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Bullish for Cdn Natural Gas: Tourmaline CEO Sees Cdn Natural Gas Demand +50%, +9 bcf/d to ~27 bcf/d in 2030.

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. Tourmaline CEO sees in-progress & widely expected projects adding 50% or 9 bcf/d to Cdn natural gas demand by 2030. [click here]
- 2. Trump pausing military intelligence & deliveries is creating more urgency for Zelensky to move to a Russia deal. [click here]
- 3. Trump brings Iran back on screens as he says something will happen very, very soon. [click here]
- 4. Vortexa crude oil floating storage 7-week moving average keeps going higher, last 3 weeks are 1st times >70 mmb since Aug. [click here]
- 5. Reminder mid-Feb thru June is when WCS less WTI differentials normally seasonally narrow. [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: -80 bcf draw in US gas storage, now -585 bcf YoY

The very cold temperatures across most of the Lower 48 for the last few weeks has been great for storage. For the week ending Feb 28, the EIA reported a -80 bcf draw [LINK]. Total storage is now 1.760 tcf, representing a deficit of -585 bcf YoY compared to a deficit of -561 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 Feb 28 saw storage at -224 bcf below the 5-yr average, down from last week's deficit of -238 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.

-80 bcf draw in US gas storage

Figure 1: US Natural Gas Storage

					Historical Comparisons				
		billion	Stocks cubic feet (Bcf		Year ago (02/28/24)		or average 020-24)		
Region	02/28/25	02/21/25	net change	implied flow	Bcf	% change	Bcf	% change	
East	340	362	-22	-22	431	-21.1	405	-16.0	
Midwest	396	424	-28	-28	582	-32.0	502	-21.1	
Mountain	166	168	-2	-2	169	-1.8	115	44.3	
Pacific	199	198	1	1	218	-8.7	175	13.7	
South Central	658	688	-30	-30	945	-30.4	786	-16.3	
Salt	150	159	-9	-9	282	-46.8	219	-31.5	
Nonsalt	509	528	-19	-19	663	-23.2	567	-10.2	
Total	1,760	1,840	-80	-80	2,345	-24.9	1,984	-11.3	

Source: EIA

Figure 2: Previous US Natural Gas Storage

	Previous 8 weeks (Bcf)										
Т	Week	Gas in	Weekly	Y/Y Diff	Diff to						
	Ended	Storage	Change		5 yr Avg						
	Jan/10	3,115	-258	-111	77						
	Jan/17	2,892	-223	-57	21						
	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						

Source: EIA

Natural Gas: US net natural gas imported from Canada 6.08 bcf/d in 2024

Here is what we wrote in last week's (Mar 2, 2025) Energy Tidbits memo on how much Cdn natural gas is imported by the US. "US net natural as imported from Canada 6.08 bcf/d in 2024. On Thursday, Trump posted that he still intends to proceed with tariffs on Canada on Tuesday. And there has been no indication of any change to Trump's plan to have a 10% tariff on Cdn energy resources. On Wednesday, we posted [LINK] "DYK? US net imports of NatGas from Canada a.k.a. what Trump calls US subsidizing Canada. 2024: 2,224.3 bcf or 6.08 bcf/d. per @ENERGY. Using \$3, that's \$6.7b worth of #NatGas. #OOTT." On Monday, the DOE posted its monthly report US Natural Gas Imports an Exports Monthly. Notwithstanding the US is the world's largest LNG exporter, the US is a net importer of Cdn natural gas but it nothing compared to US net imports of Cdn oil. But it is part of Trump's US is subsidizing Canada to \$250 billion or whatever is his latest estimate. The DOE estimates the US was a net importer of natural gas from Canada of 6.08 bcf/d. Below is the DOE

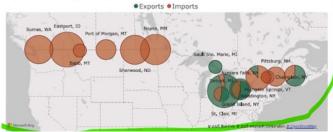
US net importer of natural gas from Canada



general map of US import points of Cdn natural gas. Our Supplemental Documents package includes excerpts from the DOE Natural Gas Imports & Exports Monthly."

Figure 3: US import and export points of Cdn natural gas by pipeline and truck

11: U.S. Natural Gas Imports & Exports by Pipeline & Truck with Canada by Point of Entry/Exit (December 2024)



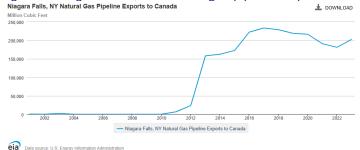
Source: DOE

Trump wants Marcellus gas for New England, therefore not Ontario

In the early days of Trump announcing the tariffs on Canadian oi I 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 4: Niagara Falls, NY natural gas pipeline exports to Canada



Source: EIA

Natural Gas: 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.

Bullish Cdn natural gas demand from

Natural Gas: Oil sands use of natural gas was 3.8 bcf/d in 2023, fcast 4.6 bcf/d in 2033 Tourmaline CEO Rose building in some increased natural gas consumption by oil sands.

This is because oil sands/SAGD uses a lot of natural gas for power. This is something that has always been the case and was in one of our first Energy Tidbits (then an email) 25 years ago. On Friday, we posted [LINK] "Oil sands growth = #NatGas consumption growth. \$TOU

Oil sands consume 3.8 bcf/d of natural gas



CEO +9 bcf/d #NatGas demand by 2030 builds in more NatGas consumption by oil sands growth. See my 12/08/24 Energy Tidbits. AER fcsts oil sands use of NatGas +0.8 bcf/d to 2033. ROT: SAGD uses 1.3 mcf/b, oil sands mining uses 0.8 mcf/b. #OOTT. [LINK]." Our post included the below excerpt from our Dec 8, 2024 Energy Tidbits memo on this subject.

12/08/24: Oil sands use of NatGas was 3.8 bcf/d in 2023, fcast 4.6 bcf/d in 2033
On Monday, we tweeted [LINK] "Oil sands growth = #NatGas consumption growth.
Oil sands consumed 3.8 bcf/d in 2023, forecast to consume 4.6 bcf/d in 2033.
@AER_news. Rule of thumb, #NatGas use per b/d of oil production. SAGD 1.3 mcf/b of oil. CSS 1.7 mcf/b. Mining with upgrading 0.8 mcf/b. Thx @garquake #OOTT." Our tweeted forwarded a tweet from @garquake, one of less than 80 we follow, on Alberta oil sands bitumen production hitting all-time highs. And it reminded that growing oil sands production leads directly to increasing natural gas consumption by the oil sands for power and steam generation. Our tweet included the Albera Energy Regulator's June 2024 update that oil ands consumed 3.8 bcf/d of natural gas in 2023 and forecast to increase to 4.6 bcf/d in 2033. Our Supplemental Documents package includes the AER's June 2024 update on Alberta's natural gas production and consumption.

12/08/24: SAGD uses 1.3 mcf/b, oil sands mining with upgrade use 0.8 mcf/b We still have readers of our Energy Tidbits memos that have done so for the 25 years of my writing these memos. One of the tidbits that investors like 25 years ago was when I highlighted what I then called rules of thumb for oil sands use of natural gas per barrel of oil. Back then, information wasn't as readily available so it was a rule of thumb that investors liked. Our tweet on the AER oil sands included their table of natural gas used per barrel of oil produced. These really haven't increased very much at all over the past 25 years. The AER notes the average natural gas used per barrel of oil production was 1.3 mcf/b for SAGD, 1.7 mcf/b for CSS and 0.8 mcf/d for oil sands mining with upgrading. 25 years ago, I used 1.2 mcf/b for SAGD and 0.6 mcf/b for oil sands mining.

Figure 5: Average use rates of natural gas for oil sands production

Table S5.2 Average use rates of purchased gas for oil sands operations, 2023 Excluding purchased gas for Including purchased gas for cogeneration Extraction method (m^3/m^3) (m3/m3)a (Mcf/bbl) (Mcf/bbl) Steam-assisted gravity drainage Cyclic steam stimulation 228 1.3 298 1.7 99 0.6 142 0.8 ^a Expressed as either cubic metres of natural gas per cubic metre of bitumen produced or thousand cubic feet of natural gas per barrel of bitumen produced. Rates are an average of typical schemes with sustained production.

Source: AER

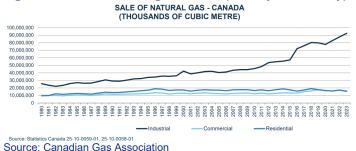
12/08/24: Canada's natural gas consumption is 75.0% from industrial users

The oil sands are the largest consumer of natural gas in Canada. As noted above, the AER estimates the oil sands consumed 3.8 bcf/d of natural as in 2023, which is 32% of total Cdn natural gas consumption. Here is what we wrote in last week's (Dec 1, 2024) Energy Tidbits memo. "Canada's natural gas consumption is 75.0% from



industrial users. Cold weather in winter is important for natural gas consumption is Canada. And winter is when residential/commercial natural gas consumption is the highest so the average numbers over the year do not fairly represent the winter peak consumption for residential/commercial users. But it is also important to remember that 75.0% of Canada's natural gas consumption is to industrial users who, as a general rule, aren't as impacted by temperatures vs 12.7% for residential users and 12.3% for commercial users. For 2023, this was 11.95 bcf/d for Canada total natural gas consumption split 8.96 bcf/d for industrial users, 1.52 bcf/d for residential users and 1.47 bcf/d for commercial users. Below is the Canadian Gas Association's graph for Canada's natural gas consumption by user type – industrial, commercial and residential."

Figure 6: Canada natural gas consumption by end user type



Natural Gas: Tourmaline must expect FID for 1.8 bcf/d LNG Canada Phase 2

On Thursday night, we also posted <code>[LINK]</code> "LNG Canada 1.8 bcf/d Phase 2 FID potential. To state the obvious, don't believe @TOU CEO would have included it in his ~9 bcf/d of new added #NatGas markets if he didn't expect it to FID. #OOTT #LNG." As noted earlier, Tourmaline CEO Rose bullish forecast for demand for Cdn natural gas to increase by 50%, by ~9 bcf/d by 2030 includes the expectation for FID for the 1.8 bcf/d LNG Canada Phase 2. As we put in in post, we don't believe he would have included LNG Canada Phase 2 in his forecast if he didn't expect it to FID. We continue to be in the same camp especially following Shell's LNG Outlook 2025 presentation on Feb 25.

