs narrowing since June

On Monday, we posted [LINK] "*Here's why WCS-WTI diffs have been way narrower since June. TMX started & ᴄᴀoil exports jumped up. @Kpler @yui_torikata graph. See my 03/14 post showing continuing narrower WCS less WTI diffs since TMX. Thx @staunov for flagging. #OOTT*". As we highlighted in last week's memo, the WCS-WTI diffs narrowed by $1.75 WoW last Friday to a very low $10.40. And despite the implementation of Trump's tariffs, this narrowing has been caused by the TMX starting up and the jump in oil exports. On Monday, Kpler posted the below graph and wrote "*TMX exports out of Vancouver have averaged at an all-time high level so far this month since it became fully operational in June 2024. Westridge Terminal over the first 10 days of March exported above 550 kbd, with all cargoes expected to go to either China or the US West Coast. If all signaled loadings take place by the month end, March exports are likely to reach its all-time high well above 500 kbd".* The tanker exports from TMX have been the reason for way lower than normal WCS less WTI differentials.

Figure 29: Crude oil exports from Vancouver by destination countries, updated on Mar 13

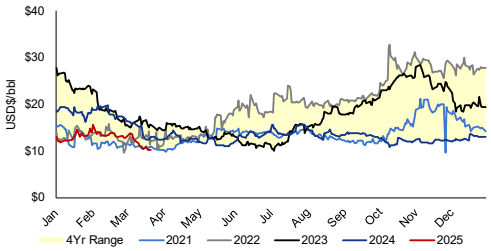


Source: Kpler

Oil: Cdn heavy oil differentials narrow $0.25 WoW to very low $10.15 on Mar 21

The Trump tariffs switching from on and then paused in previous weeks hasn't yet had any impact on WCS less WTI differentials. And we remind mid Feb is normally the start of the season for WCS less WTI differentials to narrow. This is the time of the year when we trot out our normal commentary that Feb normally marks the start of the seasonal narrowing of WCS less WTI differentials as refineries in the US start to take more medium sour crude as they change their runs to produce more asphalt for the upcoming paving season. This week saw a narrowing to the WCS less WTI differentials extending from last week's trend. WCS less WTI diffs narrowed -$0.25 WoW to a very low $10.15 on Mar 21.

Figure 30: WCS less WTI differentials



Source: Bloomberg

WCS less WTI diffs normally seasonally narrow in mid-Feb thru May

The start of TMX pipeline in June was the big expected positive for Cdn oil by keeping WCS less WTI differentials a lot narrower than what is normally seen in the normal seasonal widening in Sept/Oct/Nov. And it has continued to help in 2025 even in the face of Trump's on and off again pauses in tariffs. It is clear increasing tanker exports has worked and differentials did not widen as normally happens in H2/24. However, we remind that WCS less WTI differentials normally seasonally narrow staring in Feb and continuing into June as refineries move into peak medium sour processing ahead of summer paving/asphalt season. This means the WCS less WTI gap vs last two years is starting to narrow. Our Friday post, noted above, included "*Reminder. WCS less WTI diffs normally seasonally narrow in mid-Feb thru May as US refiners ramp up for peak asphalt/paving season."* And our post included

the below chart that shows how WCS less WTI differential were low in the summer, stayed fairly flat in Aug/Sept/Oct/Nov/Dec whereas how differentials widened in Sept/Oct/Nov in 2022 and 2023. And it also shows how differentials normally narrow starting in mid-Feb thru May every year as refiners start to process more medium/heavy as they look ahead to asphalt and paving season. Below is the Bloomberg graph we attached to our post yesterday.

Figure 31: WCS less WTI differentials to Mar 21, 2025 close

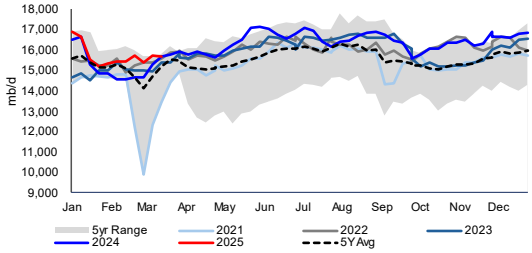
Source: Bloomberg

Oil: Refinery inputs down -0.045 mmb/d WoW to 15.663 mmb/d

Refinery inputs -0.045 mmb/d WoW

We have been highlighting that mid-February normally marks the start of refineries moving into a six-month period of increasing oil processing for the peak gasoline, diesel and jet fuel demand that happens every summer. There are always unplanned refinery items that impact crude oil inputs into refineries, as seen this week, but there are normal seasonal trends that refineries follow to provide the right fuels at the right time. Normally, late October marks the point when refineries have come out of fall turnarounds and are ramping up crude oil inputs as they change from summer to winter fuel blends. And in Nov/Dec, it is normally ramps up before we start to see refineries move into turnarounds starting in Jan/Feb for the normal winter turnarounds. And then leaving Feb is normally the start of the big seasonal increase in refinery throughput that continues into the summer, which we observed with this week's increase in inputs. On Wednesday, the EIA released its estimated crude oil input to refinery data for the week ended March 14 [LINK]. The EIA reported crude inputs to refineries were down -0.045 mmb/d this week to 15.663 mmb/d and were up +0.005 mmb/d YoY. Refinery utilization was up +0.4% WoW to 86.9% and was down -0.9% YoY.

Figure 32: US Refinery Crude Oil Inputs



Source: EIA, SAF

Oil: Still no ETA for restart of 156,000 b/d Martinez (California) refinery

156,000 b/d Martinez refinery still down

As of our 7am MT news cut off, we have not seen any new posting by the Martinez Refining Company since its Mar 5 update on an ETA for when the 156,000 b/d Martinez refinery (California) will restart. This has been the reason why California gasoline prices spiked up in Feb. Here is what we wrote in our Mar 9, 2025 Energy Tidbits memo. "*Still no ETA for restart of 156,000 b/d Martinez (California) refinery. On Wednesday, the Martinez Refining Company posted its update on the Feb 1 fire at its 156,000 b/d Martinez refinery (California) to the Hazardous Materials Programs Director. [LINK] The report is focused on updating on any hazardous materials. The report's closing paragraph was "MRC and contract personnel continue to monitor the scene of the incident, assess equipment damage, and ensure the general safety of the CFH area. Refinery operating units remain shut down while damage assessment continues, with the exception of required utility and environmental systems. At this time, the length of the operating units shut down arising from the incident cannot be reasonably estimated.*"

Oil: Not clear the impact from the Incident at 160,000 b/d Torrance (California) refinery

160,000 b/d Torrance (California) refinery incident

As of our 7am MT news cut off, we have not seen any update from the Torrance Refining Company or City of Torrence that updates what is happening since the Mar 13 release by the City of Torrence. But when we see a press release that says the refiner is "actively creating a repair plan", it suggests there could be some downtime or impact on refinery throughput. Repair plans says something has to be fixed. We just don't have any idea of what has to be fixed and what will the impact be. But it is a terrible time for any California refinery to have an issue given the unplanned shutdown of the Martinez refinery. On Thursday, the City of Torrance announced [LINK] "*At approximately 3:13 AM on Thursday, March 13th, the Torrance Fire Department was notified of a Refinery Report. The Torrance Refining Company Shift Safety Advisor reported a loss of steam that resulted in some unit shutdowns and slowdowns. The Torrance Refining company is assessing the impacts and are actively creating a repair plan.*"

Oil: US net oil imports down -1.439 mmb/d WoW, oil exports were up +1.354 mmb/d

US net imports down WoW

The EIA reported US "NET" imports were down -1.439 mmb/d to 0.741 mmb/d for the week of March 14. US imports were down big -1.439 mmb/d to 5.385 mmb/d, while exports were up +1.354 mmb/d to 4.644 mmb/d. Top 10 was down -0.392 mmb/d. 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. (i) US oil imports from Canada were down -0.514 mmb/d WoW to 3.134 mmb/d. This is not what we have seen lately as West Coast (PADD 5) have been increasing imports of Cdn oil from tankers loaded from TMX and refineries have been cranking up Cdn imports ahead of any Trump tariffs. So, it is not clear if this was in response to Trump saying the tariffs were on, only to pull them back afterwards. The big picture trend for US imports of Cdn oil over the past 9 months has been US oil imports from Canada have been higher post the startup of the TMX as more of the TMX crude has been hitting west coast US refineries. (ii) Saudi Arabia was down -0.059 mmb/d to 0.218 mmb/d. (iii) Mexico was down -0.118 mmb/d to 0.195 mmb/d. This is still well below historical levels. However, as noted in our Feb 23 memo, there has been an oil quality issue that has been causing some Mexico oil exports to be rejected by US refineries. Prior to this, oil imports from Mexico were much lower with the new Olmeca (Dos Bocas) refinery slowing ramping up in 2024 and Pemex's other refineries increasing crude oil processing. The current oil quality issue aside, assuming Pemex can ramp up Olmeca and continue to improve processing at the other refineries, Mexico should be able to process all its own oil production (i.e. no exports) by the end of 2025. (iv) Colombia was up +0.278 mmb/d to 0.349 mmb/d. (v) Iraq was up +0.032 mmb/d to 0.202 mmb/d. (vi) Ecuador was down -0.213 mmb/d to 0.000 mmb/d. (vii) Nigeria was up +0.193 mmb/d to 0.193 mmb/d.

Figure 33: US Weekly Preliminary Imports by Major Country

	Jan 17/25	Jan 24/25	Jan 31/25	Feb 7/25	Feb 14/25	Feb 21/25	Feb 28/25	Mar 7/25	Mar 14/25	WoW
Canada	4,329	3,716	4,063	3,918	3,653	3,818	4,091	3,675	3,134	-541
Saudi Arabia	256	471	488	380	277	252	203	277	218	-59
Venezuela	416	319	214	226	198	276	189	148	319	171
Mexico	244	521	149	482	553	445	308	313	195	-118
Colombia	286	283	150	150	0	150	227	71	349	278
Iraq	218	336	99	46	257	228	46	170	202	32
Ecuador	0	102	157	0	43	195	95	213	0	-213
Nigeria	156	92	152	87	139	77	0	0	193	193
Brazil	138	114	254	217	155	171	418	198	63	-135
Libya	30	0	324	0	0	0	0	0	0	0
Top 10	6,073	5,954	6,050	5,506	5,275	5,612	5,577	5,065	4,673	-392
Others	672	494	865	803	545	307	236	405	712	307
Total US	**6,745**	**6,448**	**6,915**	**6,309**	**5,820**	**5,919**	**5,813**	**5,470**	**5,385**	-85

Source: EIA, SAF

US oil imports from Canada & Mexico

Oil: Trump tariffs to hit US oil imports of ~4.7 mmb/d of Cdn and Mexican oil

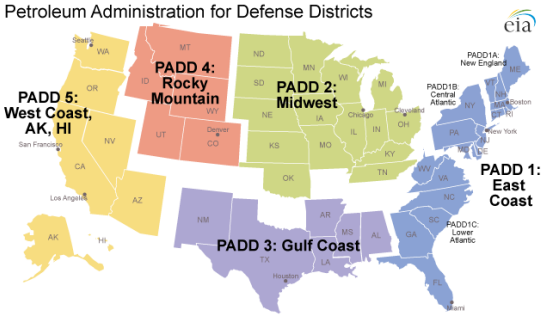
Here is what we wrote in our Mar 2, 2025 Energy Tidbits memo on how much oil will be impacted if US adds tariffs on Canada and Mexico oil. "*Trump tariffs to hit US oil imports of ~4.7 mmb/d of Cdn and Mexican oil. As of our 7am MT news cut off, the Trump tariffs on Canada and Mexico oil is still planned to start on Tues. On Friday, we reminded that these tariffs are going to hit a huge amount of US oil imports. It will impact Canada and Mexico oil imports into the US as follows: 195,000 b/d of East Coast PADD 1 oil imports of 622,000 b/d. 100% of Midwest PADD 2 oil imports of 2,940,000 b/d. 820,000 b/d of Gulf Coast PADD 3 oil imports of 1,539,000 b/d. 100% of Rocky Mountain PADD 4 oil imports of 273,000 b/d. 457,000 b/d of West Coast PADD 5 oil imports of 1,183,000 b/d. Note our post included Venezuela even though they aren't included in the Tues Trump tariffs, but Trump decided to not renew the Chevron Venezuela license which means that a six-month wind down period for Chevron in Venezuela started yesterday. We posted [LINK] "Here's where Trump tariffs on CAN & MEX #Oil on Mar 4 will hit. @EIAgov Dec oil imports by PADD & % of PADD imports. PADD 1: Can: 146 kbd, 23%. Mex: 49 kbd, 8%. Ven: 11 kbd, 2%. PADD 2: Can: 2,940 kbd,100%. PADD 3: Can: 431 kbd, 28%. Mex: 389 kbd, 25%. Ven: 289 kbd, 19%.*

PADD 4: Can: 273 kbd, 100%. PADD 5: Can: 444 kbd, 38%. Mex: 13 kbd, 1%. #OOTT." Our Supplemental Documents package includes the EIA graphs of oil imports by PADD for each Canada, Mexico and Venezuela."

"PADDs" were created in WWII to ration gasoline

Our Feb 28, 2025 above post included the EIA's map showing the PADDs. PADD stands for Petroleum Administration for Defense Districts. And the defense is because the PADDs were created in WWII. The EIA writes "*The Petroleum Administration for Defense Districts (PADDs) are geographic aggregations of the 50 States and the District of Columbia into five districts: PADD 1 is the East Coast, PADD 2 the Midwest, PADD 3 the Gulf Coast, PADD 4 the Rocky Mountain Region, and PADD 5 the West Coast. Due to its large population, PADD 1 is further divided into sub-PADDs, with PADD 1A as New England, PADD 1B the Central Atlantic States, and PADD 1C comprising the Lower Atlantic States. There are two additional PADDs (PADDs VI and VII) that encompass U.S. Territories (these are not pictured on the map). The PADDs help users of EIA's petroleum data assess regional petroleum product supplies. During World War II the Petroleum Administration for War, established by an Executive order in 1942, used these five districts to ration gasoline. Although the Administration was abolished after the war in 1946, Congress passed the Defense Production Act of 1950, which created the Petroleum Administration for Defense and used the same five districts, only now called the Petroleum Administration for Defense Districts."*

Figure 34: Petroleum Administration for Defense Districts



Source: EIA

Oil: Norway Feb oil production of 1.723 mmb/d is down -2.9% MoM, down -2.4% YoY

Norway oil production

On Thursday, the Norwegian Offshore Directorate (NOD) released it's February production figures [LINK]. It reported oil production of 1.723 mmb/d, which is down -2.9% from January figures of 1.775 mmb/d and down -2.4% YoY from a slightly revised 1.765 mmb/d in February 2024. February's production actuals came in +1.3% (+0.022 mmb/d) above the forecast volumes of 1.701 mmb/d. The NOD does not provide any explanation for any MoM changes, so we do not know if the MoM decline is related to any one-off weather items. But, as we have been highlighting since early 2024, Norway oil production is expected to peak in early 2025 with the start of the decline of Norway's biggest oilfield, Johan Sverdrup, and then move further into modest decline thereafter. Note that, prior to 2024, the Norwegian Offshore

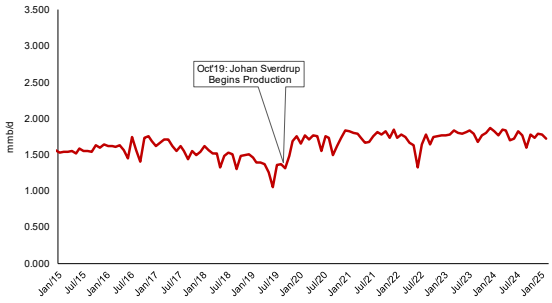
Directorate was called the Norwegian Petroleum Directorate.