Tourmaline on LNG Canada Phase 2

O2/25/25: Shell up LNG demand thru 2040, says more investment is needed Here is what we wrote in last week's (Mar 2, 2025) Energy Tidbits memo. "Shell increase LNG demand thru 2040, says more investment is needed. No one should have been surprised to have seen Shell's LNG Outlook 2025 come out with an upgraded bullish view of LNG demand growth and highlighting the need for more LNG supply investment to meet the growth. Early Tuesday morning, we saw the Shell slide deck and their clear quotes on LNG demand growth and need for investment and posted [LINK] ""Outlook upgraded for LNG demand through to 2040. More investment is needed to ensure supply can keep up with demand" Shell #LNG Outlook. More investment needed? what about FID for Shell's 1.8 bcf/d LNG Canada Phase 2. See ♣02/12 post. Shell signaled the upgrade to LNG demand. #OOTT #NatGas." We subsequently watched the webcast replay and mgmt's comments provided the background for why they increased their LNG demand forecast. Shell



included a range of LNG demand forecasts and, even under the bottom end of the demand range, there is still a big LNG supply gap emerging in the early 2030s and. at the high end of the range, there is a LNG supply gap emerging starting in 2026., And Shell had a simple message "more investment is needed to ensure supply can keep up with demand." As our post said Shell's view that more investment is needed in LNG supply to fill the gap has to be a very bullish view that Shell will FID the 1.8 bcf/d LNG Canada Phase 2."

Outlook upgraded for LNG demand through to 2040 Shell LNG nt is needed to ensure supply can keep up with demo Global LNG demand Global LNG supply vs demand forecast range 600 500 400 300

Figure 7: Outlook upgraded for LNG demand through to 2040

Source: Shell LNG Outlook 2025

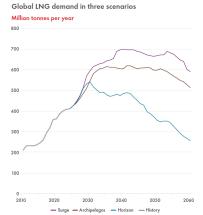
02/12/25:Shell sees significant LNG demand growth, LNG Canada Phase 2 FID?

Last week, we said no one should have been surprised to see Shell upgrade its LNG demand forecast. Three weeks ago, we thought Shell previewed that investors should expect to see a bullish outlook for LNG demand. Here is what we wrote in our Feb 16, 2025 Energy Tidbits memo. "Shell sees significant LNG demand growth, LNG Canada Phase 2 FID? Shell is holding its big LNG Outlook 2025 on Feb 25, but it looks like they gave away the LNG views in their just released Shell 2025 Energy Security Scenarios posted on Wed. Early Wed morning, we posted [LINK] "Spoiler alert for Shell's LNG Outlook 2025 on Feb 25. "In all three scenarios, LNG shows significant [demand] growth in the near term". Shell 2025 Energy Security Scenarios. This demand outlook should be favorable for LNG Canada 1.8 bcfd Phase 2 FID in 2025. #OOTT #NatGas." Our post included Shell's slide "LNG in three scenarios". And Shell is very bullish on LNG demand growth. We wish they would just use scenarios with normal names. Rather Shell has three scenarios. Horizon is really another way of saying Net Zero, it is the "rapid acceleration of the energy transition" that will sharply reduce emissions to reach net zero by 2050 and limit global warming to 1.5C by end of the century. Archipelagos seems to be something like but not quite a business as usual case. Surge is "an era of robust economic growth is ushered in by AI technologies that are welcomed and not overly challenged, with economic growth and AI infrastructure driving up energy demand." Here is what Shell wrote on LNG. "In all three scenarios, liquefied natural gas (LNG) shows significant growth in the near term, fuelled by ongoing projects in Qatar and the USA, reaching around 550 million tonnes per year (mtpa) by the end of the



decade. Divergence between the scenarios is a function of project timelines up until about 2030, but after that the scenarios diverge significantly as the different scenario drivers take hold." No surprise, the Net Zero type scenario shows LNG dropping steadily after 2030 to meet Net Zero emissions. But the other two scenarios see strong global LNG demand growth after 2030. It is why our post included the comment that this LNG demand growth outlook should be good for the potential of a FID for LNG Canada 1.8 bcf/d Phase 2. Below is the Shell Global LNG demand graph."

Figure 8: Global LNG demand forecast



Source: Shell 2025 Energy Security Scenarios

TC Energy CEOs "very bullish" on CGL Phase 2 ie. LNG Canada Phase 2

We have also been highlighting how TC Energy CEO' wouldn't be publicly saying he was very bullish on a FID for Coastal GasLink Phase 2 unless he had some sort of strong view that Shell and LNG Canada were going to FID the 1.8 bcf/d LNG Canada Phase 2. Here is what we wrote in our Feb 23, 2025 Energy Tidbits memo that was titled "TC Energy CEO must Expect FID on 1.8 bcf/d LNG Canada Phase 2 as he is "Very Bullish" on Prospects for CGL Phase 2." "TC Energy CEOs "very bullish" on CGL Phase 2 ie. LNG Canada Phase 2. We were surprised that TC Energy CEO Poirier's Feb 14 "very bullish" view on CGL Phase 2 proceeding didn't get an attention from media and analysts. CEO Poirier clearly points to the expectation for Shell and LNG Canada to FID the 1.8 bcf/d LNG Canada Phase 2. So on Thursday, we posted [LINK] "02/14/25: TC Energy CEO is "very bullish about the prospects for CGL Phase 2". CGL Phase 2 will supply #NatGas for LNG Canada brownfield 1.8 bcf/d Phase 2. Surely CEO Poirier has reason to believe Shell/LNG Canada Phase 2. FID is highly likely to go. #OOTT. Coastal GasLink Phase 2 is the expansion of the Coastal GasLink that will add compression and equipment so the Coastal GasLink pipeline that feeds LNG Canada 1.8 bcf/d Phase 1 can handle double the natural gas so that the expanded CGL, CGL Phase 2, can deliver all the natural gas for LNG Canada 1.8 bcf/d Phase 2. On the Q4 call, CEO Poirier highlighted he is "very bullish" for CGL Phase 2 and our view is simple – Surely CEO Poirier has reason to believe that Shell/LNG Canada will FID the LNG Canada 1.8 bcf/d Phase 2 in the

since July 1, 2021.



coming weeks or months. There is no way a big company CEO would say he is very bullish on a project proceeding that depends on another party's FID unless he had reason to believe that the other party would FID their project. Our post included an excerpt from the transcript of CEO Poirier's reply in the Q&A "On the natural gas side, there is absolutely demand for more LNG export and market opportunity for us to prosecute. We're very bullish about the prospects for CGL Phase 2 happening. That, of course, is only an input into the FID decision that our customer LNG Canada will make in due course."

Natural Gas: Vitol signs 10-yr 0.11 bcf/d LNG supply deal with LNGPH (Philippines)
On Tuesday, Vitol announced that it had signed a long-term LNG sales agreement with LMGPH for a supply of up to 0.11 bcf/d for 10-years, with first deliveries to begin in 2025 [LINK]. The LNG will be sourced from Vitol's global portfolio and delivered to LNGPH's Philippines terminal. The press release said, "Starting in 2025, Vitol will supply up to 0.8 million metric tons of LNG annually for a period of 10 years. The LNG will be sourced from Vitol's global portfolio and delivered to the LNGPH Terminal in Batangas, Philippines. This agreement will help meet the Philippines' growing energy needs and contribute to the reliability and stability of the country's energy supply." The Chief Financial Officer of Vitol Asia, Jay Ng, said: "We are delighted to strengthen our relationships with SPPC and EERI through this landmark agreement. Vitol delivered the first LNG cargo to the Philippines back in April 2023, since then we have delivered a number of LNG cargoes safely and reliably to the Ilijan LNG Terminal. As the Philippines' demand for LNG continues to rise, we are honoured to play a role in securing the country's energy future through our partnership with SPPC and EERI." Our Supplemental Documents Package includes the Vitol press release.

There have been 28.62 bcf/d of long-term LNG supply deals since July 1, 2021 It's been a busy last four 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 4-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 28.62 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

Vitol & LNGPH 10 yr LNG supply deal



Figure 9: Long-Term LNG Quarterly Buyer Deals Since July 1, 2021

Long-Term LNG Qua	rterly Deals Since July	y 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	6	0.5	12.8	66.7%	0.0%	33.3%

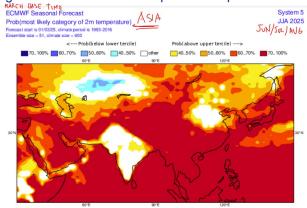
Source: SAF

Natural Gas: ECMWF forecasts normal to warmer than normal JJA temps in Asiaa

It's only early March so markets aren't going to focus on summer temperatures at this time. However, given that winter is effectively over, our temperature focus turns to the summer. On Wednesday, we posted [LINK] "Asia early summer Jun/Jul/Aug temp forecast. Still 3 months to go, but @ECMWF March update forecasts normal to warmer than normal temperatures across Asia to start summer. #OOTT #NatGas #LNG ." Our post included the ECMWF (European Centre for Long-Term Weather Forecasts) March updated temperature outlooks for Asia for the months of June/July/August. ECMWF calls for it to normal temperatures in India and parts of China and warmer than normal everywhere else for Jun/Jul/Aug.

Summer forecast for Asia





Source: ECMWF

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

Japan's LNG stocks are up WoW and YoY, but down when compared to the 5-year average. On Wednesdays, Japan's METI releases its weekly LNG stocks data [LINK]. LNG stocks on March 2 were at 94.6 bcf, up +2.1% WoW from 92.7 bcf on February 23, and up +33.1% from a year ago. Stocks are down compared to the 5-year average of 97.5 bcf. Below is the Japanese LNG stocks graph from the METI weekly report.

Japan LNG stocks up WoW







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

Natural Gas: Trump pushing Zelensky to a RUS deal, downside risk to TTF LNG prices It's been a wild and tough last week for Zelensky post last week's brutal White House Trump and Vance meeting. But one thing is clear is that Trump is not stopping in pushing/forcing Zelensky into a deal. We expect that momentum to continue this week. Zelensky is meeting MBS in Saudi Arabia on Monday, but will not be participating in the Tuesday US/Ukraine meeting in Saudi Arabia. Rubio and Waltz are reportedly attending the working meeting and e expect to see the US continue to push Ukraine to get onside of Trump's Russia peace deal. And, as we have highlighted, the potential for a Trump pushed deal that would allow Russia to resume pipeline natural gas exports to Europe. There is no question Trump is turning up the heat on Zelensky to agree to his Russia peace deal. On Wednesday, we posted [LINK] "Whether you like Trump's methods or not. Taking away military intelligence & deliveries to UKR is rapidly increasing momentum to a RUS/UKR deal. And increasing probability for cheaper Russian pipeline #NatGas to Europe ie. negative for TTF & #LNG. Thx @FT #OOTT." The FT reported that the US was cutting off intelligence sharing with Ukraine, which woulld put them at a disadvantage on multiple fronts, in particular to help target long range missiles and early warning on Russian missiles. Hurting Ukraine's defense and offense position is a reminder for Zelensky that Ukraine will be at a huge disadvantage if the

US doesn't keep the same level of military support as it was doing under Biden.

Trump hold back on military to UKR is because they haven't wanted to settle Trump is well aware that his holding back or pause on military support for Ukraine is hurting Ukraine but that he is doing so because Ukraine hasn't shown they are prepared to work for a Russia deal. Here is the Bloomberg transcript of Trump's

China natural gas imports

Trump pushing quick for a RUS UKR deal



comments from his Friday press conference. "QUESTION: Mr. President, in regards to the pause on military assistance to Ukraine, you've put out on your social media post today that a -- Russia is pounding Ukraine. TRUMP: That's right. QUESTION: Why not provide Ukraine with air defenses? And what happens, Mr. President, when Ukraine runs out of... (CROSSTALK) TRUMP: ... yeah -- yeah. Good question. Because I have to know that they want to settle. I don't know that they want to settle. If they don't want to settle, we're out of there, because we want them to settle. And I'm doing it to stop death, more important than anything else."

Trump "doing very well with RUS... more difficult, frankly, to deal with UKR"

Nothing is impossible but it's almost impossible for anyone to not believe Trump is on Putin's side and not Zelensky's side. And the part that is entirely different from all prior President's is that Trump believes in Putin's words. Trump makes no secret of this hugely different views on Russia vs Ukraine. On Friday, Trump was asked on Putin "Do you still believe him when he tells you that he wants peace?" Trump replied "Yeah -- no, I -- I believe him -- I believe him. I think we're doing very well with Russia. But right now, they're bombing the hell out of Ukraine, and Ukraine -- I'm -- I'm finding it more difficult, frankly, to deal with Ukraine. And they don't have the cards -- they don't have the cards. As you know, we're meeting in Saudi Arabia on -- sometime next week, early, and we're talking -- we're -- I find that in terms of getting a final settlement, it may be easier dealing with Russia, which is surprising cause they have all of the cards. I mean, they're -- and they're bombing the hell out of them right now. And I put a statement in, a very strong statement -- can't do that -- you can't do that."

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

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."

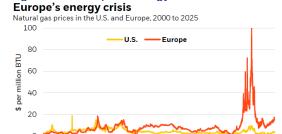
BlackRock highlighted potential catalyst RUS NatGas to Europe

Here is what we wrote in last week's (Mar 2, 2025) Energy Tidbits memo on



BlackRock's recent highlighting the potential catalyst of the return Russian pipeline natural gas to Europe. "BlackRock highlights potential catalyst RUS #NatGas to Europe. On Friday, we posted [LINK] "Positives & Negatives. Just like there is a big risk to TTF & LNG prices if Trump/Putin deal for Ukraine sees Russia pipeline #NatGas back to Europe. BlackRock upgrades Europe with key potential catalyst being a return of Russia #NatGas to boost Europe economy. #OOTT." This week, BlackRock upgraded its Europe weighting from underweight to neutral and they see several potential catalysts to turn around poor sentiment. The one potential catalyst they highlighted was natural gas. For years and before Russia invaded Ukraine, we have highlighted how high natural gas prices has been the big economic hit to Europe, in particular to Germany, BlackRock choosing to highlight natural gas reinforces that view. BlackRock wrote "One example: Possible de-escalation in the Ukraine war. Reduced reliance on Russian gas brought European energy prices down from 2022's highs. See the chart. A form of peace agreement could lower energy prices further, boosting European growth and lowering inflation. This is just one of several catalysts we think could broaden U.S. equity strength to Europe." Our Supplemental Documents package includes BlackRock's Feb 24 weekly investment commentary."

Figure 12: Europe's energy crisis



Source BlackRock Investment Institute, with data from LSEG Datastream, Intercontinental Exchange and Oxford Economics, February 2025. Note: The chart shows the natural gas prices in the U.S. and Europe since 2000. British Thermal Unit (SIV) is the traditional measurement unit for natural gas and represents the amount of energy needed to

2012

2008

Source: BlackRock

2004

2000

Natural Gas: ECMWF forecasts much warmer than normal summer in Europe

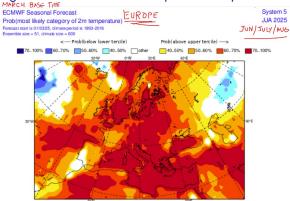
2020

2016

It's still a few months way so markets aren't going to focus on summer temperatures at this time. However, given that winter is effectively over, our temperature focus turns to the summer. On Wednesday, we posted [LINK] "Summer is still a few months away but @ECMWF Mar update calls for much warmer than normal temperatures across most of Europe to start summer in Jun/Jul/Aug. #OOTT #NatGas." Our post included the ECMWF (European Centre for Long-Term Weather Forecasts) March updated temperature outlooks for Europe for the June/July/August. ECMWF calls for it to be much warmer than normal for all of Europe to start the summer.

Summer forecast for Europe

Figure 13: ECMWF March updated temperature outlook for Europe for JJA



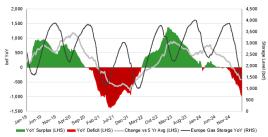
Source: ECMWF

Natural Gas: Europe storage down -2.1% WoW to 37.0% full, down -24.3% YoY

It was a good Jan/Feb for natural gas, which 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 6, Europe storage was down -2.1% WoW to 37.0% vs 39.1% on Feb 27. Recall that winter 2023/24 was one of the hottest winters in Europe. Storage is now down -24.3% from last year's levels of 61.3% on Mar 6, 2024, and down against the 5-year average of 48.0%. Below is our graph of European Gas Storage Level.

Europe gas storage at 37.0%

Figure 14: European Gas Storage Level



Source: Bloomberg, SAF

Ukraine storage is currently 3.3% of total Europe gas storage volume

We don't have detailed reports but the reports this week 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

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storage from Russia attacks. We broke out the Ukraine storage data from the above Europe data we monitor weekly from the GIE AGSI website [LINK], and, on Mar 6, natural gas in Ukraine storage was at 4.6% of its total capacity, down compared to 5.7% of its total capacity on Feb 27. Last winter, Ukraine storage as of Nov 1, 2023, was at 39.4%. Right now, Ukraine makes up about 3.3% 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 15: Ukraine Gas Storage Facilities as of June 2023



Source: Bloomberg

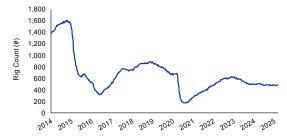
Oil: U.S. oil rigs flat WoW, down -18 rigs YoY; gas rigs down -1 rig WoW

We have been highlighting the consistent comments from the service companies that they are expecting relatively flat or some small decline in U.S. rig levels in 2025 as the oil and gas companies stay in their capital disciplined + return of capital to investors mode. On Friday, Baker Hughes released its weekly North American drilling rig data. (i) Note Baker Hughes no longer breaks out the basin changes by oil vs gas rig type. (ii) Total U.S. oil rigs were flat WoW as of Mar 7. Total U.S. oil rigs are now down -18 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: Haynesville -2 rigs WoW, Permian -1 rig WoW, Granite Wash -1 rig WoW, and Cana Woodford +1 rig WoW. There must have been a rig lost outside of the major basins to account for the total rig change for the week. (iv) The overlooked U.S. rig theme is the YoY declines, which have begun to taper as Q4 2023 saw activity leveling off, however, it is still important to note the YoY change. Total U.S. gas and oil rigs are down -32 rigs YoY to 587 rigs including US oil rigs down -18 rigs YoY to 486 rigs. And for the key basins, the Permian is -9 rigs YoY, Haynesville is -9 rigs YoY, DJ-Niobrara is -6 rigs YoY, Marcellus is -8 rigs YoY, Granite Wash is +3 rigs YoY, Eagle Ford is -3 rigs YoY, Barnett is +1 rig YoY, Ardmore Woodford is +2 rigs YoY, Arkoma Woodford is -1 rig YoY, Cana Woodford is +1 rig YoY, Mississippian is -2 rigs YoY, Utica is -1 rig YoY, and Williston is -1 rig YoY. (v) U.S. gas rigs were down -1 rig WoW to 101 gas rigs and down -14 rigs YoY. We believe U.S. gas rigs will need to increase over the next several months as more U.S. LNG capacity comes onstream in 2025. Lastly, U.S. miscellaneous rigs were flat WoW at 5 rigs and +2 rigs YoY.

US oil rigs flat WoW



Figure 16: Baker Hughes Total US Oil Rigs



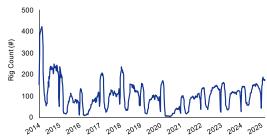
Source: Baker Hughes

Oil: Total Cdn oil rigs down -7 rigs WoW, winter peak drilling has pasted

Winter drilling season ended last week. On Friday, Baker Hughes released its weekly North American drilling rig data. This week's total oil and gas rig count was down -14 rigs WoW to 234 rigs on Mar 7 and are up +9 rigs YoY. We expected to see a larger decline this week. It was cold in Feb, which allowed companies to keep rigs going a little longer and drill a couple extra wells to take advantage of stronger than expected natural gas prices. But winter drilling is now over, so we expect to see a larger WoW decline in rigs next week. Oil rigs are down -7 rigs WoW to 170 and up +29 rigs YoY. Gas rigs are down -7 rigs WoW at 64 rigs and are down -20 rigs YoY, and miscellaneous rigs are flat WoW and flat YoY at 0 rigs total. As a reminder Baker Hughes changed their reporting format which does not allow us to see the provincial breakouts.

Cdn oil rigs down WoW

Figure 17: Baker Hughes Total Cdn Oil Rigs



Source: Baker Hughes

Oil: US weekly oil production basically flat WoW to 13.508 mmb/d, up YoY

The EIA estimated US oil supply was immaterially up from last week's numbers. 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]. As an example, please note our below comment from our Feb 23 memo on how North Dakota oil production was hit by the recent cold, and we suspect that this wasn't reflected in the EIA weekly oil estimates. 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

US weekly oil production



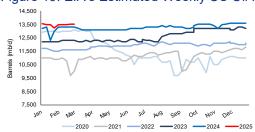
the re-benchmarking can be significant and other times, it is relatively small. The EIA does not provide any commentary. This week, the EIA's production estimate was up +0.006 mmb/d WoW to 13.508 mmb/d for the week ending Feb 28. This is up +0.208 mmb/d YoY from 13.300 mmb/d for the week ended Mar 1, 2024. Alaska production figures were up +0.004 mmb/d WoW at 0.443 mmb/d, and the Lower 48 were up +0.002 to 13.065 mmb/d. Below is a table of the EIA's weekly oil production estimates.