Figure 35: Norway February 2025 Production

		Oil mill bbl/day	Sum liquid mill bbl/day	Gas MSm³/day	Total MSm³ o.e/day
Production	**February 2025**	**1.723**	**1.938**	**355.1**	**0.663**
Forecast for	February 2025	1.701	1.943	342	0.651
Deviation from forecast		0.022	-0.005	13.1	0.012
Deviation from forecaset in %		1.3 %	-0.3 %	3.8 %	1.8 %
Production	January 2025	1.775	1.990	346.1	0.663
Deviation from	January 2025	-0.052	-0.052	9	0.000
Deviation in % from	January 2025	-2.9 %	-2.6 %	2.6 %	0 %
Production	February 2024	1.765	2.003	360.4	0.679
Deviation from	February 2024	-0.042	-0.065	-5.2	-0.016
Deviation in % from	February 2024	-2.4 %	-3.2 %	-1.4 %	-2.4 %

Source: Norwegian Offshore Directorate

Figure 36: Norway Monthly Oil Production 2015-2025



Source: Norwegian Offshore Directorate

02/05/25: Norway biggest oilfield Johan Sverdrup production peaked in 2023/24

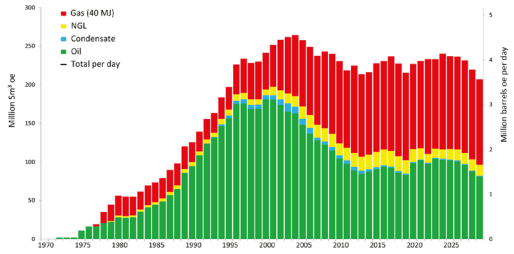
Here is what we wrote in our Feb 9, 2025 Energy Tidbits memo on comments by Equinor, the operator of Norway's biggest oilfield, Johan Sverdrup: "*Norway's biggest oilfield Johan Sverdrup production peaked in 2023/24. Equinor reported Q4 on Wednesday and confirmed their prior views – Norway's largest oilfield, Johan Sverdrup, oil production was peaking and is moving into plateau/small decline in 2025. On Wednesday, we posted [LINK] "Looks like Norway's biggest oil field, Johan Sverdrup peaked in 2024 and 2025 is start of slight decline or plateau. Equinor Q4 "production at the Johan Sverdrup field is expected to continue to be close to 2023 and 2024 levels in 2025" Close to = slightly lower production. Fits 👇 10/24/24 Q3 call. #OOTT." Equinor didn't specifically say Johan Sverdrup oil production peaked in 2023/24. Rather they said that 2025 production would be close to 2023/24 levels. As we remind, close to means less than but not too much less than. We reiterate this is not a new view, this is the same as they have said over the past year. And by Beng close to 2023 and 2024 levels, it is the same thing as saying they are in a plateau but small decline production. Johan Sverdrup peak production has been estimated at*

755,000 b/d."

01/09/25: Norway oil production plateau in 2025/26, then start to decline

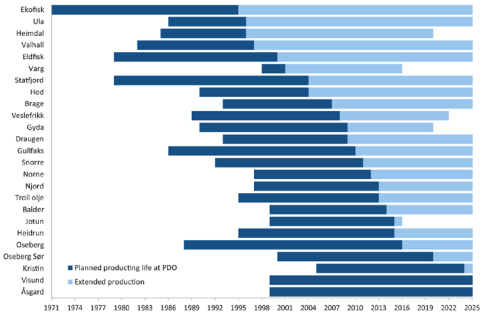
As a reminder, Norway has forecasting that its oil production was peaking in 2025. Our Aug 25, 2024 Energy Tidbits noted their forecast for Norway total oil production to peak in 2025 and then decline. On Jan 9, 2025, Norway came out with a similar forecast. Here is what we wrote in our Jan 12, 2025 Energy Tidbits memo. "*Norway oil production plateau in 2025/26, then start to decline. On Thursday, we posted [LINK] "Norway's new fcast for peak #Oil #NatGas production. Oil. peak 2023 1.79 mmbd, plateaus 2023-26, then declines. to 1.40 mmbd in 2029. NatGas, peak 2024 12.00 bcfd, modest drop to plateau 2025-27, then decline to 10.72 bcfd in 2029. Decline accelerates as mostly older fields. #OOTT." (i) It is not a surprise to see this forecast, which is in line with Norwegian Offshore Directorate's Aug forecast. (ii) On Thursday, the Norwegian Offshore Directorate posted its "The Shelf in 2024", which included the NOD's forecast for oil, condensate, NGLs and natural gas production through 2025. Our post included a table we created from the NOD backup excel to give the actual forecast numbers. (iii) For oil, the NOD estimates peak oil was 2.02 mmb/d in 2023, but that is essentially unchanged with a plateau production thru 2026 at 2.00 mmb/d in 2024, 2.01 mmb/d in 2025 and 2.00 mmb/d in 2026. Then declines hit with 1.92 mmb/d in 2027, 1.78 mmb/d in 2028 and 1.66 mmb/d in 2029. (iv) Natural gas. NOD forecasts peak natural gas production of 12.00 bcf/d in 2024, then down modestly to a plateau production of 11.64 bcf/d in 2025, 11.62 bcf/d in 2026, and 11.59 bcf/d in 2027. Then declines hit with 11.26 bcf/d in 2028 and 10.72 bcf/d in 2029. (v) The reason why declines start to kick in despite ongoing exploration and development is that a lot of the base production is old. Our post included the below NOD graph that NOD described as "The figure below shows a number of fields that are producing between 10 and 30 years longer than originally planned. Several of these fields will continue to produce until 2030, and some even to 2040. This provides a significant contribution to production and value creation on the shelf." So it's good news that technology and development is allowing longer life for old fields, but the reality is that the age of these fields will start to kick in. Our Supplemental Documents package includes excerpts from the NOD "The Shelf in 2024".*

Figure 37: Norway's forecast oil and natural gas production thru 2029



Source: Norwegian Offshore Directorate

Figure 38: Norway's oil and gas fields, original planned life vs current life expectation



Source: Norwegian Offshore Directorate

Oil: Russian refineries processing stays at low levels in March amid drone attacks

Russian refinery runs

There have been multiple drone hits on Russian refinery complexes to begin Mar and still continuing this week. But unfortunately, we never get any firm detail on how a refinery is impacted when a drone hits at a refinery. Russia's refineries were strategically targeted throughout Feb as Ukraine's government seeks to reduce Russia's energy revenue and supplies to the Russian army. These attacks have continued into Mar with Ukraine conducting drone attacks on two of the Rosenft oil refineries on Mar 10, and the next day there was another attack was on one of Moscow's oil refineries that supplies the capital with about 50% of its fuel. Last week, there was an overnight attack on the Tuapse oil refinery in Russia's Krasnodar Krai that set a gasoline storage tank on fire on Mar 14, and a drone caused fire outbreak on a facility in Russia's Astrakham Oblast on Mar 17. Bloomberg reported that during the period of Mar 5-12, Russia's average crude processing rate was rose +0.030 mmb/d to 5.17 mmb/d from the level seen during the Mar 1-5 period. This is down about -0.030 mmb/d below the level seen for most of Feb, when processing rates averaged around 5.20 mmb/d. If processing rates maintain at the current average level of 5.16 mmb/d for the rest of Mar, it would mark a five-month low for refinery runs. Bloomberg wrote, "*Russia's crude-processing rate averaged around 5.16m b/d during March 1-12 amid repeated Ukrainian drone attacks, according to a person with knowledge of industry data. If refinery runs remain at that level until the end of March, they would reach a five-month low, according to historical data*". Our Supplemental Documents package includes the Bloomberg article.

Oil: Urals oil price $60 lets legitimate Greek-owned tankers load Russia oil

Greek-owned tankers loading Russian oil

Russian seaborne tanke exports have been strong in March and a key reason is that its Urals price has been low and that means it is below the price cap and non-sanctioned tankers (like Greek tankers) have been able to load Russian crude. Here is what we wrote in our Mar 9, 2025, Energy Tidbits memo. "*Urals oil price $60 lets legitimate Greek-owned tankers load Russia oil. We finally saw a good insight into why Russia tanker loadings, apart from weather factors, are up – the price of Urals oil is down below the price cap so legitimate tankers can load Russian oil. And because of this Greek-owned tankers loaded 40% of the Russian crude in Feb, the highest % in 19 months and sanctioned tankers loaded 38% of Russian crude which was the lowest in 12 months. And the reminder that if Urals price stays below the price*

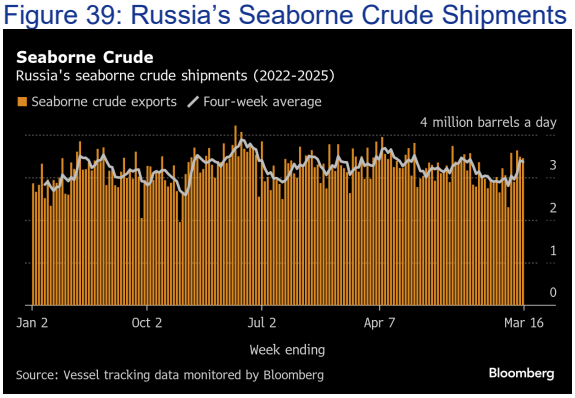
cap, these increased loadings will impact supply On Thursday, we posted [LINK] "Great tanker insights for near-term holdback to #Oil prices from @Michellewb_ .Russian Urals oil price $60 in Feb, below price cap which meant "private Greek shipowners have come in and they have literally saved the day for the Russians because they don't need to source alternative tonnage". Greek tankers 40% of loadings, highest in 19 mths. Sanctioned tankers 38%, lowest in 12 mths. "These are extraordinary events and I think we have to quickly reassess oil flows, oil prices and what a potential lifting of the price cap means now." See my 👇transcript. #OOTT @sean_evers @gulf_intel." Our post included the SAF Group created transcript of comments by Michele Wiese Bockmann (Principal Analyst, Lloyd's List Intelligence) with Sean Evers (Founder & Managing Director, Gulf Intelligence) on Gulf Intelligence Daily Energy Markets podcast on March 3, 2025. [LINK] Items in "italics" are SAF Group created transcript. At 5:40 min mark, Evers asked about where the US sanctions are now in curtailing Russian oil supply. Wiese Bockmann "…. I've crunched February numbers and the extraordinary thing is that, because Urals crude has averaged $60 per barrel, $60 a barrel for most of February means that it was effectively under the price cap. And what's happened is that private Greek shipowners have come in and they have literally saved the day for the Russians because they don't need to source alternative tonnage. The price of Urals is more or less below the cap and so I analyzed the percentage of tankers by beneficial ownership that called there to lift Russian oil and products. And I found that. Hang on, I'm just going to refer to my notes here, so we had 40% of tonnage, the highest figure in 19 months, was Greek owned. And the dark fleet, the percentage that lifted was 38%, which was the lowest in 12 months. So, effectively, the lowering of the crude prices has all but rendered those sanctions ineffective. And then you remember, of course, that only the US ones were the stickiest. The EU and UK sanctions, while initially causing some difficulty for trading those that are sanctioned in the dark fleet, have since sort of recovered from that. So when you look at the prospects for a month long ceasefire, we can probably start talking about whether or not the G7 price cap, how much longevity does it have. These are extraordinary events and I think we have to quickly reassess oil flows, oil prices and what a potential lifting of the price cap means now."

Oil: Russia's seaborne crude shipments hover 4-month high

Russia's seaborne crude exports

On Tuesday, Bloomberg released their weekly Russian Seaborne crude tracker titled "*Russian Crude Flows Hold Near Four-Month High While Putin Stalls*". There was little change WoW in Russia oil shipments, as oil exports remained high with the prospects of Russia agreeing to a 30-day ceasefire in Ukraine. Bloomberg wrote, "*The US is pressing Russia to sign up to a 30-day ceasefire that Ukraine has said it is ready to accept. While Putin has said Moscow is willing to consider a truce in principle, he has insisted on a number of conditions before he'll commit to any halt to the invasion that he launched in February 2022."* There was an approximate -0.030 mmb/d WoW decrease in daily crude flows, falling to 3.45 mmb/d for the seven days to Mar 16. Russian crude shipments from the Baltic port of Primorsk surged but was offset by a decline in cargoes from Ust Luga. Four-week average flows saw little change from its huge boost last week, staying around 3.37 mmb/d and close to their highest level in four months. Bloomberg also wrote, *"Less volatile four-week average flows were also little changed at about 3.37 million barrels a day, compared with 3.4 million in the period to March 9. On this measure, flows remained close to their highest level in four months."* Our Supplemental Documents package includes the Bloomberg report.

Figure 39: Russia's Seaborne Crude Shipments



Source: Bloomberg

Russia oil exports to China still down -0.22 mmb/d vs Jan 5

As mentioned in the previous few week's memos, we expected increased unloading in China because of Urals price being below the price cap and allowing legitimate tankers to load Russian crude as those February loadings in Russia reach China in March. And it looks like a little more Russian oil is being unloaded in China, reflective in the upward revisions seen for the previous week's shipment volumes. Prior to the recent decline in Urals price, we highlighted the reports in Jan that China had stopped some direct unloading of sanctioned Russian tanks, and this is evident in the trend depicted in Bloomberg's Russian oil shipments to China. Bloomberg's crude oil shipments from Russia to China have continued to report lower volumes of shipments since the US sanctions were implemented on Jan 10. The four-week average of Russia oil shipments to China were 1.10 mmb/d for the week ending Mar 16, which is down from last week's substantial upward revision to 1.29 mmb/d (was 1.09 mmb/d). This week is also down -0.22 mmb/d vs the four-week average on Jan 5 of 1.320 mmb/d. Below is the table from the Bloomberg article showing Russia's Asian customers.

Figure 40: Russian Crude Shipments to China

Russia's Asian Customers
Shipments of Russian crude to Asian buyers in million barrels a day

4 weeks ending	China	India	Other	Unknown Asia	Other Unknown	Total
February 09, 2025	1.07	1.35	0.04	0.04	0.00	2.49
February 16, 2025	1.31	1.40	0.04	0.06	0.03	2.83
February 23, 2025	1.15	1.51	0.00	0.09	0.03	2.77
March 02, 2025	1.15	1.53	0.00	0.19	0.05	2.92
March 09, 2025	1.29	1.47	0.00	0.40	0.05	3.21
March 16, 2025	1.10	1.33	0.00	0.60	0.18	3.21

Source: Vessel tracking data compiled by Bloomberg
Bloomberg

Source: Bloomberg

Oil: Updated OPEC+ compensation plans could in theory offset Apr added barrels

Updated OPEC+ compensation plans

We expect that markets will want to see if the OPEC+ countries who are to repay for overproduction, especially Iraq and Kazakhstan, actually cut their promised production cuts before they assume they will actually do so. But, in theory, in the event they do, the compensation cuts will more than offset the gradual return of OPEC+ voluntary cut barrels for April. On Thursday, OPEC posted [LINK] "*OPEC Secretariat receives updated compensation plans from Saudi Arabia, Russia, Iraq, the United Arab Emirates, Kuwait, Kazakhstan, and Oman. As agreed during the virtual meeting held by the eight countries with additional voluntary adjustments, including Saudi Arabia, Russia, Iraq, the United Arab Emirates, Kuwait, Kazakhstan, Algeria, and Oman, on 3 March 2025, the OPEC Secretariat receives updated compensation plans as per the table below:*"

Figure 41: Updated compensation plans

	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Total
Algeria																	
Iraq	116	116	135	130	120	115	120	120	120	120	123	123	123	123	125	125	1,954
Kuwait		8	15	23	30	38	27										141
Saudi Arabia	15	9	6														30
UAE		5	10	10	10	10	10	10	20	20	33	33	33	50	55	56	365
Kazakhstan	38	53	57	72	66	81	85	90	84	49	39	38	40	38	42	36	908
Oman	5	7	10	12	14	18	20	13									99
Russia	25	51	76	102	127	152	173										706
Total	199	249	309	349	367	414	435	233	224	189	195	194	196	211	222	217	4,203

Source: OPEC

Oil: OPEC+ to proceed with Apr 1 "*gradual & flexible*" return of voluntary cut barrels

OPEC+ Apr 1 return of barrels

As of our 7am MT news cut off, there have been no indications that there will be any change to OPEC+ plan to start the gradual return of voluntary cut barrels starting on Apr 1. There are three near-term holdbacks to oil sentiment: economic uncertainty from Trump tariffs, continued concern on the China recovery and OPEC+ schedule to start adding back voluntary oil cut barrels on Apr 1. Here is what we wrote in our Mar 9, 2025 Energy Tidbits memo on OPEC+ adding back barrels. "*OPEC+ to proceed with Apr 1 "gradual & flexible" return of voluntary cut barrels. On Monday just after noon, we posted [LINK] "ICYMI. Brent dropped an hour ago as OPEC confirmed "to proceed with a gradual and flexible return of the 2.2 mbd voluntary adjustments starting on 1st April, 2025..." #OOTT." Just after 11am MT, OPEC posted its release [LINK] that it was, as per their plan, proceeding with "a gradual and flexible return of the 2.2 mbd voluntary adjustments starting on 1st April, 2025." OPEC proceeded with their previously announced plan "Taking into account the healthy market fundamentals and the positive market outlook." This was their previously announced plan but, in the last couple weeks, a number of the major sellside analysts came out with their view that OPEC was likely to push back the return of the barrels from April 1 to July 1. So, no surprise the immediate Brent oil price reducing was down ~$1 and Brent ended up down $1.50 to $71.62 on Monday. Our Supplemental Documents package includes the OPEC release.*"

Figure 42: OPEC phase out starting Apr 1, 2025

Country	2025									2026									Required Production Level as per 37th ONOMM (1)
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep - Dec	
Algeria	911	914	917	919	922	925	928	931	934	936	939	942	945	948	951	953	956	959	**1,007**
Iraq	4,012	4,024	4,037	4,049	4,061	4,073	4,086	4,098	4,110	4,122	4,134	4,147	4,159	4,171	4,183	4,196	4,208	4,220	**4,431**
Kuwait	2,421	2,428	2,436	2,443	2,451	2,458	2,466	2,473	2,481	2,488	2,496	2,503	2,511	2,518	2,526	2,533	2,541	2,548	**2,676**
Saudi Arabia	9,034	9,089	9,145	9,200	9,256	9,311	9,367	9,422	9,478	9,534	9,589	9,645	9,700	9,756	9,811	9,867	9,922	9,978	**10,478**
UAE	2,938	2,963	2,989	3,015	3,041	3,066	3,092	3,118	3,144	3,169	3,195	3,221	3,246	3,272	3,298	3,324	3,349	3,375	**3,519**
Kazakhstan	1,473	1,477	1,482	1,486	1,491	1,495	1,500	1,504	1,509	1,514	1,518	1,523	1,527	1,532	1,536	1,541	1,545	1,550	**1,628**
Oman	761	764	766	768	771	773	775	778	780	782	785	787	789	792	794	796	799	801	**841**
Russia	9,004	9,030	9,057	9,083	9,109	9,135	9,161	9,187	9,214	9,240	9,266	9,292	9,318	9,344	9,371	9,397	9,423	9,449	**9,949**

Source: OPEC

Novak reminded OPEC+ knows oil demand seasonally increases after Q1

Here is what we wrote in our Mar 9, 2025 Energy Tidbits memo. *"Novak reminded OPEC+ knows oil demand seasonally increases after Q1. Russia Energy Minister Novak was asked about the OPEC+ decision to go ahead and add back the voluntary barrels starting Apr 1 and Novak reminded of the normal seasonal increase in global oil consumption in the spring and summer. Interfax reported "This [decision to increase] is primarily owing to the fact that this can only be done during periods of increased demand, and we are entering the spring-summer period of growth in demand, as auto transportation recovers, so there is an opportunity [to recover]," Novak explained." Global oil consumption follows normal seasonal patterns, just like seen in the US. The IEA Oil Market Report Feb 2025 is the most conservative of the agency forecasts for oil demand growth in 2025. Even still, the IEA demand forecasts are in line with Novak's comments – oil consumption seasonally increases in the spring and summer. The IEA Feb OMR forecasts Q2/24 oil consumption to be +1.1 mmb/d QoQ vs Q1/24. And Q3/24 oil consumption is forecast to be +1.1 mmb/d QoQ vs Q2/24."*

Oil: Seems like neither US or Iran want any military actions, at least over the Houthis

Trump & Khamenei seem to want to avoid escalation

No one really knows what Trump or Iran will do, but what started out this week as Trump raising the potential for an escalation against Iran seems to have pulled back to both Trump and Iran not wanting to escalate. But what isn't clear is what happens next. (i) On Monday, Trump looked to have the risk for military action against Iran. On Monday, we posted [LINK] *"WOW! New #Oil price wildcard. Trump will treat "Every shot fired by the Houthis will be looked upon, from this point forward, as being a shot fired from the weapons and leadership of IRAN, and IRAN will be held responsible, and suffer the consequences, and those consequences will be dire!" Impossible for Trump to back down from this promise. ie. will he launch missiles at Iran if Houthis launch drones/missiles at US navy or American cargo ships? #OOTT."* Trump seemed clear in his warning to Iran – if the Houthis attacked the US again, the US would view it as an attack by Iran and the "*consequences will be dire*." (ii) The Houthis subsequently launched drones/missiles at the US Nav in the Red Sea on three occasions. So, at least the Houthis didn't seem to worry that Trump warned Iran he would take it out on Iran if the Houthis attacked the US navy. (iii) When we saw the Houthis announce the attacks, we posted [LINK] "*Trump Houthis/Iran watch! Houthis said they attacked US navy in Red Sea after Trump's Monday 👇threat that an Houthi attack is treated*

as if an Iran attack. No confirmation yet by CENTCOM. will we see one? If CENTCom confirms, doesn't this obligate Trump to hit Iran:? Brent only +$0.75 today. #OOTT." Then on Tues, the Houthis say they targeted the US Navy again in the Red Sea and we were still waiting to see what Trump would do. (iii) Trump either ignored or backed away from his threat. On Wednesday, we posted [LINK] "*Here's why #Oil hasn't spiked up post Houthis attacks at US navy in Red Sea in last 48 hrs. Seems like he is backing off his warning to Iran. Mon morning: "from this point forward" every shot fired by Houthis will be viewed as a shot by Iran, "Iran will be held responsible and suffer the consequences, and those consequences will be dire". Just now "Iran must stop the sending of these supplies immediately. Let the Houthis fight it out themselves.... they [Houthis] will be completely annihilated". At least for now, market not reflecting Trump attacks Iran as inferred on Mon morning. #OOTT."* (iv) Yesterday, we posted [LINK] "Does Iran Supreme Leader, like Trump, want to avoid direct conflict with US over "the events in Yemen". Khamenei wants "*entire Islamic Ummah*" to strongly oppose the "*truly large, atrocious crime*" in Gaza. But seems less outraged over US attacks on Houthis? "*The same is true about the events in Yemen. The attacks on the people of Yemen and on Yemeni civilians are also crime that must definitely be stopped*." It struck us that Khamenei seemed to downplay the events in Yemen, which we interpreted as him wanting to signal he doesn't want to get into an escalation with the US over the Houthis. Our Supplemental Documents package includes the Trump posts and Khamenei's New Year's speech.

03/12/25: Iran Supreme Leader rejects any negotiations with the US

At least so far, Iran has been rejecting Trump's overtures for negotiations. Here is what we wrote in last week's (Mar 16, 2025) Energy Tidbits memo. *"Iran Supreme Leader rejects an negotiations with the US. Last week, Trump highlighted his sending of a letter to Iran's Supreme Leader to negotiate. On Wednesday, the Supreme Leader said no thanks. They have no interest in having any negotiations with the Trump administration based on how Trump pulled out of the JCPOA. On Wednesday, we posted [LINK] "Iran Supreme Leader rejects talks with US. ""Iran spent several years negotiating a nuclear deal, but the US president tore down the deal," Ayatollah Khamenei said, explaining more that "When we know that they do not comply with talks, there is no need for such talks." Mehr. #OOTT." Our post included the Mehr (state media) reporting of Khamanei's comments. "The Leader stressed that negotiations will not resolve any problems. "Iran spent several years negotiating a nuclear deal, but the US president tore down the deal," Ayatollah Khamenei said, explaining more that "When we know that they do not comply with talks, there is no need for such talks." "If we had wanted to acquire nuclear weapons, the United States could not have stopped us," the Leader said. He continued to warn the Americans against thinking about military actions against Iran, saying that any attack will receive a response that will inflict more losses on them. "Iran does not seek war, but if the Americans and their cohorts do a damn thing whatsoever, Iran's retaliation is decisive and definite, and the one who will be the loser would be America." "Iran is capable of dealing a blow to the aggressor and will definitely hit it back," Ayatollah Khamenei further said."*

Oil: Still no final deal to resume Kurdish oil exports via Turkey

Still no Iraq Kurdistan final deal

As of our 7am MT news cut off, there still does not appear to be any resolve of the issues the IOCs in Kurdistan have before they sign off on any proposed Iraq deal. (i) On Wednesday, Rudaw (Kurdistan news) reported [LINK] "*The Kurdistan Region's oil exports through Turkey could be resumed next week after nearly two years of suspension, the chairman of the Iraqi parliament's oil and gas committee said on Wednesday following a meeting with the relevant federal officials. "God willing, the oil exports through the Kurdistan Region next week - based on what the committee formed by the oil ministry said," Haybat al-Halbousi told reporters after hosting a committee formed by the Iraqi oil ministry, which includes Iraq's State Oil Marketing Organization (SOMO). The meeting focused on the recent amendment to the Iraqi budget law, which stipulates that the federal government is required to pay $16 as remuneration per barrel of oil produced in the Kurdistan Region." (ii)* The Iraq comments sounded promising. However, shortly thereafter, Rudaw reported [LINK] "*US urges Iraq to resume Kurdish oil exports, honor contracts with American companies*." The Rudaw reported on comments by APIKUR (the industry association for IOCs operating in Kurdistan) that reinforced there is still no progress in the negotiations with Iraq. Rudaw wrote "*Myles Caggins, spokesperson for the Association of the Petroleum Industry of Kurdistan's (APIKUR), an umbrella group of eight international oil firms, told Rudaw after Bruce's comment that they have yet to reach an agreement to restart the Kurdistan Region's oil exports. "More meetings are required. APIKUR appreciates the priority that Iraqi Prime Minister Sudani and Senior U.S. Government leaders have placed on restoring oil exports through the Iraq-Türkiye pipeline," he said."* (iii) The IOCs have gone two years on this and we have to believe they will continue to hang in there longer to see if they can get what they want ie. it seems hard to see how this gets quickly resolved. Our Supplemental Documents package includes the two Rudaw reports.

IOCs in Kurdistan want guarantees they will get paid if oil exports resume

It seems like the big issues is still not resolved – the oil companies in Kurdistan still don't assurances they will get paid and they will get paid their contract rate. Here is what we wrote in our Feb 23, 2025 Energy Tidbits memo included the then breaking news that Kurdistan and Iraq agreed on a deal to resume Kurdistan oil via Turkey and that it was to happen very quickly. However, we probably shouldn't have been surprised to see that things aren't as smooth as they should be. The restart hasn't yet happened. Yesterday, the Iraqi News Agency (state media) reported [LINK] Iraq is meeting with Kurdistan on Tuesday "*The ministry extended an invitation to the Ministry of Natural Resources in the region to attend in Baghdad next Tuesday for the purpose of discussing and debating issues related to the concluded contracts to reach understandings that contribute to developing the oil fields with the best international practices and in a manner that serves the national interest."* Some of the initial reports suggested Iraq invited the IOCs to meet but that looks to be an incorrect interpretation of what the Iraqi News Agency reported. Rather they reported "*The ministry stated in a statement, received by the Iraqi News Agency (INA) today, Saturday, that it "extended an invitation to international foreign companies under (APICOR) and contracted with the Kurdistan Regional Government to develop the region's fields*." And the IOCs yesterday came out clearly saying there are issues to be resolved. Earlier this morning, we posted [LINK] "*Can't blame them. IOCs in Kurdistan ".. the principles are we must have guarantees that these payments will*

occur". @apikur_oil Myles Caggins. Still no firm restart for Kurdistan #Oil via Turkey. #OOTT." APIKUR is the industry association for the international oil companies operating in Kurdistan. Our post included the video of APIKUR reminding there are still outstanding issues including they "*must have guarantees that these payments will occur."*

Oil: Libya oil production of 1.385 mmb/d is above Aug 1 levels

Libya oil production at 1.385 mmb/d

On Wednesday, the Libya National Oil Corporation (NOC) posted [LINK] *"Oil, gas and condensate production rates over the past 24 hours. #NOC #OIL #LIBYA"*. The NOC reported crude oil production of 1,385,068 b/d and 53,772 b/d of condensates amounting to total liquids production of 1,438,840 b/d. This is above the Aug 1 level of 1.279 mmb/d for oil + condensate before the interruptions started and when the NOC stopped providing oil production updates for a few months. Note that the NOC has updated its posting format a few times since Jan, and it did not provide commentary on the changes in production like it did in a previous week's post. The NOC has also removed its total production figure that included oil, condensate, and natural gas production measured in boe/d.