Figure 18: 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								
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		

Source: EIA

Figure 19: EIA's Estimated Weekly US Oil Production



Source: EIA

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

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: US SPR less commercial reserve deficit widens, now -38.462 mmb

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, we again saw no change on the SPR side and a build on the commercial side. The EIA's weekly oil data for Feb 28 [LINK] saw the SPR reserves flat WoW at 395.313 mmb for the fourth week in a row, while commercial crude oil reserves increased +3.614 mmb to 433.775 mmb. There is now a -38.462 mmb difference between SPR reserves and commercial crude oil reserves. The below graphs highlight the difference between commercial and SPR stockpiles, along with the weekly changes to SPR stockpiles.

US SPR reserves

Figure 20: Strategic Petroleum Reserve Stocks and SPR WoW Change



Source: EIA

Figure 21: US Oil Inventories: Commercial & SPR



Source: EIA

Figure 22: US Oil Inventories: SPR Less Commercial



Source: EIA

Oil: Positive for Cdn medium sour IF US moves to refill SPR

On Thursday, one of the oil stories was how Energy Secretary Wright estimated it would cost ~\$20 billion to fill the Strategic Petroleum Reserve. Recall that Trump has said they would refill the SPR. On Friday, we posted [LINK] "Positive for Cdn medium sour #Oil IF US moves to fill #SPR. See ... To get back to full levels like 12/31/2010, would need to add 150 mmb

US SPR reserves



sweet and 182 mmb medium sour. US doesn't produce medium sour so would have to look to Canada & others for 182 mmb medium sour. #OOTT." Our reminder was that 60% of the SPR capacity is for medium sour crude like WCS and the US does not produce medium sour crude. All of its tight/shale oil plays are light oil, not medium sour crude. The US does have some medium sour plays but these are not the big shale/tight oil plays. So a big proportion of any SPR refill for medium sour will be crude quality like Canadian WCS. And the reason why the SPR is mostly medium sour crude is that this has historically and continues to be the quality crude needed by refineries in the Gulf Coast and Midwest. So, our post included how much sweet and how much sour crude would be needed to be added to refill the SPR to Dec 31, 2010 levels when the SPR was essentially full. We couldn't see on the DOE SPR website where they note the capacity of each SPR site split by sour vs sweet so we used the Dec 31, 2010, when SPR was essentially full, as a good indicator for sweet vs sour capacity. Using Dec 31, 2010, it means the US would need to add 150 mmb of sweet and 182 mmb of medium sour to fill the SPR. And medium sour happens to be what the US primarily imports from Canada.

Figure 23: 150 mmb sweet + 182 mmb medium sour needed to refill SPR



Source: DOE, SAF Group

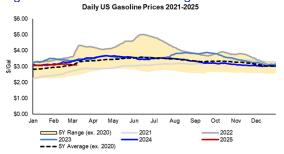
Oil: AAA US national average gasoline flat WoW, California -\$0.07 WoW

So far there have been no real impacts from the upcoming Trump tariffs on imports of Cdn oil and petroleum products. Yesterday, we posted [LINK] "AAA National average gasoline prices flat WoW at \$3.10 on Mar 8, -\$0.04 MoM and -\$0.30 YoY. California average gas prices are -\$0.07 WoW to \$4.72, +\$0.14 MoM, -\$0.15 YoY. No ETA for return of Martinez refinery post Feb 1 fire. No impact yet from upcoming tariffs on CAN #Oil #PetroleumProducts imports. Thx @AAAnews #OOTT." Yesterday, AAA reported that US national average prices were \$3.10 on Mar 8, which was flat WOW, -\$0.04 MoM and -\$0.30 YoY. The negative for Californians over the past five 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. 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. Yesterday, AAA also reported California average gasoline prices were \$4.72 on Mar 8, which was -\$0.07 WoW, +\$0.14 MoM and -\$0.15 YoY. Below is our graph of Bloomberg's National Average weekly gasoline prices.

US gasoline prices



Figure 24: AAA National Average Gasoline Prices



Source: AAA, Bloomberg

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

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 is happening at the time of year that 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
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

GasBuddyGuy's initial call on tariffs hit



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 -\$2.09 WoW to \$22.93 on Mar 7, WTI -\$2.72 WoW to \$67.04 On Fri, we posted [LINK] "321 crack spreads -\$2.09 WoW to \$22.93 on Mar 7. WTI -\$2.72 WoW to \$67.04 driven by global concerns. Reminder cracks normally start their seasonal move up in mid Feb thru June for refineries to crank up processing for summer peak gasoline/jet fuel demand. Thx @business #OOTT." Crack spreads were -\$2.09 WoW to \$22.93 on Mar 7 and WTI was -\$2.72 WoW to \$67.04. There continues to be concerns on global oil prices with China still uncertain recovery, the currently scheduled Apr 1 start for OPEC+ to bring back voluntary cut barrels and Trump's continued pressure for low oil prices. 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 \$22.93 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 \$22.93 on Mar 7, followed \$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, \$16.44 on Dec 20, \$16.53 on Dec 13, and \$15.95 on Dec 6.

Crack spreads normally point to near term oil moves, explaining 321 cracks
Crack spreads and WTI price movement to end the week reinforced that WTI is more
impacted by global oil items than crack spreads. 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

Crack spreads closed at \$22.93



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 \$22.93 on Mar 7.

Figure 25: Cushing 321 Crack Spread & WTI Mar 7, 2015 to Mar 7, 2025



Source: Bloombera

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 for refineries to crank up processing for summer peak 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.





Source: Bloomberg

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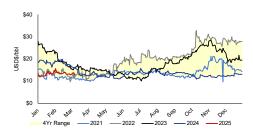


Oil: Cdn heavy oil differentials narrow \$0.75 WoW to \$12.15 on Mar 7

The Trump tariffs on and then paused tariffs really didn't have much of an impact on WCS less WTI differentials this week as WCS less WTI differentials didn't move too much this week. And we remind mid Feb is normally the start of the season for WCS less WTI differentials to narrow. Normally, at this time of the year, we would be trotting 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. At least so far, the Trump tariff has not really impacted WCS less WTI differentials. This week saw a narrowing to the WCS less WTI differentials after it had seen no change in the previous week. WCS less WTI diffs closed -\$0.75 WoW to \$12.15 on Mar 7.

WCS less WTI diffs narrows

Figure 27: WCS less WTI differentials



Source: Bloomberg

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

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 pause tariffs. It is clear increasing tanker exports has worked and differentials did not widen as normally happens WCS less WTI differentials are approx. \$5 narrower than seen over the past two years. 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 should start to narrow. On Friday, we posted [LINK] "WCS-WTI diffs narrow \$0.75 to \$12.15. No real Trump tariff impact. Still way lower diffs since tanker exports increased with June TMX start. But gap is narrowing as this is the normal seasonal narrowing for WCS-WTI diffs as refiners look for more medium sour for paving season. WCS less WTI diffs: 03/07/25: \$12.15. 03/07/24: \$16.00. 03/07/23: \$16.00. Thx @garquake @business #OOTT." "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 in Q1 every year as refiners start to process more medium/heavy as they look ahead to asphalt and paving season.





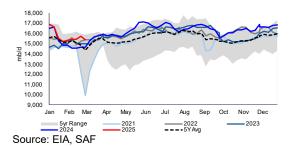
Source: Bloomberg

Oil: Refinery inputs down -0.346 mmb/d WoW to 15.387 mmb/d

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, like 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. On Wednesday, the EIA released its estimated crude oil input to refinery data for the week ended February 28 [LINK]. The EIA reported crude inputs to refineries were down -0.346 mmb/d this week to 15.387 mmb/d and were up +0.119 mmb/d YoY. Refinery utilization was down -0.6% WoW to 85.9% and was up +1.0% YoY.

Refinery inputs
-0.346 mmb/d WoW

Figure 29: US Refinery Crude Oil Inputs



Oil: 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

156,000 b/d Martinez refinery still down



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: US net oil imports down -0.054 mmb/d WoW, oil imports were down -0.106 mmb/d

The EIA reported US "NET" imports were down -0.054 mmb/d to 1.677 mmb/d for the week of February 28. US imports were down -0.106 mmb/d to 5.813 mmb/d, while exports were down -0.052 mmb/d to 4.136 mmb/d. Top 10 was down -0.035 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 up +0.273 mmb/d WoW to 4.091 mmb/d. This is the normal seasonal period for US refineries to want more Cdn crude plus US refineries were likely more motivated to take up Cdn crude before Trump sanctions. In addition, 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 -0.049 mmb/d to 0.203 mmb/d. (iii) Mexico was down -0.137 mmb/d to 0.308 mmb/d. This is still well below historical levels. However, as noted in last week's memo, there is an oil quality issue that is 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 +0.077 mmb/d to 0.227 mmb/d. (v) Iraq was down -0.182 mmb/d to 0.046 mmb/d. (vi) Ecuador was down -0.100 mmb/d to 0.095 mmb/d. (vii) Nigeria was down -0.077 mmb/d to 0.000 mmb/d.

US net imports down WoW

Figure 30: US Weekly Preliminary Imports by Major Country

_					-		_	•	_	
	Jan 3/25	Jan 10/25	Jan 17/25	Jan 24/25	Jan 31/25	Feb 7/25	Feb 14/25	Feb 21/25	Feb 28/25	WoW
Canada	4,422	3,985	4,329	3,716	4,063	3,918	3,653	3,818	4,091	273
Saudi Arabia	69	333	256	471	488	380	277	252	203	-49
Venezuela	253	240	416	319	214	226	198	276	189	-87
Mexico	392	362	244	521	149	482	553	445	308	-137
Colombia	72	266	286	283	150	150	0	150	227	77
Iraq	180	152	218	336	99	46	257	228	46	-182
Ecuador	147	103	0	102	157	0	43	195	95	-100
Nigeria	192	38	156	92	152	87	139	77	0	-77
Brazil	233	129	138	114	254	217	155	171	418	247
Libya	56	86	30	0	324	0	0	0	0	0
Top 10	6,016	5,694	6,073	5,954	6,050	5,506	5,275	5,612	5,577	-35
Others	412	430	672	494	865	803	545	307	236	-71
Total IIS	6.428	6 124	6 745	6 448	6 915	6 309	5 820	5 919	5 813	-106

Source: EIA, SAF

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

Here is what we wrote in last week's (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.