Libya NOC restarts Mabrouk oilfield after 10-yr halt, to reach 25,000 b/d by July

Here is what we wrote in last week's (Mar 16, 2025) Energy Tidbits memo on an example of low hanging fruit for Libya to add oil production. "*Libya NOC restarts Mabrouk oilfield after 10-yr halt, to reach 25,000 b/d by July. For years, we have highlighted the any sustained peace between east and west Libya will lead to Libya ramping up oil production. We believe there is a lot of low-hanging fruit to add oil because the fighting/war has forced Libya to focus on doing what they can to maintain oil production rather than focusing on growth. We are still cautious as Libya still hasn't moved forward with the last-minute cancelled elections in Dec 2023. But, on Wednesday, the Libya NOC posted on Facebook "Mabrouk Oil Operations Resumes Production at Mabrouk Field After a 10-Year Halt. Mabrouk Oil Operations has resumed production at the Mabrouk oil field after a 10-year hiatus, dating back to 2015. Production officially resumed on March 9, 2025, at a rate of 5,000 barrels per day (bpd), with a plan to increase production to 7,000 bpd by the end of this month. Exports to the Bahi field began on March 11, 2025, with production expected to reach 25,000 bpd by July 2025."*

Libya targets 1.6 mmb/d in 2025 and 2 mmb/d by 2028

The restart of Mabrouk is a good example of low-hanging fruit and why can buy into their oil growth potential assuming there is no resumption of fighting between east and west Libya. Here is what we wrote in our Jan 19, 2025 Energy Tidbits memo. "*Libya targets 1.6 mmb/d in 2025 and 2 mmb/d by 2028. We have been big believers for decades that there is big oil production growth potential in Libya if there is peace and access to foreign capital. So when we see the NOC saying they can get to 2 mmb/d in three years, we believe that is attainable as longer there is peace and access to capital. Yesterday, Libya held its Libyan Energy and Economy Conference 2025 in Tripoli. Yesterday, the NOC posted [LINK] "And moving forward to achieve the main goal of reaching a production of 2 million barrels per day within the next three years, if sufficient funding is available to achieve this." Amena Bakr (Senior Research Analyst at Energy Intelligence) X/Twitter post [LINK] gave further color.*

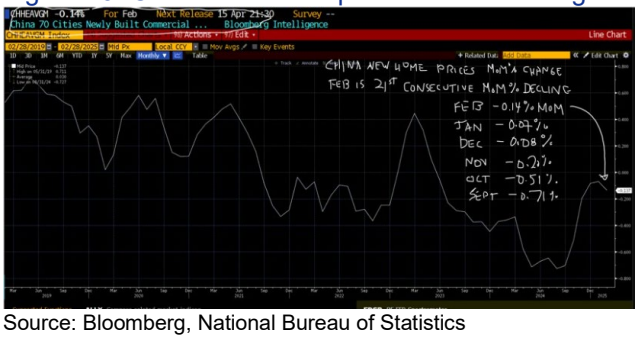
"Under the current plan Libya hopes to boost its capacity to 1.6 million bpd by the end of this year, and 2 million bpd by 2028". It isn't clear if this is oil or oil + condensate, but condensate, if included would likely be under 100,000 b/d in total of the 2 mmb/d."

Oil: China home prices continue to lower in value, 21 mths for new & 22 mths for old

China home prices down again

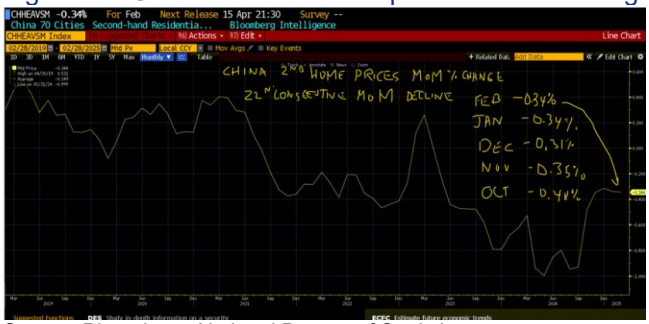
One of the most important priorities for China when announcing their Sept stimulus was to stop home values from declining and increase consumer sentiment. It has helped lessen the MoM declines but not stopped the continuation of MoM declines in values. And there is still the uncertainty for Chinese consumers on how the Trump tariff war will work out. Last Sunday night's new China push to help the consumer will paly out. But, at least for now, the indicators for Feb new and used home prices were still negative MoM with an equal or higher MoM decline than seen in Jan. On Sunday, we posted [LINK] "*Chinese consumer's most important asset, their home values, keep going lower. New home prices: 21st straight MoM % drop. Feb -0.14% MoM. Jan -0.07%. Dec -0.08%. Nov -0.20%, Oct -0.51%. Sept -0.71%. 2nd hand home prices: 22nd straight MoM % drop. Feb -0.34% MoM, Jan -0.34%. Dec =0.31%. Nov -0.35%, Oct -0.48%. Sept -0.93%. Thx @business #OOTT".* China home prices continue to lose value – new home prices had a MoM% drop for the 21st straight month, and second-hand home prices fell for the 22th straight month. One of the most significant drivers of negative sentiment among Chinese consumers has, to date, been they keep losing value in their homes, which meant their biggest asset value keeps decreasing month after month. Just like in North America, the home is the most important asset for most Chinese people, and they have seen the value of their homes decline month after month with no end in sight. In Feb, China new home prices were down -0.14% MoM and second-hand home prices were down -0.34% MoM. It seems like China home prices got a lift post China Sept stimulus and fell far less than previous months. But, as noted above, the qualifier will be how the new Trump administration is viewed by Chinese consumers. Below are the Bloomberg graphs with the Feb home prices that were included with our post.

Figure 43: China new home prices MoM % change incl Feb 2025



Source: Bloomberg, National Bureau of Statistics

Figure 44: China 2nd hand home prices MoM % change incl Feb 2025



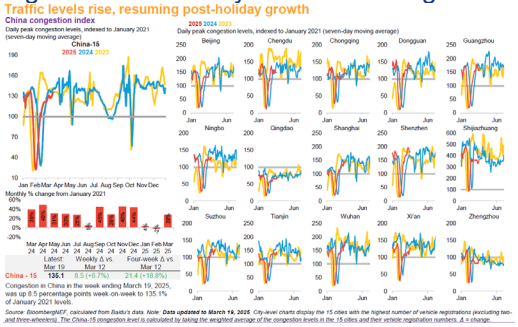
Source: Bloomberg, National Bureau of Statistics

Oil: China city-level road congestion -8.2% YoY, still a negative activity indicator

China city-level road congestion

The 40-day Spring Festival is behind us now, and China city-level road congestion has normalized to pre-holiday levels as people routines are back to normal now. But, as noted in last week's (Mar 16, 2025) Energy Tidbits memo, we have to wonder if the lower YoY city-level road congestion is reflecting less city economic activity. On Thursday, BloombergNEF posted its China Road Traffic Indicators Weekly report, which includes the Baidu city-level road congestion for the week ended Mar 19. BloombergNEF reported Baidu city-level road congestion saw an increase of +6.7% WoW to 135.1% of Jan 2021 levels. March 2025 data saw average daily peak congestion down -8.2% YoY when compared to March 2024. March 2025 is post-Spring Festival, so road congestion should be at normal levels. Last year, Lunar New Year was Feb 10 so city-level road congestion for the Mar 19 week was still reflecting some Spring Festival lesser city-level road congestion. So similar to last week, the week ended Mar 19 being -8.2% YoY would seem to be a negative economic indictor for city-level activity. 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 growth picks back up after a flat week*". Below are the BloombergNEF key figures.

Figure 45: China city-level road congestion for the week ended Mar 19



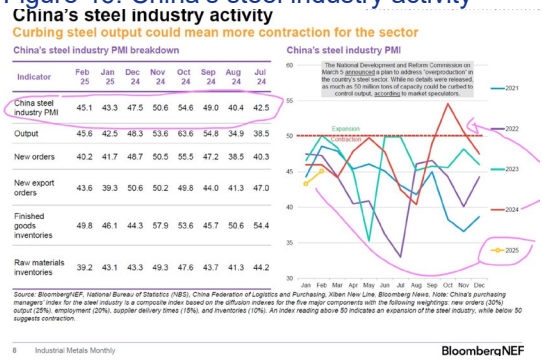
Source: BloombergNEF

Oil: Negative China steel indicators are once again below pre-Sept stimulus levels

Negative China steel indicators

On Monday, Reuters, and others similarly, reported China steel production for Jan/Feb was -1.5% YoY ie. continued weak steel production. Last week's (Mar 16, 2025) Energy Tidbits memo highlighted how China's steel indicators had fallen back below the pre-Sept stimulus levels. Here is what we wrote last week. "*China steel indicators are once again below pre-Sept stimulus levels. Steel is always viewed as a key indicator for economies, especially in the case of China. On Thursday, we posted [LINK] "Negative indicator for China recovery - Steel PMI. China Sept stimulus boost to China steel industry PMI only lasted until Nov. But now, Jan/Feb 2025 steel PMI is lowest post Covid. And Trump tariffs on China should keep pressure on China economy. #OOTT Thx @BloombergNEF." BlooombergNEF had posted its Industrial Metals Monthly, which tracks short term developments in iron ore, steel, copper, aluminum and other base metals. One of the many slides that we have included in prior Energy Tidbits memos is their China's steel industry activity slide. When you look back over the past eight months, it showed the steel indicators jumped up post the Sept stimulus with strong Oct and Nov data but Dec was lower and Jan was down more and Feb was up a bit but again still back below the pre Sept stimulus levels. The Sept stimulus impact didn't last. And our concern is that we still don't know the ultimate impact on the China from the Trump initial tariffs that started this week. But all we know is that adding tariffs on China will be negative. Below is the China's steel industry activity chart attached to our post*."

Figure 46: China's steel industry activity



Source: BloombergNEF

Oil: China oil production -0.2% YoY in Jan-Feb to 4.35 mmb/d

China oil production

A similar theme to natural gas is playing out for China oil imports in that increasing China domestic oil production reduces the amount of China oil imports. What is often overlooked is the fact that China is one of the world's top producers of crude oil, ranked 5th globally in 2023, according to the EIA [LINK]. On Monday, Bloomberg reported that China's total crude oil production was down -0.2% YoY during Jan-Feb, but because of the extra day during Jan-Feb in 2024, oil production was up +0.06 mmb/d to 4.35 mmb/d in Jan-Feb 2025 from 4.29 mmb/d during the same period in 2024. The government of China also noted [LINK] on January 28 that crude oil production over 2024 was overall 4.27 mmb/d, which was up +2.0% YoY from 2023.

Oil: How come China's NEV sales aren't impacting Sinopec gasoline sales?

Sinopec sees gasoline sales increases

We have a 7am MT news cut off but the Sinopec Q4 had just come out so we are able to included the great il food for thought from Sinopec's Q4 release this morning. We can't help read their comments and note the negative on oil demand is on diesel, which makes sense given weak China manufacturing and the increasing penetration of LNG-fueled medium and heavy duty trucks. Most will be surprised by Sinopec highlighting growth in gasoline sales in the face of the big increase in China New Energy Vehicle sales, which makes us wonder if this is the trend we have been highlighting – its PHEVs that are dominating BEVs in China and PHEVs are really just much more fuel efficient ICE. Earlier this morning, we posted [LINK] "*Huge #Oil questions from Sinopec Q4. Is China #Gasoline sales growing because PHEVs are dominating BEVs and PHEVs are just very fuel efficient ICE? Is China total #Oil demand modestly growing driven by jet fuel, petrochemicals & gasoline offsetting declining #Diesel demand that is hit by weak China manufacturing & LNG displacing some diesel for trucks? Reminder total Oil demand incl oil for petrochemicals. "domestic demand for #NatGas grew rapidly, while that for refined oil products domestically declined slightly, and domestic demand for chemical products continued to increase." "achieved growth in high-grade gasoline sales" "We followed market demand and flexibly adjusted product mix and export scheduling by producing more jet fuel and continuously reducing the diesel-to-gasoline ratio. Effort was made to carry forward the transition of low-cost "refined oil products to chemical feedstocks" and high-value "refined oil products to refining specialties" strategy, and to increase production .." "boosted the sales volume of high-grade gasoline. " "domestic demand for natural gas and chemical products is expected to maintain growth, and that for refined oil products will remain influenced by alternative energy. " "make every effort to increase the production of jet fuel; continue with the transition of low-cost "refined oil products to chemical feedstocks" and high-value "refined oil products to refining specialties" Has total demand for oil peaked or is it like Jan 25 vs Jan 24 small increase in total oil demand but diesel down YoY? #OOTT."* Our Supplemental Documents package includes excerpts from the Sinopec Q4.

China Jan 25 vs Jan 24 oil demand by category fits the Sinopec comments

Our Sinopec post said "*Has total demand for oil peaked or is it like Jan 25 vs Jan 24 small increase in total oil demand but diesel down YoY".* Their comments reminded of OPEC's Mar MOMR split of China oil demand and our Sinopec included the OPEC table of Jan 2025 vs Jan 2024 China oil demand that shows China diesel demand YoY but overall China oil demand up YoY driven by increasing petrochemicals, jet fuel and gasoline.

Figure 47: China oil demand Jan 25 vs Jan 24

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

China's oil demand By product	Jan 24	Jan 25	Change Jan 25/Jan 24 Growth	%
LPG	2.85	3.06	0.21	7.3
Naphtha	1.90	2.05	0.15	7.7
Gasoline	4.24	4.28	0.04	0.9
Jet/kerosene	1.21	1.23	0.02	1.3
Diesel	4.50	4.34	-0.16	-3.6
Fuel oil	0.97	0.99	0.02	1.8
Other products	1.84	1.80	-0.04	-2.4
Total	**17.51**	**17.73**	**0.22**	**1.3**

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

Sources: Argus Media, Chinese Customs, Chinese National Bureau of Statistics, JODI and OPEC.

However, diesel is estimated to have seen the largest decline of 162 tb/d, y-o-y, down from a contraction of 33 tb/d, y-o-y, seen the previous month. Diesel has been under pressure from weak manufacturing activity amid the ongoing penetration of LNG trucks. The 'other products' category (comprised of bitumen, petroleum coke and lubricants) is estimated to have declined by 43 tb/d, y-o-y, in January, down from an increase of 82 tb/d, y-o-y, seen in December.

Source: OPEC March MOMR

Oil: Sinopec highlighting oil for chemicals is why Saudi sees growing China demand

Sinopec highlights oil for chemicals

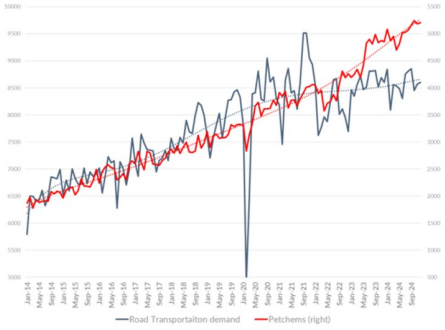
Sinopec's highlighting in the just released Q4 of China's increasing consumption of oil for petrochemicals is something Saudi Aramco has been highlighting as key to their view why China's overall oil consumption is still increasing. Here is what we wrote in our Jan 26, 2025 Energy Tidbits memo. "*Saudi Aramco CEO, China oil consumption is growing driven by petrochemicals. Saudi Aramco CEO Nasser didn't specifically say that China car consumption of gasoline and gasoline had peaked, but he seemed to infer that in his comments to Bloomberg. But Nasser highlighted there is growth in China oil consumption, it's just driven by growth in petrochemicals. On Tuesday, we posted [LINK] "Petrochemicals growth = Growth in China oil demand even if gasoline/diesel component is peaking. "The growth [in China oil demand] is still there. Instead of producing more gasoline and diesel, they are using the feedstock to produce more chemicals" Aramco CEO to @JoumannaTV #OOTT." Our post included the transcript we made of Nasser's Bloomberg interview. Bloomberg's Joumanna Bercetche asked "It's interesting what you say about transport fuel in China, because obviously, there there has been a big shift towards the usage of electric vehicles. Analysts are saying that we're getting close to peak oil demand when it comes to transport fuel. What do you see?" Nasser replied "I think in China, as I say, there is a huge growth even for electric vehicles. The liquid to chemical, our strategy is to go to 4 million by 2030. About 4 million barrels per day. A lot of it is going to into China, China. Why do they need the liquid to chemical as a feed. They need it because of electric vehicles. They need it for solar panels. They need it for carbon fibers. So, my point even for the [??] on going to electric vehicles, you need oil as a feed stock to produce the material that would be required for any transitions. So, the growth is still there. Instead of producing more gasoline and diesel, they are using the feed stock to produce more chemicals. You'll see a lot of the conversion of refineries in China, for example, a lot of the one that we're investing right now, the conversion of liquid to chemical is at 60 to 70%, compared to an average of about 10 to 12% integration in liquid to chemical around the world." Bercetche followed up "do you think the market was overstating the state of demand that is coming out of China? And the fact that people have been so bearish about some signals coming through there?" Nasser replied 'No. We're still seeing good demand coming out of China. We're seeing it in 2024 we still*

anticipate, as I said, most of the growth, 1.3 million. 40% of that growth, will come from China and India. The rest is coming from the rest of the world. As I said, China, even when you talk about the move into electric vehicles and renewables and all of that, they need to feedstock to create the material that would be used in these electric vehicles and these carbon fibers and all of these things. So, we are seeing the demand, and demand is increasing year on year."

Vitol also sees China petrochemicals demand driving oil demand growth

Here is what we wrote in our Nov 24, 2024 Energy Tidbits memo on Vitol also highlighting China oil consumption of petrochemicals. "*Vitol, China total oil demand growth on trend even as peak transport fuel reached. Yesterday, we tweeted [LINK] "Great China #Oil demand perspective from @vitolnews @Giovanni Serio. China oil demand "trend is the same. What has changed is the composition of that demand. It is very clear when you break it down that peak transport fuel has been reached in China, but that petchem continues to expand and drive demand growth".Excerpt from his must read [LINK] #OOTT." We have been focusing on the piece of the China oil demand picture that we can follow – the growth of LNG-fueled trucks leading to peak China diesel demand. But that is a key piece but only piece of the China oil demand picture and we were reminded of this point by a great perspective comments by Giovanni Serio, Vitol's Global Head of Research at this week's FT Commodities Asia conference. The headlines from Serio's comments were his clear view that "peak transport fuel has been reached in China". That makes sense with LNG-fueled trucks and BEVs and PHEVs growth. Although he does also remind a wildcard is how much PHEVs keep taking share from BEVs. But what was missed in the headlines is that he sees China oil demand on trend with pre-Covid because strong petchem growth makes up for peak transport fuels. Our tweet included his key quote and the graphs that show the flattened gasoline/gasoil (diesel) curve an the strong growth in petchems to give the overall trend. Below is his road transport fuels and petchem demand growth graph*."

Figure 48: China road transportation fuels & petchems demand



China demand trends / kbpd

Source: Vitol

Oil: China oil imports 11.18 mmb/d in Feb, up +14.8% MoM and down -3.3% YoY

China oil imports

On Tuesday, the China's General Administration for Customs (GACC) released their data on China's oil and natural gas imports for January and February [LINK]. Note that we wrote about China's cumulative oil imports in our Mar 9 Energy Tidbits memo, but this week the numbers have been broken down for each month. China's imports of crude oil in February were 42.69 million tons, or 11.18 mmb/d, a +14.8% increase from 9.73 mmb/d in January. Crude imports were down -3.3% YoY from 44.14 million tons, or 11.16 mmb/d, in February 2024.

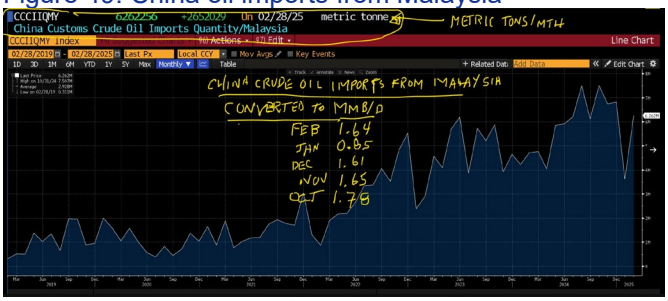
> **03/09/25: China oil imports -5.0% YoY, 10.42 mmb/d during Jan-Feb period**
> Here is what we wrote in our Mar 9, 2025, Energy Tidbits memo when the GACC had only released cumulative oil imports for Jan-Feb. "*On Friday, China's General Administration for Customs (GACC) reported on the summary data of China's oil and natural gas imports for Jan-Feb [LINK]. As the world's second-largest oil consumer, China's imports of crude oil in the period of Jan-Feb were 83.85 million tons, or 10.42 mmb/d, a decrease of -5.0% YoY. The absolute tonnage in Jan-Feb 2024 was high than Jan-Feb 2025 at 88.30 million tons but recall that last year had 29 days in Feb because of the leap year. The Jan-Feb oil imports average of 10.42 mmb/d is down -7.9% compared to Dec's imports of 11.31 mmb/d.*"

Oil: China oil imports from Iran back to normal in Feb

China oil imports from Iran

It looks like there will be more volatility for China oil imports from Iran for April but, at least for the Feb data, China oil imports from Iran were back to normal levels after being down in Jan when China held of loadings on sanctioned tankers carrying Iran oil. On Thursday, we posted [LINK] "*China #oil imports from Iran back to normal levels, ~1.64 mmbd in Feb after dropping to 0.85 mmbd in Jan when China didn't unload some sanctioned tankers. China customs data says zero oil imports from Iran since June 2022 vs Malaysia ~1.64 mmbd despite Malaysia only producing 0.35 mmbd. #OOTT.*" China customs data continues to show zero oil imports from Iran since June 2022. But we use China oil imports from Malaysia as the proxy for China oil imports from Iran. And we remind that Malaysia total country oil production is only 0.35 mmb/d but China oil imports from Malaysia has generally been around 1.65 mmb/d. Our post noted how China oil imports from Malaysia in 1.64 mmb/d in Feb, which followed 0.85 mmb/d in Jan, 1.61 mmb/d in Dec, 1.65 mmb/d in Nov and 1.78 mmb/d in Oct. Below is the Bloomberg graph of China oil imports from Malaysia that was attached to our post.

Figure 49: China oil imports from Malaysia



Source: Bloomberg

Oil: OECD lowers GDP growth in most of the world

OECD lower global GDP growth

The reality is that month two of the Trump regime has surprised markets and raised economic growth as a major wildcard for the US and around the world. And lower GDP growth will inevitably lead forecasters to lower oil demand growth. On Monday, we posted [LINK] "*Lower GDP growth = Lower #Oil consumption. Trump tariffs impact. OECD cuts global GDP forecast. Diff vs Dec fcast: MEX -2.5%. CAN -1.3%. US -0.2%. Euro -0.3%. Japan -0.4%. India -0.5%. Korea -0.6%. Argentina +2.1%. China +0.1%. RUS +0.2%. Saudi +0.2%. #OOTT."* The OECD had just posted its quarterly update to its GDP growth forecast and lowered it for most countries vs its Dec GDP forecast. The OECD subtitled its report "*Steering through Uncertainty*". They didn't specifically blame Trump tariffs but that is the key reason. The first three points in its report are *"Global output growth remained resilient in 2024, with robust expansions in the United States and several large emerging-market economies, including China. • Recent activity indicators have begun to point to a softening of global growth prospects. Business and consumer sentiment have weakened in some countries, and indicators of economic policy uncertainty have risen markedly around the world. • Significant changes have occurred in trade policies that if sustained would hit global growth and raise inflation."* Our Supplemental Documents package includes excerpts from the OECD forecast.

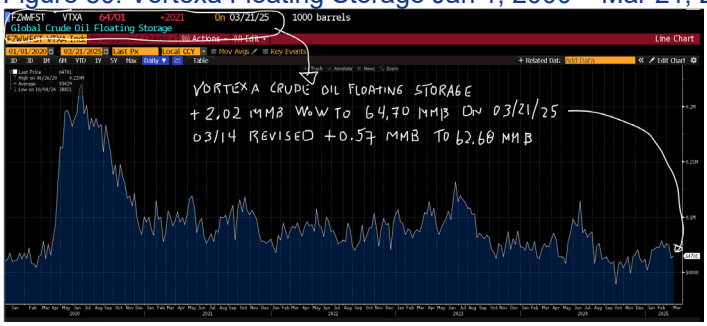
Oil: Vortexa crude oil floating storage +2.02 mmb WoW to 64.70 mmb on Mar 21

Vortexa floating storage

We are referencing the Vortexa crude oil floating storage data posted on the Bloomberg terminal as of 9am MT yesterday. Note that these estimates get revised over the course of the week and the revisions can go back months. We do not check daily for the revisions, so our comments on the new estimates are compared to the prior week's Vortexa estimates posted on Bloomberg on Mar 15 at 9am MT. (i) Yesterday morning, we posted [LINK] "*Vortexa crude #Oil floating storage. 64.70 mmb on 03/21, +2.02 mmb WoW vs immaterially revised up 03/14 of 62.68 mmb. 7-wk moving average down to 71.48 mmb on 03/21, last 5-wks moving average are 1st times >70 since Aug. Been ~2 mths since China stopped unloading some sanctioned RUS/Iran tankers. Asia is off from peak but still high ie. perhaps pointing to so so demand. Thx @vortexa @business #OOTT."* (ii) As of 9am MT Mar 22, Bloomberg posted Vortexa crude oil floating storage estimate on Mar 21 was 64.70 mmb, which was +2.02 mmb WoW vs revised up Mar 14 of 62.68 mmb. Note Mar 14 was revised +0.57 mmb to 62.68 mmb vs 62.11 mmb originally posted at 9am MT on Mar 15. (iii) Revisions. There was a mix of +/- revisions for the seven prior weeks, but they weren't big

with all +/- 2 mmb, such that the average revision for the prior seven weeks was almost nothing at 0.09 mmb. Here are the revisions for the prior seven weeks compared to the estimates originally posted on Bloomberg at 9am MT on Mar 15. Mar 14 revised +0.57 mmb. Mar 7 revised -0.75 mmb. Feb 28 revised +1.90 mmb. Feb 21 revised +1.59 mmb. Feb 14 revised -0.98 mmb. Feb 7 revised -0.99 mmb. Jan 31 revised -1.95 mmb. (iv) Even with Mar 14 coming at 64.70 mmb, the last five weeks have been the first time since Aug that the 7-week moving average is over 70 mmb. The 7-week moving average to Mar 21 is 71.48 mmb, which is down vs last week's 7-week moving average as of Mar 14 of 72.72 mmb. (v) 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. (vi) 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. (vii) Mar 21 estimate of 64.70 mmb is -67.14 mmb vs the 2023 peak on June 25, 2023 of 131.84 mmb. Recall Saudi Arabia stepped in on July 1, 2023 with its voluntary cuts. (viii) Mar 21 estimate of 64.70 mmb is -9.08 mmb YoY vs Mar 22, 2024 of 73.78 mmb. Below are the last several weeks of estimates posted on Bloomberg as of 9am MT on Mar 22, Mar 15, and Mar 8.

Figure 50: Vortexa Floating Storage Jan 1, 2000 – Mar 21, 2025, posted Mar 22 at 9am MT



Source: Bloomberg, Vortexa

Figure 51: Vortexa Estimates Posted 9am MT on Mar 22, Mar 15, and Mar 8

Posted Mar 22, 9am MT

Date	Last Px
Fr 03/21/2025	64701
Fr 03/14/2025	62680
Fr 03/07/2025	74733
Fr 02/28/2025	75679
Fr 02/21/2025	71876
Fr 02/14/2025	78652
Fr 02/07/2025	72049
Fr 01/31/2025	72793
Fr 01/24/2025	70645
Fr 01/17/2025	70525
Fr 01/10/2025	59942
Fr 01/03/2025	51922

Mar 15, 9am MT

Date	Last Px
Fr 03/14/2025	62111
Fr 03/07/2025	75478
Fr 02/28/2025	73780
Fr 02/21/2025	70291
Fr 02/14/2025	79627
Fr 02/07/2025	73036
Fr 01/31/2025	74740
Fr 01/24/2025	70961
Fr 01/17/2025	70921
Fr 01/10/2025	60934
Fr 01/03/2025	53763
Fr 12/27/2024	63353

Mar 8, 9am MT

Date	Last Px
Fr 03/07/2025	74215
Fr 02/28/2025	76111
Fr 02/21/2025	70716
Fr 02/14/2025	78464
Fr 02/07/2025	75146
Fr 01/31/2025	77833
Fr 01/24/2025	70368
Fr 01/17/2025	71148
Fr 01/10/2025	61133
Fr 01/03/2025	53477
Fr 12/27/2024	64271
Fr 12/20/2024	64144

Source: Bloomberg, Vortexa

Source: Bloomberg, Vortexa

Oil: Vortexa crude oil floating storage by region

Vortexa floating storage by region

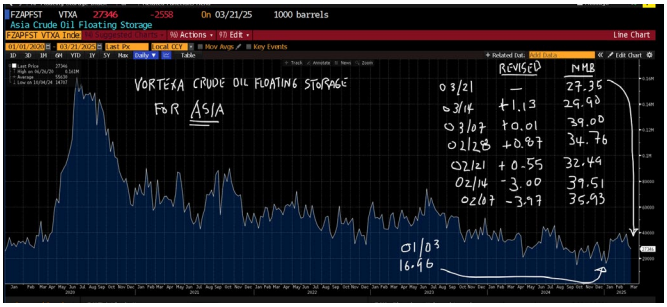
Bloomberg posts Vortexa crude oil floating storage in key regions, but not all regions of the world. The regions covered are Asia, North Sea, Europe, Middle East, West Africa and US Gulf Coast. We then back into the "Other" for rest of world. (i) As noted above, last week's Mar 14 was revised +0.57 mmb. There were no significant revisions in a region. (ii) Asia. The revisions to the prior four weeks were immaterial, but Feb 14 was revised -3.00 mmb down below 40 mmb tp 39.51 mmb and Feb 7 revised -3.97 mmb to 35.93 mmb. Asia floating storage doubled in Jan & Feb when China surprised by becoming stricter on taking sanctioned tankers related to Russia and Iran from 16.96 mmb on Jan 3 to a high of 39.51 mmb on Feb 14. Mar 21 of 27.35 mmb is now the 3rd consecutive week below 30 mmb. Our concern is that the China sanctioned tankers immediate hit should have worked thru the system by now so the continued higher Asia floating storage would seem to be more reflective of demand. The 7-week moving average is now 34.13 mmb (was 36.19 mmb), but it includes the big weeks in the aftermath of the surprise China change. (iii) Total floating storage on Mar 21of 64.70 mmb is +2.02 mmb vs revised up Mar 14 of 62.68 mmb. The major WoW changes were West Africa +4.77 mmb WoW, Middle East -3.12 mmb WoW and Asia -2.55 mmb WoW. (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 Mar 14 that was posted on Bloomberg at 9am MT on Mar 15.