US oil imports from Canada & Mexico



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. @ElAgov 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 ElA 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 31: Petroleum Administration for Defense Districts

Source: EIA

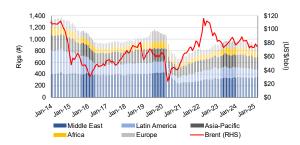
Oil: Baker Hughes International rigs flat MoM at 905 rigs in February, down -5.5% YoY On Friday, Baker Hughes posted its monthly update to international rigs, in total, rigs in February remained flat MoM. (i) Note that Baker Hughes has changed its report format which

International rigs flat MoM in Feb



doesn't allow us to break out all country-by-country information. (ii) Total international rigs remained the same MoM at 905 rigs in February and total rigs are up +99 rigs from the recent low of 806 in April 2022. The MoM rig count is as follows: Africa -3 rigs MoM, Asia-Pacific +4 rigs MoM, Europe +1 rig MoM, Latin America -2 rigs MoM, and the Middle East flat MoM. The YoY rig count is as follows: Africa -13 rigs YoY, Asia-Pacific -9 rigs YoY, Europe +7 rig YoY, Latin America -35 rigs YoY, and the Middle East -3 rigs YoY. (iii) We were not able to summarize the MoM data by country due to Baker Hughes' new format. (iv) February's count of 905 rigs was down -5.5% YoY, which is a decline of -53 rigs from 958 rigs in February 2024, and down -16.6% vs pre-Covid February 2020 of 1,085 rigs. Below is our graph of international rigs by region and avg monthly Brent price.

Figure 32: Baker Hughes International Rig Count and Brent Price



Source: Baker Hughes, Bloomberg, SAF

Oil: US only gives Chevron 1 month, not 6 months, to stop Venezuela oil

No one should have been surprised when Trump stopped Chevron's oil license in Venezuela last week. But Trump surprised this week on his order for Chevron to stop oil operations in Venezuela. Last week's (Mar 2, 2025) Energy Tidbits highlighted Trump was not renewing the Chevron license to operate in Venezuela and that this meant the six-month clock at started for Chevron to stop Venezuela operations. The Biden Chevron license provided a monthly renewal of the license and then a six-month wind down period if the license wasn't extended in any month. But this week, Trump changed made the six-month wind down period into a one-month wind down period. On Tuesday, the WSJ reported "The Treasury Department moved Tuesday to formally rescind a Biden-era license allowing Chevron to pump oil in Venezuela, giving the company 30 days to wind down operations as the Trump administration pressures President Nicolás Maduro."

Maduro reportedly says won't accept any more migrants now

There was no surprise to see the WSJ and others report that, post Trump pulling the Chevron Venezuela license, Maduro won't be taking migrants. The WSJ wrote "President Trump's plan for mass deportations faces a new hurdle: The Venezuelan government has privately warned the administration that it won't accept migrants after the White House rescinded Chevron's license to pump oil there, said people familiar with the matter. Early last month, Trump touted a deal an envoy reached with Venezuelan President Nicolás Maduro to accept tens of thousands of migrants who had fled the strongman's regime because of economic upheaval and political repression. The deal would have smoothed the way for Trump's deportation plans

Trump stops Chevron in Venezuela



because Venezuelans are one of the biggest groups of unauthorized migrants in the U.S., and Maduro had long refused to accept them. But signs of difficulty emerged almost immediately, as Trump allies jockeyed over whether to engage with an authoritarian regime the U.S. has deemed illegitimate or take a more-hawkish stance. Caracas accepted about 360 returning Venezuelans in the weeks after the deal was announced, but no flights have taken place since Feb. 20."

Trump had to stop Chevron Venezuela oil license to clean up Biden mess

Here is what we wrote in last week's (Mar 2, 2025) Energy Tidbits memo on why no one should have been surprised when Trump cancelled Chevron's Venezuela license. "We think it would have been pretty well impossible for Trump to renew the Chevron Venezuela license as it would have meant that he was continuing what he loudly called as Biden's mess. Here is what we wrote in last week's (Feb 23, 2025) Energy Tidbits memo. "Doesn't Trump have to stop Chevron Venezuela oil license to clean up Biden mess. After seeing Trump's comments on Friday, it seems to us that Trump has to stop Venezuela's oil exports or else he will be continuing what he calls the big mess Biden left behind with Maduro and Venezuela. Yesterday, we posted [LINK] "Positive for Cdn oil. Unless Trump wants to continue Biden's Venezuela "mess", doesn't he have to cut off VEN #Oil revenues incl VEN oil into Gulf Coast PADD 3. See his -comments. If he doesn't, he will be making the same Biden mistakes/mess - let VEN make ton of money, make them strong & keep Maduro from quitting. Thx @business #OOTT." Trump's comments to the Governors on Friday night went on the mess Biden created in Venezuela by letting Venezuela export oil including to the US. He didn't say he would cut the oil exports but, if he doesn't, he will be continuing the conditions that led to Biden's mess - letting Venezuela make a lot of money because of oil. Trump also highlighted Secretary of State Rubio who has been one of the strongest anti-Maduro US politicians. Here is what Trump said on Friday night "And then we've made Venezuela strong again. You know, they've given them a lot of money. They never thought they were going to have so much money. And all the people are leaving. So you're going to have one guy sitting there with a lot of -- a lot of oil under his feet. That's not a good situation. But we're having talks about that whole mess. What a mess. It was, that was another one that was done. He was ready to quit. He was going to be out. Marco, you know that better than anybody. Marco's been very staunch against what, took place there. And we were going to have that in any form we wanted it. But Biden made them strong."

Oil: Russian refineries processing hit 4-month low after drone attacks

There were more drone hits on Russian refinery complexes last week, with the month of Feb seeing nearly daily Ukrainian drone attacks. But unfortunately, we never get any detail on how a refinery is impacted when a drone hits at a refinery. Russia's refineries have been strategically targeted throughout Feb as Ukraine's government seeks to reduce Russia's energy revenue and supplies to the Russian army. On Feb 19, Rosenft's Syzran refinery was hit by a drone attack that caused a fire outbreak, resulting in a suspension to its operations. The refinery was reportedly struck again on Tuesday, further delaying its return to operations. Additionally, the Ryazan refinery, one of Russia's five largest oil refinery facilities, halted operations on Feb 24 after its third drone attack in the past month caused fire outbreaks. Bloomberg reported that during the period of Feb 20-26, Russia's average crude processing

Russian refinery runs



rate decreased to 5.14 mmb/d, which is down about -0.225 mmb/d WoW. For Feb, processing rates averaged around 5.20 mmb/d, marking a four-month low after consistent drone attacks have hit some key facilities. Bloomberg wrote, "Russia's crude processing rates averaged nearly 5.2M b/d in the first 26 days of February, reaching a four-month low amid repeated Ukrainian drone attacks on some key facilities, according to a person with knowledge of industry data." Our Supplemental Documents package includes the Bloomberg article.

Oil: 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 up big, but cargoes still sit undelivered
As noted above, the decline of Urals price below the price cap is leading to increased Russia

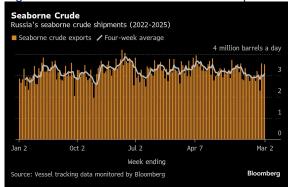
Greek-owned tankers loading Russian oil

Russia's seaborne crude exports



loadings as the low price allows legitimate tankers to load and that has been happening. On Tuesday, Bloomberg released their weekly Russian Seaborne crude tracker titled "Russia's Oil Flows by Sea Surge But Cargoes Sit Undelivered". There was a WoW spike in Russia oil shipments after the previous week's drop. Bloomberg wrote "The amount of Russian crude oil that's stuck at sea is rising as Joe Biden's farewell sanctions on Moscow continue to snarl the nation's petroleum trade. While exports from the country's ports jumped to a three-month high, India's refiners are so far refusing to accept cargoes that have been moved on sanctioned tankers, even if only for part of their voyage. Some Chinese ports appear to be taking the same approach." There was an approximate +0.580 mmb/d WoW increase in daily crude flows, jumping to 3.53 mmb/d for the seven days to Mar 2. Russian crude shipments from Novorssiysk increased to six, after being stuck at zero last week. Exports from the Baltic declined, while shipments from the Arctic rose. Four-week average flows were up about 0.120 mmb/d WoW to 3.09 mmb/d, the highest level in three months. Bloomberg also wrote, "Daily crude flows in the seven days to March 2 jumped by about 580,000 barrels, or 20%, from the previous week to 3.53 million. The increase reversed almost all of an 18% drop seen the previous week. Shipments of Russian crude from Novorossiysk surged to six cargoes, while flows from the Baltic slipped. Exports from the Pacific were unchanged from the previous week, while Arctic shipments rose." Our Supplemental Documents package includes the Bloomberg report.





Source: Bloomberg

Russia oil exports to China continue to fall, down -0.31 mmb/d vs Jan 5

As noted earlier, Urals price being below the price cap is allowing legitimate tankers to load Russian crude and we would expect to see that reflected in increasing unloadings in China as those February loadings in Russia reach China in March. But, prior to this price drop Bloomberg also provided the Russia oil shipments to key Asian countries. We have been highlighting the reports in Jan that China had stopped some direct unloading of sanctioned Russian tanks, and this is evident 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 1.01 mmb/d for the week ending Mar 2, which is down from last week's upwardly revised 1.07 mmb/d (was 1.02 mmb/d). This is also down -0.31



mmb/d vs the four-week average on Jan 5 of 1.320 mmb/d. Below are the Bloomberg table and graph that we attached to our post.