Figure 52 Vortexa crude oil floating storage by region

Vortexa crude oil floating storage by region				Original Posted	Recent Peak	
Region	Mar 21/25	Mar 14/25	WoW	Mar 14/25	Jun 23/23	Mar 21 vs Jun 23/23
Asia	27.35	29.90	-2.55	28.77	74.11	-46.76
North Sea	2.76	1.09	1.67	1.06	6.79	-4.03
Europe	7.04	5.13	1.91	5.17	6.05	0.99
Middle East	6.90	10.02	-3.12	8.80	6.59	0.31
West Africa	8.48	3.71	4.77	5.14	7.62	0.86
US Gulf Coast	0.76	1.75	-0.99	1.61	1.53	-0.77
Other	11.41	11.08	0.33	11.56	29.15	-17.74
Global Total	64.70	62.68	2.02	62.11	131.84	-67.14
Vortexa crude oil floating storage posted on Bloomberg 9am MT on Mar 22						
Source: Vortexa, Bloomberg						

Source: Bloomberg, Vortexa

Figure 53: Vortexa crude oil floating storage for Asia Jan 1, 2020 thru Mar 21, 2025



Source: Bloomberg, Vortexa

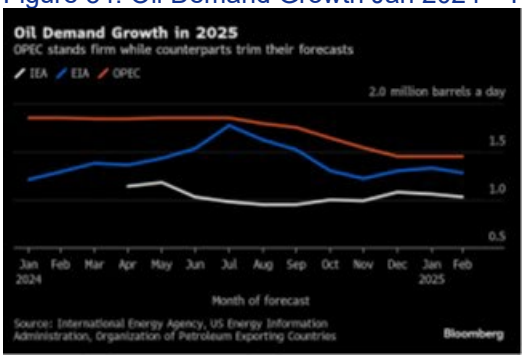
Oil: Bloomberg Oil Demand Monitor, *Trump's Tariffs Cast Shadow Over Outlook*

Bloomberg Oil Demand Monitor

The Bloomberg Oil Demand Monitor is a good recap of key oil demand indicators around the world. This week's report discusses how the market is observing the potential impact of

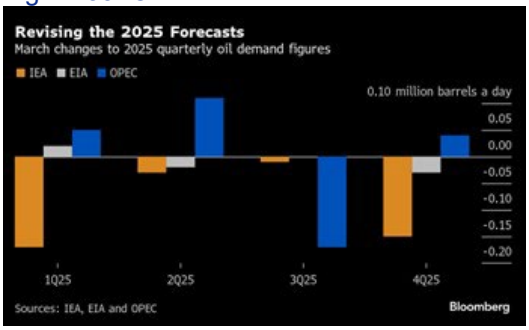
Trump's trade wars on oil demand. Bloomberg references the IEA's warning from last week's report that tariffs will act as barriers to global trade and economic growth in 2025. The demand forecast follows a familiar format of OPEC being more optimistic than the consumer-focused IEA and EIA forecasts, with the OPEC keeping its forecasts flat and the others cutting their demand growth. There has been some negative oil demand data recently from major consumers nations including China's energy imports declining to start the year and India's oil consumption largely falling in February. On the other hand, the US offers some positive outlook for 2025 and 2026 with expectations of smaller oil surpluses around the global, citing decreased flows from Iran and Venezuela. Bloomberg reported, "*There's also been a smattering of discouraging demand data from major consumer nations in recent weeks. Chinese energy imports broadly fell at the start of 2025, while India's oil-product consumption fell sharply in February. Not everyone is so downbeat on the outlook. The US expects smaller global oil surpluses for this year and 2026 than it estimated previously, citing the prospect of diminished flows from Iran and Venezuela. Meanwhile, US Energy Secretary Chris Wright said he plans to seek as much as $20 billion to accomplish Trump's goal of refilling the nation's depleted oil reserve — a potential boost to demand."* Our Supplemental Documents package includes the Bloomberg Oil Demand Monitor.

Figure 54: Oil Demand Growth Jan 2024 – Feb 2025



Source: Bloomberg

Figure 55: Oil Demand Forecast Revisions 2025



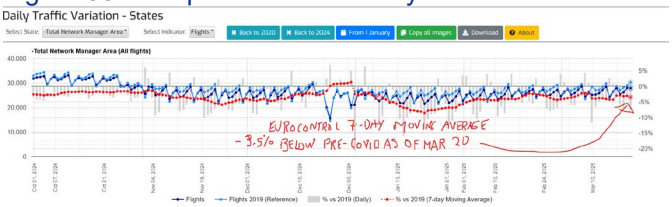
Source: Bloomberg

Oil: Europe airports daily traffic 7-day moving average -3.5% below pre-Covid

Europe airports daily traffic

Yesterday morning, we posted [LINK] "*EU air traffic (arrivals/departures) stuck below pre-Covid. 7-day moving average as of: Mar 20: -3.5% below pre-Covid. Mar 13: -4.0% Mar 6: -2.2%. Feb 27: -4.3%. Feb 20: -2.4%. Feb 13: -4.1%. Feb 6: -4.3%. Jan 30: -5.9% below pre-Covid. Jan 23: -7.6%. Jan 16: -7.6%. Jan 9: -4.2%. Jan 2: -2.6%. Dec 26: +0.8%. #OOTT.*" Note the Eurocontrol air traffic is daily arrivals/departures data. The Xmas rush for the 7-day moving average as of Dec 26 was the only time above pre-Covid since Jan 2024 but it didn't last and went right back below pre-Covid in Jan 2025. Air traffic always goes up for Xmas and it always seasonally drops after Xmas. But in Jan 2024, it didn't drop as much and was actually above pre-Covid in Jan 2024. This year, there was a big drop off after Xmas. The 7-day moving average was -3.5% below pre-Covid as of Mar 20, which follows -4.0% as of Mar 13, -2.2% as of Mar 6, -4.3% as of Feb 27, -2.4% as of Feb 20, which follows -4.1% as of Feb 13, -4.3% as of Feb 6 ,-5.9% as of Jan 30, -7.6% as of Jan 23, -7.6% below as of Jan 16, -4.2% as of Jan 9, -2.6% as of Jan 2, and +0.8% as of Dec 26. Normally 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].

Figure 56: Europe Air Traffic: Daily Traffic Variation to end of Mar 20



Source: Eurocontrol

Oil: Frontier Airlines going after market share in peak summer travel season

Frontier Airlines goes after market share

Last week's (Mar 16, 2025) Energy Tidbits memo highlighted the comments from the US airlines on the slowdown in domestic demand and their pulling back on capacity. Recall that Monday Mar 10 was a bad day for US airline stocks and then was followed with a bad Tues Mar 11 after Delta Air Lines posted drastically reduced profit guidance and warned on demand weakness from consumers and companies. This week, Frontier Airlines decided it was going to cut effective prices to capture market share. Early Tuesday morning, we posted [LINK] " 👇 *@FlyFrontier moves to capture market share for peak summer air travel season. Free carry-on bag, seat selection, flight changes & checked bag. Teases, if enough bookings by Mar 24, "we might just make it permanent". #OOTT."* Frontier had just posted its cut in effective prices for the summer with free carry-on bag, free checked bag, free flight changes and seat selection. Our Supplemental Documents package includes the Frontier post.

Oil: Heathrow power outage caused global air travel chaos

Heathrow power outage

No surprise that when one of the busiest airports in the world gets closed, it causes travel chaos in the global air travel. It's too early to know all the details to what caused the power outage that shut down Heathrow and what back up power generation was or was not available. The UK govt is "*to carry out an investigation into this specific incident and to understand any wider lessons to be learned on energy resilience for critical national infrastructure, both now and in the future.*" There are accusations floating around on

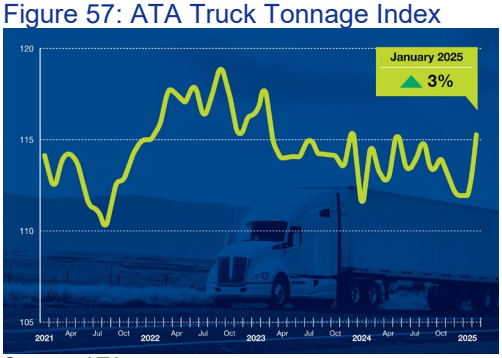
inadequacy of backup generation but we aren't going to add to any speculation. Our Thurs night post [LINK] "*Air travel chaos with Heathrow being closed for all of Fri Mar 21 due to power outage. Heathrow averaged well over 200,000 passengers per day in 2023. .See 👇 @ACIWorld 2023 table. #OOTT [LINK]*" highlighted the ACI World 2023 data that showed Heathrow was the 4th busiest airport in the world with over 200,000 passengers per day in 2023. Our Supplemental Documents package includes the ACI World 2023 top 20 busiest airports that was attached to our post.

Oil: ATA Truck Tonnage index in February up +3.0% MoM, +0.6% YoY

ATA Truck Tonnage Index +3.0% MoM

We look to items like truck tonnage for indicators on the US economy. The American Trucking Association (ATA) released its seasonally adjusted Truck Tonnage Index for February on Tuesday [LINK]. Truck tonnage surged +3.0% MoM for its best sequential increase in years. The index was also up +0.6% YoY from February 2024, which is the first time since early 2023 to have two months in a row with a YoY increase. Chief Economist Bob Costello noted, *"After a scant 0.1% decline in January, which wasn't bad considering the harsh winter weather and California wildfires, truck tonnage had a robust gain in February. This outcome fits well with our growing optimism for the truck freight market after a two-year recession. Some of the gain in February was due to accelerated imports early in the year as shippers rushed to bring products into the U.S. before tariffs hit. Even accounting for this, the first two months of the year were positive, all things considered, indicating that the freight recovery has indeed begun."* Trucking serves as an indicator of the US economy, representing 72.7% of tonnage carried by all modes of domestic freight transportation, including manufactured and retail goods. Trucks hauled 11.27 billion tons of freight in 2024. Motor carriers collected $906 billion, or 76.9% of total revenue earned by all transport modes.

Figure 57: ATA Truck Tonnage Index



Source: ATA

Oil & Natural Gas: TIPRO Texas oil & gas jobs increase in January

TIPRO January jobs update

On March 14, Texas Independent Producers and Royalty Owners Association (TIPRO) posted its monthly oil and gas jobs data for January [LINK]. TIPRO reported a significant MoM increase in jobs in January following December's decline. January jobs were up +2,500 jobs MoM vs the upwardly revised jobs added in December. Direct Texas upstream employment totaled 203,400 in January, up +6,900 from the recent high in March 2024. TIPRO wrote, "*TIPRO's new workforce data indicated strong job postings for the Texas oil and natural gas industry. According to the association, there were 10,724 active unique jobs*

postings for the Texas oil and natural gas industry last month, including 5,140 new postings. In comparison, the state of California had 3,017 unique job postings in January, followed by New York (2,437), Florida (1,936) and Colorado (1,544). TIPRO reported a total of 54,402 unique job postings nationwide last month within the oil and natural gas sector." Our Supplemental Documents package includes excerpts from the TIPRO recaps for January.

Oil & Natural Gas: No change to Liberal oil & gas issues with Alberta under PM Carney

Alberta's energy issues continue under Carney

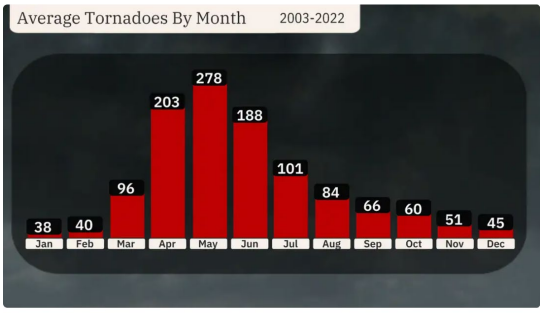
As of our 7am MT news cut off, there has been no formal Canada election call but the expectation is that it could happen today. On Thursday, there was a reminder from Alberta Premier Danielle Smith, post her call with new PM Mark Carney, that there is no change to Alberta's energy disputes with the Liberal govt under PM Mark Carney vs his predecessor Trudeau. On Thursday, we posted [LINK] *"Polite version of Justin? @ABDanielleSmith says "frank discussion" with @CanadianPM ie. Carney listened but didn't agree to any of Smith's 👇federal govt issues. Can Smith get AB voters to focus on Liberal track record? Or can Carney get AB voters to focus on Trump? #OOTT."* Most of these issues have been issues for years such as "Repealing Bill C-69 (aka "no new pipelines act"), lifting the tanker ban off the BC coast. Eliminating the oil and gas emissions cap, which is a production cap, etc. Our Supplemental Documents package includes the Smith post.