Figure 34: 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		
January 26, 2025	1.11	1.42	0.00	0.04	0.03	2.58		
February 02, 2025	1.13	1.45	0.00	0.04	0.03	2.64		
February 09, 2025	1.10	1.31	0.00	0.07	0.03	2.52		
February 16, 2025	1.24	1.34	0.00	0.23	0.03	2.83		
February 23, 2025	1.07	1.41	0.00	0.28	0.03	2.78		
March 02, 2025	1.01	1.40	0.00	0.42	0.08	2.91		
Source: Vessel tracking data compiled by Bloomberg Bloomb								

Source: Bloomberg

01/10/25: Biden sanctioned 160 tankers that shipped 1.6 mmb/d of RUS oil

Here is what we wrote in our Jan 19, 2025, Energy Tidbits memo. "Last week's (Jan 12, 2025) Energy Tidbits highlighted the Jan 10 new Biden sanctions on Russia energy sector. This week, the IEA noted the significance of the latest sanctions on Russian tankers. They noted it impacted over 160 tankers that carry oil for Russia, Iran and Venezuela. And that these newly sanctioned tankers shipped over 1.6 mmb/d of Russian oil in 2024, which was ~22% of Russia's seaborne exports. The IEA also noted "At the same time, there is heightened speculation that the incoming US administration will take a tougher stance on Iran's oil exports, compounding the impact of US Treasury sanctions on Tehran. On 19 December, the US expanded sanctions on vessels transporting Iranian crude. The new sanctions on Iran's shadow fleet now cover vessels that transported an average of over 500 kb/d of Iranian crude in 2024, nearly one-third of the country's crude exports. While it is too early to fully quantify the potential impact from these new measures, some operators have reportedly already started to pull back from Iranian and Russian oil."

Oil: Bloomberg OPEC production up +0.240 mmb/d MoM to 27.350 mmb/d in Feb

On Monday, Bloomberg posted its monthly survey of OPEC production. (i) The Bloomberg survey estimates OPEC production in Feb was up +0.240 mmb/d MoM to 27.350 mmb/d. (ii) Jan's production estimates were revised, increasing +0.080 mmb/d to 27.110 mmb/d. Iraq was revised up +0.050 mmb/d to 4.060 mmb/d (was 4.010), and Libya was revised up +0.030 mmb/d to 1.240 (was 1.210). (iii) The largest MoM change in Feb vs Jan was Iraq, up +0.100 mmb/d to 4.160 mmb/d, which saw a rebound in production after a fire at the Rumaila oil field reportedly knocked out ~300,000 b/d (25% of the Rumaila production) for about a week in Jan. (iv) Venezuela was up +0.080 mmb/d to 980,000 b/d. It was expected that Venezuela, especially Chevron, would be cranking up their production given there has been risk for Trump to pull Chevron's license, which was done this week. (v) UAE was up +0.070 mmb/d MoM, offsetting Nigeria's -0.070 mmb/d decline. Below is the Bloomberg survey table.

OPEC Feb production



Figure 35: Bloomberg Survey OPEC production in February (mmb/d)

Feb. Jan. Net Pct Estimated Capacity Total OPEC 27,350 27,101 240 0.9% 33,640 Algeria 910 890 20 2.2% 1,060 Rep. Congo 240 250 -10 -4.0% 30 Equatorial Guinea 70 40 30 75.0% 80 Gabon 200 230 -30 -13.0% 230 Iran 3,310 3,320 -10 -0.3% 3,830 Iraq 4,160 4,660 r 100 2.5% 4,800 Kuwait 2,470 2,490 -20 -0.5% 2,820 Libya 1,290 1,240 r 50 4.0% 1,290 Nigeria 1,450 1,520 -70 -4.6% 1,600 Saudi Arabia 8,970 8,940 30 0,3% 12,000 UAE 3,300 90 80 8,9% 980				<u> </u>			
Total OPEC 27,350 27,110 240 0.9% 33,640 Algeria 910 890 20 2.2% 1,060 Rep. Congo 240 250 -10 -4.0% 300 Equatorial Guinea 70 40 30 75.0% 80 Gabon 200 230 -30 -13.0% 230 Iran 3,310 3,320 -10 -0.3% 3,830 Iraq 4,160 4,060 r 100 2.5% 4,800 Kuwait 2,470 2,490 -20 -0.5% 2,820 Libya 1,290 1,240 r 50 4.0% 1,290 Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,330 70 2.2% 4,650		Feb.	Jan.		Net	Pct	Estimated
Algeria 910 890 20 2.2% 1,060 Rep. Congo 240 250 -10 -4.0% 300 Equatorial Guinea 70 40 30 75.0% 80 Gabon 200 230 -30 -13.0% 230 Iran 3,310 3,320 -10 -0.3% 3,830 Iraq 4,160 4,060 r 100 2.5% 4,800 Kuwait 2,470 2,490 -20 -0.8% 2,820 Libya 1,290 1,240 r 50 4.0% 1,290 Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,230 70 2.2% 4,650		Estimate	Output		Change	Change	Capacity
Rep. Congo 240 250 -10 -4.0% 300 Equatorial Guinea 70 40 30 75.0% 80 Gabon 200 230 -30 -13.0% 230 Iran 3,310 3,320 -10 -0.3% 3,830 Iraq 4,160 4,060 r 100 2.5% 4,800 Kuwait 2,470 2,490 -20 -0.8% 2,820 Libya 1,290 1,240 r 50 4.0% 1,290 Nigeria 1,450 1,520 -70 -4.6% 1,600 Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,230 70 2.2% 4,650	Total OPEC	27,350			240	0.9%	33,640
Equatorial Guinea 70 40 30 75.0% 80 Gabon 200 230 -30 -13.0% 230 Iran 3,310 3,320 -10 -0.3% 3,830 Iraq 4,160 4,060 r 100 2.5% 4,800 Kuwait 2,470 2,490 -20 -0.8% 2,820 Libya 1,290 1,240 r 50 4.0% 1,290 Nigeria 1,450 1,520 -70 -4.6% 1,600 Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,230 70 2.2% 4,650	Algeria		890			2.2%	1,060
Gabon 200 230 -30 -13.0% 230 Iran 3,310 3,320 -10 -0.3% 3,830 Iraq 4,160 4,060 r 100 2,5% 4,800 Kuwait 2,470 2,490 -20 -0.8% 2,820 Libya 1,290 1,240 r 50 4.0% 1,290 Nigeria 1,450 1,520 -70 -4.6% 1,600 Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,230 70 2,2% 4,650	Rep. Congo					-4.0%	
Iran 3,310 3,320 -10 -0.3% 3,830 Iraq 4,160 4,060 r 100 2.5% 4,800 Kuwait 2,470 2,490 -20 -0.5% 2,820 Libya 1,290 r 50 4.0% 1,290 Nigeria 1,450 1,520 -70 -4.6% 1,600 Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,230 70 2.2% 4,650	Equatorial Guinea					75.0%	
Iraq 4,160 4,060 r 100 2.5% 4,800 Kuwait 2,470 2,490 -20 -0.8% 2,820 Libya 1,290 1,240 r 50 4.0% 1,290 Nigeria 1,450 1,520 -70 -4.6% 1,600 Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,230 70 2.2% 4,650	Gabon					-13.0%	
Kuwait 2,470 2,490 -20 -0.8% 2,820 Libya 1,290 1,240 r 50 4.0% 1,290 Nigeria 1,450 1,520 -70 -4.6% 1,600 Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,230 70 2.2% 4,650	Iran	3,310	3,320			-0.3%	3,830
Libya 1,290 1,240 r 50 4,0% 1,290 Nigeria 1,450 1,520 -70 -4.6% 1,600 Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,230 70 2.2% 4,650	Iraq	4,160	4,060			2.5%	4,800
Nigeria 1,450 1,520 -70 -4.6% 1,600 Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,230 70 2.2% 4,650	Kuwait	2,470	2,490			-0.8%	2,820
Saudi Arabia 8,970 8,940 30 0.3% 12,000 UAE 3,300 3,230 70 2.2% 4,650	Libya	1,290	1,240			4.0%	1,290
UAE 3,300 3,230 70 2.2% 4,650	Nigeria	1,450	1,520			-4.6%	1,600
	Saudi Arabia	8,970	8,940			0.3%	12,000
Venezuela 980 900 80 8.9% 980	UAE	3,300	3,230			2.2%	4,650
	Venezuela	980	900		80	8.9%	980

Source: Bloomberg

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

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

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 36: OPEC phase out starting Apr 1, 2025

C		2025				2026							Required Production Level as per						
Country	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep - Dec	an th
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
Kezakhstan	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

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

OPEC+ Apr 1 return of barrels

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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.

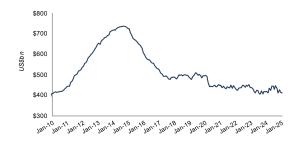
Oil: Saudi nest egg, its net foreign assets were down -\$2.3b MoM in January

For the past several years, we have stated that the #1 financial theme for Saudi Arabia will be the increasing use of Other People's Money "OPM" to fund their government and MBS Vision 2030 plan. This is because they have seen a \$325.5b reduction in their net foreign assets in the last decade. It is also why we continue to believe Saudi Arabia will be working to do all they can to keep oil prices solid and not crash oil prices for a few months to regain oil market share. We believe that will be an action of last resort. We also expect to see OPM deals in the near term to add to the piggy bank. Every month, we track Saudi net foreign assets, which we have described as their piggy bank for the future. Please note that the Net Foreign Assets have seen very big swings, both up and down, in the last couple years. For January, there was a MoM decrease of -\$2.3b, this follows from a decrease in December of -\$13.0b, an increase of +\$15.0b in November, and the largest two month decrease since Covid in Sept/Oct of -\$34.6b. On February 27, the Saudi Central Bank (SAMA) released its Monthly Statistical Bulletin for the month of January [LINK]. Our long-stated view is that the #1 financial theme for Saudi Arabia in the 2020s will be their continued, and increasing, use of Other People's Money as they try to fund MBS's Vision 2030. It continues to play out as expected. We believe this has been obvious with how Saudi Arabia's net foreign assets dropped by -44.2% or -\$325.5b since the peak of \$737.0b on Aug 31, 2014. We are surprised that markets and oil watchers did not seem to pay attention to the Saudi net foreign assets data i.e., what we call their nest egg to help them their push to MBS's Vision 2030. Recently we have been seeing much larger MoM changes, both up and down. In January there was a -\$2.3b MoM decrease to Saudi Arabia's net foreign assets which are now \$411.5b vs \$413.8b in December. Last month's data saw an increase of -\$13.0b MoM for December. The thesis and big picture remain that Saudi net foreign assets as of January 31 of \$411.5b is a decline of -44.2% or -\$325.5b from its peak of \$737.0b on Aug 31, 2014. That is an average of -\$2.6b per month for the last 125 months since the peak. Saudi Arabia is far from going broke but there has been a huge decline in the last 10 years. This net foreign asset depletion is why we have been highlighting that the primary financial theme for Saudi Arabia in the 2020s is getting Other People's Money (OPM) to fund as much of their Vision 2030 as possible. And no question, accessing OPM has helped to slow down and temporarily pause the decline in net foreign assets. Below is our graph of Saudi Arabia net foreign assets updated for the January data.