Oil & Natural Gas: March is start of ramp up to peak tornados in May

Tornados per month

The big tornado hits from last week died down last weekend, but it is a reminder that the US is now moving into peak tornado season. Here is what we wrote in last week's (Mar 16, 2025) Energy Tidbits memo. "*March is start of ramp up to peak tornados in May. We follow tornado activity as it can impact oil and gas onshore operations in Oklahoma and Kansas. As a rule, most of the key Texas oil and gas operations (Permian and Eagle Ford) tend to be west and/or south of major tornado activity. Normally we don't bring up tornadoes for another month or two but, yesterday's major tornado activity have brought tornadoes into the spotlight. Here is what we wrote a year ago in our March 17, 2024 Energy Tidbits memo on tornado season. "Normal peak tornado season is May. The Weather Channel provided an updated monthly distribution of tornadoes for the 20-year period 2003-2022. This is an update from what we included in our May 17, 2023 Energy Tidbits memo that had the monthly distribution for the 20-yr period 1991-2010. The distribution by month is the same: tornado activity really ramps up in April, peaks in May, is still high in June and then in July is below April levels. Below is the graph from The Weather Channel report."*

Figure 58: Monthly Tornado Averages 2003-2022

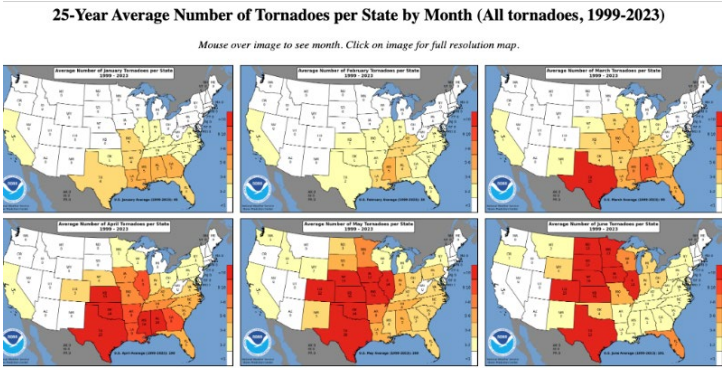


Source: The Weather Channel

25-year average number of tornadoes per state by month

Here is another item from last week's (May 16, 2025) Energy Tidbits memo on tornados. "*25-year average number of tornadoes per state by month. Earlier this morning, we saw a good NOAA graphic that shows the 25-year average number of tornadoes per state by month as it really illustrates the tornado alley. It illustrates why Kansas, Oklahoma and Texas are the key normal tornado risk areas. Below we pasted NOAA's map for Jan thru June. [LINK]*"

Figure 59: Average number of tornadoes per state by month



Source: NOAA

Tornados Enhanced Fujita Scale (EF Scale) Intensity & Rating

Here is an item from last year's March 17, 2024 Energy Tidbits memo. *"Tornados Enhanced Fujita Scale (EF Scale) Intensity & Rating. NOAA's National Weather Service has a recap of the Enhanced Fujita Scale (EF Scale) for the intensity and rating of tornadoes. [LINK]. NOAA explains "The Fujita Scale. Fujita Scale (or F Scale) of tornado damage intensity. The F Scale was developed based on damage intensity and not wind speed; wind speed ranges given are estimated, based on the extent of observed damage." But there is also the Enhanced Fujita Scale (EF Scale). NOAA explains "The Enhanced Fujita Scale or EF Scale, which became operational on February 1, 2007, is used to assign a tornado a 'rating' based on estimated wind*

speeds and related damage. When tornado-related damage is surveyed, it is compared to a list of Damage Indicators (DIs) and Degrees of Damage (DoD) which help estimate better the range of wind speeds the tornado likely produced. From that, a rating (from EF0 to EF5) is assigned. The EF Scale was revised from the original Fujita Scale to reflect better examinations of tornado damage surveys so as to align wind speeds more closely with associated storm damage. The new scale has to do with how most structures are designed."

Figure 60: Enhanced Fujita Scale (EF Scale) for Tornadoes

EF SCALE	
EF Rating	**3 Second Gust (mph)**
0	65-85
1	86-110
2	111-135
3	136-165
4	166-200
5	Over 200

Source: NOAA

Energy Transition: Sinopec gasoline sales keep increasing despite huge NEV sales

Sinopec gasoline sales keep going higher

Earlier in the memo, we posted on Sinopec Q4 results and said there are huge questions on oil from the Sinopec Q4 including the big question "*Is China #Gasoline sales growing because PHEVs are dominating BEVs and PHEVs are just very fuel efficient ICE?"* It jumped out to us how Sinopec noted the shift from low value diesel to higher value gasoline in its refineries and its highlighting the growth in high-grade gasoline sales. This is likely contrary to what almost everyone expects with the huge China New Energy Vehicle sales and most have called peak China oil demand has been reached driven by NEVs. At a minimum, the Sinopec comments on gasoline should stir up the question as to why gasoline sales keep increasing. And we have to remind of the point we have highlighted for a very long time – China's NEVs sales are dominated by PHEV sales over BEV sales and PHEVs are really just more fuel efficient ICE. And that the big unknown is what percentage of kms driven by Chinese PHEV owners are driven in electric mode vs ICE mode. Below is what we wrote on this in our March 2, 2025 Energy Tidbits memo.

03/02/25: China's BYD Feb sales, NEV up huge YoY, PHEV are 1.5x BEV

Here is what we wrote in our Mar 2, 2025 Energy Tidbits memo. "*China's BYD Feb sales, NEV up huge YoY, PHEV are 1.5x BEV. Earlier this morning, we posted [LINK] "BYD Feb sales just out. Huge YoY growth in both PHEV + BEV sales. PHEVs keep dominating BEVs in China. Don't forget NEVs = BEVs + PHEVs. Feb sales: PHEV: 193,331, +189.2% YoY, 59.9% share. BEV: 124,902, +127.5% YoY, 38.7% sh. YTD Feb sales: PHEV: 364,400, +124.2% YoY, 58.5% sh. BEV: 250,279, +56.2% YoY, 40.1% sh. #OOTT." BYD posted its Feb production and sales volumes this morning. The Feb sales were similar trend as seen in 2024: NEV sales continue to be up big and PHEV sales continue to be 1.5x BEV sales. As a reminder, in China NEV sales are the sum of BEV + PHEV sales. Our concern is that almost everyone*

refers to BYD's NEV sales without splitting between BEV and PHEV. We recognize it takes that extra step to go and get the split but there is likely a difference to the China gasoline consumption decline forecast if the cars are BEVs vs PHEVs. This is not a question that the huge % increase in PHEVs is because the huge % is relative to a low base. BYD's PHEVs reached parity to BEV volumes about a year ago. So, the YoY % growth between the two is from a similar basis in 2024. BEVs had a big recovery in Feb vs Jan when BEVs were +19.7% YoY so both BEV and PHEV were up huge YoY. And PHEVs continue to be 1.5x BEV sales. Our table below shows the BYD Feb and YTD Feb 28 NEV sales split into BEV, PHEV, Commercial vehicles – bus and Commercial vehicles – others."

Figure 61: BYD New Energy Vehicle Sales for Feb and YTD Feb 28 2025

BYD New Energy Vehicle Sales: Feb 2025

	Feb-25	% Share	Feb-24	% Share	Volume Δ	*% change*
BEV	124,902	38.7%	54,908	44.9%	69,994	*127.5%*
PHEV	193,331	59.9%	66,840	54.6%	126,491	*189.2%*
Commercial Vehicle - Bus	453	0.1%	201	0.2%	252	*125.4%*
Commercial Vehicle - Others	4,160	1.3%	362	0.3%	3,798	*1,049.2%*
Total	**322,846**	**100.0%**	**122,311**	**100.0%**	**200,535**	***164.0%***

	YTD Feb 25	% Share	YTD Feb 24	% Share	Volume Δ	*% change*
BEV	250,279	40.1%	160,212	49.5%	90,067	*56.2%*
PHEV	364,400	58.5%	162,555	50.2%	201,845	*124.2%*
Commercial Vehicle - Bus	739	0.1%	526	0.2%	213	*40.5%*
Commercial Vehicle - Others	7,966	1.3%	511	0.2%	7,455	*1,458.9%*
Total	**623,384**	**100.0%**	**323,804**	**100.0%**	**299,580**	***92.5%***

Source: BIYD Production and Sales Volumes for February 2025 posted Mar 2, 2025
Prepared by SAF Group

Source: BYD

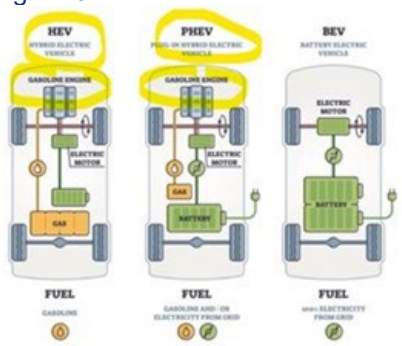
Big unknown – how much do Chinese drive in ICE vs electric mode

Here is another item from our Mar 2, 2025 Energy Tidbits memo. "*Big unknown – how much do Chinese drive in ICE vs electric mode. It seems like a dirty little secret for car companies to keep as to how much their PHEVs are driven in ICE mode vs electric mode. It is a split that they must all have but don't disclose whether it is in China, Europe or the US. The only clear statement we have seen was from Volvo and that wasn't in any disclosed reports, rather was the response in a conference call on how the km driven by their PHEVs is about 50/50 split ICE vs electric mode. Our BYD post highlighted this unknown. Our Tuesday post said "Dirty little secret for PHEVs, what % of kms driven are in ICE vs electric mode. PHEVs are really just more fuel efficient ICE vehicles. See 👇09/04 tweet. Volvo said its PHEVs kms driven are 50/50 ICE vs electric mode. Unknown for Chinese PHEVs. Surely more kms in electric than Volvo but how much more?" BYD newer higher end cars are moving more extended range electric, which has to help them drive significantly more in electric mode. But we don't know what % of kms are driven in ICE vs electric mode. In our prior posts on the BYD data, we remind that the vast majority of Chinese in cities live in apartments vs single family homes. And given that most of these apartments were built in the big China boom from 2000 to Covid, we have to question if they are set for broad EV charging for most of the residents. Only BYD and therefore Chinese govt knows the data on how many kms these millions of PHEVs are driven in ICE mode vs electric mode."*

HEVs & PHEVs are really just more fuel-efficient ICE vehicles

Here is another item from our Mar 2, 2025 Energy Tidbits memo. *"HEVs & PHEVs are really just more fuel-efficient ICE vehicles. We call it a dirty little secret by the car companies but, for some reason, they don't want to disclose what % of kms are their PHEVs driven in ICE mode vs electric mode. They have the data and we would have thought that would be some sort of sales/marketing pitch for the value equation of PHEVs vs ICE if they are driven mostly in electric mode. But that data doesn't seem to be something they disclose. As noted in our BYD post on Tuesday, it is unknown what % of kms are driven in ICE vs electric mode given vast majority of Chinese in cities live in apartments build in prior boom. Although, given that more BYD higher end PHEVs have are extended range electric, we would expect that Chinese drive their PHEVs significantly more in electric mode than driven by Volvo's PHEV owners. We linked to our prior disclosure on Volvo saying their PHEVs are driven about 50/50 in gasoline vs electricity mode. In the western world, HEVs are the big winners as opposed to PHEVs in China. The emergence of HEVs and PHEVs is a win or at least a much lesser loss of gasoline/diesel consumption vs BEVs. 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 BEVs for an electrified car group. HEVs and PHEVs run on gasoline or diesel for likely at least half of the time for PHEVs, at least for Volvo's, and probably 90% for HEVs. On Sept 4, we tweeted [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." Our tweet referenced Ford and Volvo data on HEVs and PHEVs. On Ford F150 Hybrid vs ICE mpg. 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. On Volvo PHEVs, most just lump PHEVs in with EVs because both are electrified. But the reality is that a lot of PHEV is driven in ICE mode. As noted earlier, Volvo 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 be 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."*

Figure 62: HV vs PHEV vs BEV



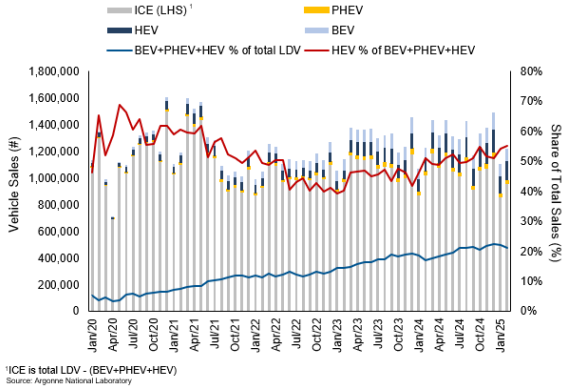
Source: Engineering Infrastructure

Argonne US LDV sales

Energy Transition: HEVs continue to take share from BEVs in US but BEVs up YoY

The key 2024 trend in US car buying has continued on Feb with HEVs taking share from BEVs, PHEVs and ICE. But the other key 2024 trend had a pause in Jan Feb with BEVs up strong YoY, which was helped by consumers moving on BEVs before Trump pulled incentives. Prior to Jan/Feb, BEV sales in 2024 were well below expectations and the theme in 2024 awas BEVs are not being adopted anywhere near as fast as assumed in the Energy Transition aspirations. And now most are aware that Hybrids keep taking share from BEVs in the US. Argonne National Laboratory posted its monthly US sales data for Light Duty Vehicles (LDVs) broken out into Battery Electric Vehicles (BEVs), Plug-in Electric Hybrids (PHEVs) and Hybrid Electric Vehicles (HEVs) for Feb, which then allows us to back into ICE sales [LINK]. On Thursday, we posted [LINK] "*US Feb 25 car sales by fuel source: BEV strong Jan/Feb, partially in rush before Trump cuts all BEV incentives. HEV continues to take share. ICE keeps losing share. Feb 25: BEV: +17.0% YoY to 94,464 & 7.7% share. (was 6.5% sh). PHEV: -23.3% YoY to 21,956 & 1.8% sh (was 2.3% sh). HEV: +35.0% YoY to 143,007 & 11.7% sh (was 8.5% sh). ICE: -6.2% YoY to 960,414 & 78.7% sh (was 82.6% sh). YTD Feb: BEV: +18.8% YoY to 185,922 & 8.0% sh (was 6.8% sh). PHEV: -19.8% YoY to 41,883 & 1.8% sh (was 2.3% sh). HEV: +38.6% YoY to 274,189 & 11.8% sh (was 8.6% sh) ICE: -3.8% YoY to 1,820,979 & 78.4% sh (was 82.3% sh). Thx @argonne for sales data. #OOTT.*" . Our Supplemental Documents package includes the data from Argonne.

Figure 63: US BEV, PHEV, HEV, ICE vehicle sales for Feb 2025



Source: Argonne National Laboratory

Figure 64: US BEV, PHEV, HEV, ICE vehicle sales for Feb 2025

Argonne Feb 2025 Light Duty Vehicle Monthly Sales by Fuel Source

	Volume Feb-25	Volumes Feb-24	% Change	Share Feb-25	Share Feb-24	YTD Feb 25	YTD Feb 24	% Change	Share YTD Feb 25	Share YTD Feb 24
BEV	94,464	80,715	17.0%	7.7%	6.5%	185,922	156,477	18.8%	8.0%	6.8%
PHEV	21,956	28,610	-23.3%	1.8%	2.3%	41,883	52,253	-19.8%	1.8%	2.3%
HEV	143,007	105,919	35.0%	11.7%	8.5%	274,189	197,862	38.6%	11.8%	8.6%
ICE	960,414	1,024,370	-6.2%	78.7%	82.6%	1,820,979	1,892,931	-3.8%	78.4%	82.3%
Total LDV	1,219,841	1,239,614	-1.6%	100.0%	100.0%	2,322,973	2,299,523	1.0%	100.0%	100.0%

Source: Argonne National Laboratory
Prepared by SAF Group https://safgroup.ca/insights/energy-tidbits/

Source: Argonne National Laboratory

Capital Markets: Canada election to be called for Apr 28

Canada election expected Apr 28

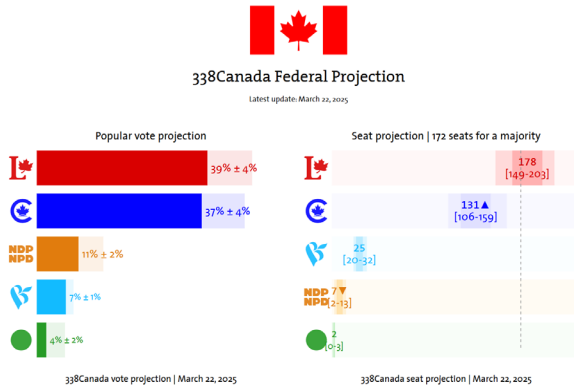
As of our 7am MT news cut off, Prime Minister Carney has not yet met with the Governor General and a Canada federal election has not yet been called. But it is expected that the election call will be done by the time our Energy Tidbits memo gets posted by noon MT. All expectations are for the shortest possible time and an election will be on Apr 28.

Liberals could actually win a majority govt

It is great timing and looks like a good strategy for the Liberals to go for the election. A couple months ago, the Conservatives had a >20% lead and were looking a strong majority government. But the Liberals have fixed or be viewed to have fixed the two big negatives: Trudeau is gone and the are cutting the carbon tax. We recognizer that the Carney new program is expected to ultimately hurt more than the carbon tax but the Liberals can go out with saying they fixed a huge negative. And the greatest positive to the Liberals is Trump and this means Canadians will, to a great part, be focused on Trump and not necessarily the economic negative views of the Liberals for the past several years. And this is being reflected in the polls in terms of the most important issues and then the key, the Liberals have moved ahead in a number of polls and potentially on track for a majority govt. Yesterday, we posted [LINK] "*Current projections are for a tight Canada election race with election call tomorrow for Apr 28 vote. @338Canada Mar 22 projections. Liberals & Conservatives*

projected to take seats from NDP & Bloc. But Liberals projected 178 seats vs 172 needed for majority. #OOTT." The 338Canada Mar 22 seat projections vs current seats are: Liberals 178 seats (152), Conservatives 131 seats (120), Bloc Quebecois 25 seats (33), NDP 7 seats (24), Green Party 2 seats (2), Independent currently 3 and Vacant seats currently 4. 172 seats are needed to form a majority govt.

Figure 65: 338 Canada Federal Projection update Mar 22, 2025



Source: 339Canada

Capital Markets: Trump's critical minerals & rare earths includes almost anything

Trump's broad definition of critical minerals

Earlier in the memo, we highlighted how Trump's new executive order could include helping him get natural gas into the NE US. Most will have seen video of Trump, on Thursday, announcing his executive order *"to dramatically increase the production of critical minerals and rare* earths*?"* The reports on the executive order was how Trump was including coal in this EO on critical minerals and rare earths. It seems like most didn't read the detail for the EO because the definition of minerals includes just about anything that can come out of the ground and not just critical minerals, rare earths and coal. One of Trump's day1 actions was his declaring a National Energy Emergency and this EO is to move to increase domestic production of minerals to address the emergency. To be fair, the EO didn't include the definition but referred readers to another document saying *"(a) "Mineral" means a critical mineral, as defined by 30 U.S.C. 1606(a)(3), as well as uranium, copper, potash, gold, and any other element, compound or material as determined by the Chair of the National Energy Dominance Council (NEDC)."* And the annoying part of the EO is that it doesn't even provide a link to the definition, which is probably why most didn't read the definition as they would have had to first find the definitilon document. Early Friday morning, we posted [LINK] "*Devil in the details. Trump called it "critical minerals & rare earths" His EO title to increase "American mineral production" Read "30 U.S.C. 1606(a)(3). it could include just about anything! ie much more than just coal! #OOTT."* Our post included the detailed definition. And it is clear Trump can include just about anything in what he calls a definition of a mineral. Here is a key excerpt of what is included "*(A) In general. For purposes of carrying out this subsection, the Secretary shall maintain a list of minerals, elements, substances, and materials designated as critical, pursuant to the final methodology published under paragraph (3), that the Secretary determines- (i) are essential to the economic or national security of the United States; (ii) the supply chain of which is vulnerable to disruption (including restrictions*

associated with foreign political risk, abrupt demand growth, military conflict, violent unrest, anti-competitive or protectionist behaviors, and other risks throughout the supply chain); and (iii) serve an essential function in the manufacturing of a product (including energy technology-, defense-, currency-, agriculture-, consumer electronics-, and health care-related applications), the absence of which would have significant consequences for the economic or national security of the United States. (B) Inclusions. Notwithstanding the criteria under paragraph (3), the Secretary may designate and include on the list any mineral, element, substance, or material determined by another Federal agency to be strategic and critical to the defense or national security of the United States."

Capital Markets: Even Republlicans are worry on Trump's light switch on/off approach

Trump's light switch approach to tariffs

Mick Mulvaney was had two key roles in the 1st Trump administration including Director of the Office of Management and Budget and as White House Chief of Staff. So, he probably worked as closely to Trump as anyone did in the first term. One of our favorite CNBC Squawk Box regular items is when they have Republican Mulvaney and former US Senator from North Dakota Democrat Heidi Heitkamp on to debate issues. Both are level-headed so it becomes a true left vs right debate/discussion as opposed to just fighting. And both are prepared to at least mention items that can be of concern to their party's positions. In this case, Mulvaney raised concerns on Trump's on/off approach to tariffs. On Monday, we posted [LINK] "*Worth a listen to @MickMulvaney on @SquawkCNBC. Trump tariff approach may just be a pause for capital flows for the vast majority of companies that have no better choice than the US. But Trump's light switch approach to tariffs will probably push on the margin capital outside of US ie. a loss of capital and not a pause. #OOTT."* Mulvaney described Trump's on/off tariff approach to a light switched being flipped off and on. And he raised the concern that companies don't want to invest under this type of on/off as they don't know of the rules will change. Our view in our post is that the reality is that most companies don't have a choice because the US is the best market to allocated capita. But our concern is that this light switch approach will drive some of the on-the-margin capital to other markets. And as everyone knows, less buyers means prices go down. Mulvaney's comments are worth a listen and our post included a short video we made of his comments.

Capital Markets: IFIC, mutual funds equity & balanced funds net redemptions in Feb

IFIC Cdn mutual fund data

IFIC does not provide explanation to its monthly funds flows data. On Friday, the IFIC (Investment Funds Institute of Canada) reported mutual funds and ETF sales for Feb [LINK]. IFIC reported net sales (inflows) of $1.521b in balanced funds, $3.108b in bond funds, and $2.491b in specialty funds, while there were net redemptions (outflows) of $0.197b in equity funds. Feb 2025 mutual fund net sales totaled $9.026b, up +195.8% MoM from $3.051b in Jan, and marked the highest mutual fund net sales since Feb 2022. There was also a notable improvement in YTD net sales for the start of 2025 compared to the same Jan-Feb period in 2024 with approx. +$10.000b more YTD net sales. Balanced funds had net sales of $1.521b in Feb compared to net redemptions of $0.388b in Jan, and saw a significant increase in net sales from Feb 2024 which had net redemptions of $0.871b. Equity funds saw net redemptions of $0.197b in Feb, after having net redemptions of $2.143b in Jan. Bonds mutual funds remained the top-selling asset class, maintaining that position for the last ten months. Our Supplemental Documents package includes the IFIC release.

Figure 66: Cdn Mutual Fund Net Sales/Net Redemptions ($ Millions)

Mutual fund net sales/net redemptions ($ millions)*

Asset class	Feb 2025	Jan 2025	Feb 2024	YTD 2025	YTD 2024
Long-term funds					
Balanced	1,521	(388)	(871)	1,133	(5,346)
Equity	(197)	(2,143)	1,551	(2,340)	495
Bond	3,108	3,304	1,768	6,412	5,510
Specialty	2,491	1,426	775	3,918	1,340
Total long-term funds	6,924	2,198	3,222	9,122	2,000
Total money market funds	2,102	852	(127)	2,954	316
Total	9,026	3,051	3,095	12,076	2,315

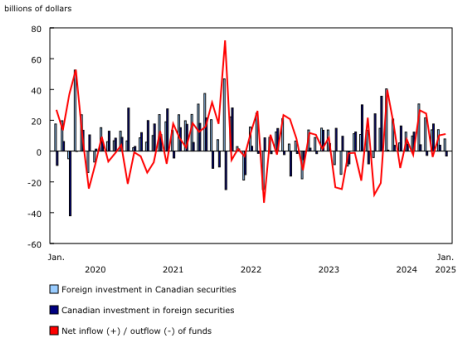
Source: IFIC

Capital Markets: StatsCan, foreign investment in Cdn securities was $7.9bn in Jan

StatsCan Intl. Securities Transactions

On Monday, Statistics Canada reported their international transactions in securities for January [LINK]. StatsCan reported a decrease of -$3.2bn in Canadian holdings in foreign securities in January, and a +$7.9bn of foreign investment in Canadian securities. Foreign investments were led +$14.5bn invested into debt securities. This was the highest monthly investment into Canadian bonds since April 2020 with non-resident investors increasing their bond exposure by +$33.5bn. The foreign investors also cut their exposure to money market instruments by -$18.9bn, the largest divestment since Feb 2024. Canadian investors reduced -$3.2bn in foreign securities, driven by -$17.6bn of foreign equities being sold. Canadian investors also increased foreign debt securities by +$14.4bn in Jan, led by +$15.1bn of investments in foreign bonds. StatsCan reported: "*Foreign investors acquired $7.9 billion of Canadian securities in January, led by the highest monthly investment in the Canadian bond market since April 2020. Meanwhile, Canadian investors reduced their holdings of foreign securities by $3.2 billion, mainly of US equity securities.*" .

Figure 67: Canada's international transactions in securities



Source: Statistics Canada

Demographics: Finland named happiest country in the world, Canada drops to 18th

Canada 18th in world happiness rankings

We can't help but still be a bit disappointed to see the results of the 13th annual World Happiness Report for 2025 [LINK]. Finland was named the happiest country in the world for the eighth straight year. The Nordic countries dominated once again with all five countries occupying the top 10. Meanwhile, Canada is down to 18th overall (15th last year) and is still far below its highest rank of 5th overall in 2015. This is disappointing as Canada is a great country to live in, but it is not great to see how the Canadians in these results have led to a large drop in Canada's ranking of the world's happiest places to live over recent years. This is the 13th report so there is the ability to see trends. It was interesting to note the widening of

the gap that Nordic countries are having on industrialized western countries such as Canada. Here is what was written in the report, "*In general, the western industrial countries are now less happy than they were between 2005 and 2010. Fifteen of them have had significant drops, compared to four with significant increases. Three western countries had drops exceeding 0.5 on the 0–10 scale (the United States, Switzerland, and Canada) putting them among the fifteen largest losers*". We believe that a significant part of the drop in happiness stems from the affordability crisis, and lack of confidence in being able to afford a home.

Figure 68: Ranking of happiness (3yr average score)

Rank	Top 10 Happiest	Life Score
1	Finland	7.736
2	Demark	7.521
3	Iceland	7.515
4	Sweden	7.345
5	Netherlands	7.306
6	Costa Rica	7.274
7	Norway	7.262
8	Israel	7.234
9	Luxembourg	7.122
10	Mexico	6.974
18	Canada	6.803
24	United States	6.724

Source: SAF, World Happiness Report

Twitter/X: Thank you for getting me to 12,000 followers

In January, I went over 12,000 followers on Twitter/X. I really appreciate the support and, more importantly, some excellent insights and items to look at from Twitter/X followers. It helps me do a better job. For new followers to our Twitter/X, I am 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. My Twitter/X handle is @Energy_Tidbits and can be followed at [LINK]. I wanted to use Energy Tidbits since I have been writing Energy Tidbits memos for 25 consecutive years. Please take a look thru my tweets and you can see I don't just retweet other tweets. Rather I try to use Twitter/X for early views on energy items. Our Supplemental Documents package includes our tweets this week.

Misc Facts and Figures.

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

Wine of the week: 2002 LAN a Mano, Bodegas LAN

In August, I started the wine of the week when I realized I had to get to opening up some wines bought 20 to 30 years ago that included some that, unfortunately, were getting past their prime. One of the negatives of the change in life from Covid was a huge absence of entertaining at home, which means there has been a big shortfall in wine drinking at our home. So am now making sure what, when I bought them 15-25 years ago, were some good wines and make sure bottles get opened especially as many are 20 to 40 years old. On Thursday, I posted the wine of the week, the 2002

LAN a Mano, Bodegas LAN. The LAN a Mano is another example of the great value in Spanish wines. I am pretty sure it was fairly inexpensive in the mid 2000's when I bought a case of the 2002's. Drank half of them pre-Covid and I remember them as being great. I only decanted for an hour and the 2002 is still drinking very well. And even though it wasn't an expensive wine, it the 2002 LAN a Mano fits the thesis that great wines drink very well for much longer than expected.

Figure 69: 2002 LAN a Mano, Bodegas LAN

Source: SAF Group, K&L Wines

Scottie Scheffler goes to Texas again for Masters Club Dinner

The Masters is Apr 10-13 and one of the man traditions is the Masters Club Dinner, which is a dinner for any prior Masters champion. There were 33 past champions wo attended the 2024 Masters Club Dinner with the only two, Angel Cabrera and Sandy Lyle, not attending. The tradition at the dinner is the reigning champion picks the menu. Scottie Scheffler set the menu for the 2023 dinner and his menu for the April 8, 2025, dinner includes some repeats from the 2023 dinner: cheeseburger sliders, firecracker shrimp, blackened redfish and warm chocolate chip skillet cookie. Scheffler replaced the 2023 main course choice of Texas ribeye steak with a similar sounding wood-fired cowboy ribeye. The other two recent menus were by Jon Rahm with Spanish menu that included various tapas as appetizers and Hideki Matsuyama with this Japanese menu that included appetizers of sushi, sashimi and yakitori. Our Supplemental Documents package includes the last four menus.

Corey Conners is three shots back in the Valspar

Once again, we will be watching golf this afternoon with the final round of the Valspar with Cdn star golfer Corey Connors in in the hunt. He has been playing well for the past few weeks. We hope we aren't jinxing him by noting him once again. But two weeks ago, he was 3rd going into the final round at the Arnold Palmer Invitational and ended up 3rd. Last weekend, Corey was -8 and T5 going into the final rouind of The Players before ending up T6 and 3 shots behind Rory McIlroy. This week's stop is the Valspar and Corey is T11 at -4 but is only 3 off the lead.

Sounds like many Mexicans have already returned from the US

I have been down in San Jose del Cabo for a few days and have taken the opportunity to ask local small business owners, service people and any locals if they directly know many Mexicans who returned from the US post Trump. These are all people I have known from coming down to San Jose del Cabo probably 150 times over the last 20 years. The feedback from a dozen or more of my local friends is Yes. Most were people who were working in the US but some were students who were there learning to be bilingual. And the people they know were not illegals into the US.

Higher costs of some US basics are already hitting

The other feedback from our local friends is that higher costs are already flowing through on products. One of our long-term local friends just told me the example of some US coffee pods have just jumped up in the price from US $15 to $25 over the past couple weeks. I didn't get how many pods were in the package. That is just one example, but it is a reminder that tariffs are really going to hurt middle income Mexicans especially in areas like San Jose del Cabo that have very high American tourist impact on prices.