Saudi net foreign assets



Figure 37: Saudi Arabia Net Foreign Assets



Source: Saudi Central Bank, Bloomberg

12/1/2024: Sept/Oct was largest 2-mth drop in Saudi Net Assets since Covid

January MoM change in Net Foreign Assets was relatively modest. Whereas, we were seeing some huge monthly swings in 2024 in Saudi Net Foreign Assets, much larger than seen pre-Covid. Here is what we wrote in the Dec 1, 2024, Energy Tidbits Memo: "We are huge believers that any picture does a great job of painting a story BUT as we like to see the numbers as the numbers reveal way more than picture. And our below table of the Saudi Net Foreign Assets shows that Sept/Oct -\$34.6b was the largest 2-mth drop in Saudi Net Foreign Assets since the \$59.4b drop in Mar/Apr height of Covid. And Brent averaged roughly \$75 so it highlights why Saudi Arabia may not target an oil price but clearly doesn't want lower oil prices. The other reminder when you look at the numbers is that the few times it has neared dropping below \$400b, there was a subsequent inflow. So when we see \$411.7b for Oct 31, we fully expect to see some OPM deals adding to the piggy bank in the next couple months."

Figure 38: Saudi Net Foreign Assets

			S	audi Arabia	Net Foreign	Assets (US\$	bn)			
	2020	MoM Change	2021	MoM Change	2022	MoM Change	2023	MoM Change	2024	MoM Change
Jan	\$496.1	\$2.3	\$445.5	(\$3.4)	\$429.4	(\$8.1)	\$437.6	(\$1.9)	\$419.3	\$2.2
Feb	\$491.6	(\$4.5)	\$436.7	(\$8.8)	\$424.1	(\$5.3)	\$433.0	(\$4.6)	\$412.1	(\$7.2)
Mar	\$463.3	(\$28.3)	\$444.6	\$7.9	\$434.2	\$10.1	\$418.7	(\$14.3)	\$434.2	\$22.1
Арг	\$442.2	(\$21.1)	\$436.3	(\$8.3)	\$435.3	\$1.1	\$410.2	(\$8.5)	\$423.6	(\$10.6)
May	\$444.3	\$2.1	\$432.6	(\$3.7)	\$435.5	\$0.2	\$422.8	\$12.6	\$444.6	\$21.0
Jun	\$442.8	(\$1.5)	\$441.8	\$9.2	\$448.5	\$13.0	\$423.5	\$0.7	\$445.1	\$0.5
Jul	\$443.3	\$0.5	\$437.4	(\$4.4)	\$445.6	(\$2.9)	\$407.1	(\$16.4)	\$429.8	(\$15.3)
Aug	\$448.6	\$5.3	\$437.0	(\$0.4)	\$438.9	(\$6.7)	\$407.4	\$0.4	\$446.3	\$16.4
Sep	\$442.8	(\$5.8)	\$448.0	\$11.0	\$448.8	\$9.9	\$420.2	\$12.8	\$433.3	(\$13.0)
Oct	\$441.9	(\$0.9)	\$433.2	(\$14.8)	\$444.5	(\$4.2)	\$406.3	(\$13.9)	\$411.7	(\$21.6)
Nov	\$452.1	\$10.2	\$446.9	\$13.8	\$451.8	\$7.3	\$418.1	\$11.7	\$426.8	\$15.0
Dec	\$448.9	(\$3.2)	\$437.5	(\$9.4)	\$439.5	(\$12.3)	\$417.1	(\$1.0)		

Source: Saudi Central Bank, Bloomberg

12/1/2024: Also, why Saudi starting oil price war to regain share is a last resort Here is what we wrote in the Dec 1, 2024, Energy Tidbits Memo: "We have been consistent in our view that Saudi Arabia starting an oil price war to regain oil market share is a last resort action. Their piggy bank is still massive at \$411.7 b but it declined \$34.6b in roughly \$75 Brent. Let's say Brent went down to \$40 or \$50 in an

declined \$34.6b in roughly \$75 Brent. Let's say Brent went down to \$40 or \$50 in an oil price war, that could hit Saudi by over \$10b per month. If that had been Sept/Oct, then the drop in Saudi Net Foreign Assets would have been over \$55b drop or close



to what was seen in Mar/Apr 2020. We just think Saudi oil price war to regain market share is a last resort action."

Oil: Trump, something to happen very very soon on Iran

Whether you are a Trump supporter or not, you have to acknowledge he tries to use words, implied threats and threats as his tool to get other to take action before he has to act on his big threat. We are seeing that in sanctions and NATO and Ukraine with the Europeans doing something no one thought they would do – truly crank up defense spending. And he does so by building momentum/attention to an issue by his continual verbally pushing on an issue. He tries to create a sense of urgency. In the case of Iran, he has implied he would be onside if Israel attacks Iran's nuclear facilities. So no one should be surprised by his comments on Friday on Iran that he is trying to create an urgency for Iran and saying something is going to happen very very soon. Earlier this morning, we posted [LINK] "Trump on Iran. "something is going to happen very soon, very very soon. You'll be talking about that pretty soon, I guess, and hopefully, we can have a -- a peace deal, you know, but I'm not speaking out of strength or weakness; I'm just saying I'd rather see a peace deal than the other. But the other will solve the problem." Thx @business #OOTT. Trump is creating momentum for a deal or he is warning or else. Our Supplemental Documents package includes the Trump Iran comments.

Oil: Are Trump's only options bullish for oil if Iran doesn't negotiate

Earlier this morning, we were scanning Iran media and posted [LINK] "Bullish upside for #Oil? What are Trump's options to not let Iran go nuclear as Iran says - "become clear that lifting sanctions is possible through strengthening Iran and neutralizing sanctions.... by utilizing our vast domestic capacities..." Iran's strength depends on continued oil exports. So what options? cut Iran oil exports to cut cash flow? Israel bomb Iran nuclear facilities? Other? #OOTT." This was a statement today by Iran's parliamentary speaker so is after Trump's above Friday comments. The speaker was clear that strengthening Iran is the way to get sanctions lifted. He didn't say it directly, but strengthening Iran needs cash flow and Iran's cash flow depends on oil exports. If Iran wants strength and needs oil exports to continue strong, then it made us wonder what are Trump's options to make sure Iran can't get nuclear capability if Iran won't negotiate. We noted the two obvious ones - try to cut off Iran's cash flow by cutting off oil exports or by supporting/allowing Israel to bomb Iran's nuclear facilities. The cutting off oil exports to zero is what Trump signed off on Feb 4 in his maximum pressure on Iran. So it is his stated policy. And both of those would look to be potential upsides to oil prices. Mehr reported "The US seeks to impose its demands and disarm Iran, as outlined in the US policy document he has signed, he added. He further stressed that no negotiation under the shadow of threats, with an agenda of imposing new concessions, will lead to the lifting of sanctions, nor will it result in anything other than humiliating the proud Iranian nation. "Today, more than ever, it has become clear that lifting sanctions is possible through strengthening Iran and neutralizing sanctions. Therefore, we are not waiting for any letter from the United States and believe that by utilizing our vast domestic capacities and seizing opportunities to expand foreign relations with other countries, we can reach a position where the enemy has no choice but to lift sanctions within the framework of continued negotiations with the remaining parties to the JCPOA." Our Supplemental Documents package includes the Mehr report.

Trump on Iran

Iran says strength will neutralize sanctions



02/04/25: Trump's maximum pressure on Iran, cut oil exports to zero

Earlier this morning, we posted [LINK] "Reminder: On Feb 4, Trump signed his stated policy of maximum pressure on Iran that included denying Iran of revenue and driving their oil exports to zero. See my Feb 4 post. [LINK] #OOTT." Recall that one of Trump's early actions was they he signed off on the maximum pressure on Iran campaign and to cut their oil exports to zero. Here is what we wrote in our Feb 9, 2025 Energy Tidbits memo. "Trump signs off on imposing maximum pressure on Iran & cut oil exports to zero. On Tuesday, we posted [LINK] "Trump Maximum Pressure on Iran. "Implement a robust and continual campaign, in coordination with the Secretary of the Treasury and other relevant executive departments or agencies (agencies), to drive Iran's export of oil to zero, including exports of Iranian crude to the People's Republic of China;" And more. #OOTT." There was no real reaction to oil prices with the signing of the executive order. We have saying foTumr months that Trump's quickest way to impact oil prices would e if he goes back to his first term playbook of cutting Iran and Venezuela oil exports to almost zero. Trump has surprised many, including us, on how he seems to have no interest in cutting Venezuela's oil exports. And, based on the conversations we had with investors and oil people, most don't expect him to cut Iran's oil exports to zero for fear of what it would do to oil price and gasoline prices. If you read the executive order, it certainly seems say the US will drive oil exports to zero. Our Supplemental Documents package includes the executive order."

Trump signaled he really preferred to do a deal with Iran

Here is another items from our Feb 9, 2025 Energy Tidbits memo on Trump's Iran comments. "Trump signaled he really preferred to do a deal with Iran. We watched the CSPAN coverage of Trump signing the executive order imposing maximum pressure on Iran. One of the annoying things about the Trump Admin is that they never post things quickly. We understand the reason is they want eyes on the event and not having people read what is written. The Dept of Transportation suspending of funds for EV charging infrastructure on Thursday wasn't posted until Friday. Trump did the formal signing of the Iran executive order but the White House didn't post the executive order until hours later. Fortunately, we were able to watch the CSPAN coverage. So all we knew was that he signed he executive order and what he said at the live press coverage of the signing. There wasn't the actual executive order to read. And when we listened to Trump's comments, he really gave the impression that the last thing he wanted to do was actually act on the maximum pressure. Rather he pointed to wanting to meet with Iran President and cutting a deal. We suspect this is a great part of the reason why most don't think he will go full Admin 1 and cut Iran's oil exports to zero even if that is what the executive order ending up showing. We created a transcript of Trump's comments. A couple were "The Iran situation, hopefully, I am going to sign it. But hopefully, we're not going to have to use very much. We will see whether or not we can arrange or work out a deal with Iran. And everybody can live together." Then he confirmed he would speak with the Iran President. "Question "Mr. President, are you going to be engage in conversations with your counterpart?" Trump "I would". Our Supplemental Documents package



includes the transcript we made of Trump's comments. "

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

There have been multiple prior occasions when Iraq said Kurdistan oil exports via Turkey was ready to resume only to find out the IOCs in Kurdistan still don't have an acceptable agreement. So, we are from the Show Me state when we saw the Iraq oil minister come out yesterday and say Kurdistan "oil exports may restart this month". Yesterday, we posted [LINK] "Too early to celebrate. Iraq oil minister says Kurdish "oil exports may restart this month". But - @KarwanFaidhiDri also reports "Awadi said that they might need more meetings to "reach a final outcome," but that they are in the "final stages of resolving the disputes." #OOTT." The key to the Rudaw reporting is that the Iraq oil minister saying they might more meetings to reach a final outcome. Our concern is that the Kurdistan oil companies still have outstanding issues and, after two years, we have to believe they won't cave in until their issues are resolved. We don't know if that is leverage but the IOCs have had to deal with this for two years so why would they give in now? On Thursday, we posted [LINK] "Still no deal to restart Kurdistan #Oil via Turkey. "'Nothing achieved' in Baghdad meeting over Kurdistan oil exports: Source". - @KarwanFaidhiDri. Can't help wonder if it's been an Iraq tease until oil markets can handle KRG barrels on top of southern Iraq barrels? #OOTT." The long awaited meeting with the Kurdistan oil companies was apparently held and it didn't accomplish anything as to resolving the outstanding issues. Our Supplemental Documents include the two Rudaw reports.

Still no Iraq Kurdistan final deal

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 Iragi 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: Iraq highlights its decades-long Turkey fresh water issue and Kurdish oil exports

There was an Iraqi News Agency Wed report that didn't get any attention. The problem with relatively short reports is that they tend to raise more questions than provide answers. And that was the case, at least for us, on the Iraqi News Agency report that made us wonder if Iraq is just highlighting its two major issues with Turkey (access to water and resuming Kurdistan oil exports) of it they are hopeful of linking the decades-long water issue with the resumption of Kurdistan oil exports via Turkey. Yesterday, we posted [LINK] "Hopefully, It's just water & oil are the two big issues with Turkey and there isn't any linkage of Iraq's decades-long water issue to resuming Kurdistan #Oil exports? - Irag state media. "The minister stressed, according to the statement, "the importance of the files related to the work of the committee, especially the water and oil files." It pointed out "the necessity of activating the water file in a way that serves the interests of Iraq by achieving a fair share of water releases," stressing "the imminent activation of the oil export file through the oil pipeline to the Turkish port of Ceyhan and the possibility of increasing exports through this pipeline of Basra oil." #OOTT." Iraq's decades-long dispute with Turkey on how much of the Tigres and Euphrates water makes it downstream to Iraq is a dispute that not many see as never being resolved and has been one of the major disputes with Turkey for decades. So, we just hope it's a question that the Iraqi News Agency short report is only mentioning the water and oil as the two big issues and there isn't any hope of Iraq of linking the two issues. Our Supplemental Documents package includes the Iraqi News Agency report.

Iraq's decade long fresh water issue with Turkey

Oil: Libya oil production of 1.396 mmb/d is above Aug 1 levels

On Friday, 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 1,395,853 b/d and 54,812 b/d of condensates amounting to total liquids production of 1,450,665 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 last 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 oil production at 1.396 mmb/d

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

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 believes 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



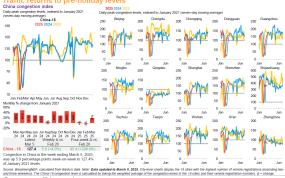
plan Libya hopes to boost its capacity to 1.6 million bpd by the end of this year, and 2 million bpd by 2028". It isn't clear if this is oil or oil + condensate, but condensate, if included would likely be under 100,000 b/d in total of the 2 mmb/d."

Oil: China city-level road congestion normalizes post-holidays

The 40-day Spring Festival ended two weeks ago, and China city-level road congestion has rebound to pre-holiday levels as people are back to work now. As expected, this week's traffic continued to flatten after the big spike seen in the previous weeks. On Thursday, BloombergNEF posted its China Road Traffic Indicators Weekly report, which includes the Baidu city-level road congestion for the week ended Mar 5. BloombergNEF reported Baidu city-level road congestion saw an increase of +4.9% WoW to 127.4% of Jan 2021 levels. February 2025 data saw average daily peak congestion up +19.8% YoY when compared to February 2024. We noted in previous weeks memos that Chinese New Year and Spring Festival was early this year and that means China city-level road congestion saw a huge decline in January and not in February as happened in 2024. 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 recovers to pre-holiday levels". Below are the BloombergNEF key figures.

China city-level road congestion

Figure 39: China city-level road congestion for the week ended Mar 5



Source: Bloomberg

Oil: Caixin Manufacturing PMI in Feb improves pre-Trump's China tariffs

There was a good example this month of why we try to read the actual documents instead of just looking at the headline numbers. There was a big beat in the Caixin China Manufacturing PMI for Feb but we thought the messaging in the report was a warning. On Sunday, we posted [LINK] "Pre Trump China 10% tariff. China Feb Caixin Manufacturing PMI for China's smaller more export oriented companies. 50.8 is good # but seemed like a cautious messaging ie. "nonetheless, China's economy still faces significant challenges, with rising uncertainties in employment and household income constraining efforts to boost domestic demand and stabilize the economy." Feb 50.8 vs est 50.4 Jan 50.1 Dec 50.5 Nov 51.5 Oct 50.3 Sep 49.3 Aug 50.4 Jul 49.8 Jun 51.8 May 51.7 Apr 51.4 Mar 51.1 Feb 50.9 Thx @SPGlobalPMI. #OOTT." The Caixin Manufacturing PMI for Feb was released Monday morning (local time) [LINK]. The headlines included that it was the 5th consecutive month of improving manufacturing sector conditions for the Caixin PMI in Feb. The PMI rose to 50.8

China Caixin Manufacturing PMI Feb



following 50.1 in Jan, 50.5 in Dec, 51.5 in Nov, and 50.3 in Oct. Feb was above the estimate of 50.4 and up from 50.1 in Jan. Feb saw an increase in export orders and exceeded estimates, improving to a three-month high of 50.8. But S&P remained cautious about future outlook, writing "Nonetheless, China's economy still faces significant challenges, with rising uncertainties in employment and household income constraining efforts to boost domestic demand and stabilize the economy."Out of the two China manufacturing PMI data reports that come out each month, the Official Manufacturing PMI that the National Bureau of Statistics publishes, and the Caixin Manufacturing PMI from S&P Global, we have focused on the Caixin Manufacturing PMI. The Caixin Manufacturing PMI is viewed as more of a leading indicator for how the China recovery is doing as it primarily focusses on smaller Chinese companies who are export-oriented, and exports have been the big driver of China for the past 20 years. Our Supplemental Documents package includes the Caixin China Manufacturing PMI.

Figure 40: China Caixin General Manufacturing PMI



Sources: Caixin, S&P Global PMI
Source: S&P Global

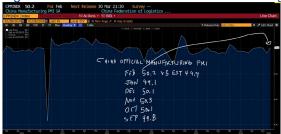
China official Feb Manufacturing PMI back to expansion pre Trump tariffs

Here is what we wrote in last week's (Mar 2, 2025) Energy Tidbits memo on China's official Manufacturing PMI for Feb. "China official Jan Manufacturing PMI back to expansion before Trump 10% tariff. As of our 7am MT news cut off, the expectation is that the Trump 10% tariffs on China go into effect as planned on Tuesday. There is also a major China event starting Tues – The China two sessions that is March 4 and 5. where China will be expected to roll out their economic plans and policy support. Prior to the tariffs, we saw Chinese manufacturers turn back positive in Feb. On Friday night, we posted [LINK] "China "official" manufacturing PMI back to expansion BUT two big wildcards on Tues: Trump tariffs & start of China "two sessions". Feb 50.2 vs est 49.9. Jan 49.1 vs est 50.1 Dec 50.1 Nov 50.3 Oct 50.1 Sept 49.8 Aug 49.1 July 49.4. Smaller, more export oriented Caixin manufacturing PMI is Sunday night. #OOTT." Bloomberg posted the official China manufacturing PMI on Friday night. As a reminder, there are two China manufacturing PMI data reports that come out each month, the Official Manufacturing PMI that the National Bureau of Statistics publishes and the Caixin Manufacturing PMI from S&P Global. The Caixin Manufacturing PMI is for more smaller, export-oriented companies and is being released tonight. We were a little surprised that the PMI was back above 50 given the still uncertain impact of Trump tariffs. The China official manufacturing PMI



for Feb was an expansion 50.2 (vs estimates 49.9), which follows 49.1 in Jan, 50.1 in Dec and 50.3 in Nov. Below is the Bloomberg chart of China official general manufacturing PMI."

Figure 41: China Official General Manufacturing PMI



Source: Bloomberg

Oil: Hong Kong retail sales, 11th consecutive month of YoY decline

On Monday, we posted [LINK], "Chinese consumers still on sideline. 11th consecutive month of YoY declines in Hong Kong retail sales. Hong Kong retail sales in Jan -5.2% YoY, despite earlier Lunar New Year in Jan this yr and mainland China visitors to HK +25% YoY in Jan. Thx @business Ailing Tan #OOTT". Hong Kong Jan retail sales was a good reminder of the weak Chinese consumer. Lunar New Year was early this year in January and that normally means more spending. Plus visitors to Hong Kong were up big YoY yet Hong Kong retail sales were down YoY. We recognize there are international tourists to Hong Kong but visitors to Hong Kong are hugely dominated by visitors from the mainland. Despite an earlier Lunar New Year and visitor arrivals being up +25% YoY, Hong Kong Jan retail sales were down -5.2% YoY, which followed Dec down -11.3% YoY and Nov down -8.4% YoY. Bloomberg posted a table of retail sales by category, and it looks like the lone consistently positive category has been Alcohol and Tobacco. All other categories are consistently down YoY, and some are down huge like motor vehicles, consumer durable goods, and many more. It continues to be a brutal looking retail sales picture. The South China Morning Post wrote [LINK], "A government spokesman said retail sales recorded a much narrower annual decline in January thanks in part to the earlier arrival of Lunar New Year. The holiday fell on January 29 this year. But the department also noted that retail sales tended to show greater volatility in the first two months of a year due to the timing of the holiday."

Hong Kong Jan retail sales



Figure 42: Hong Kong monthly retail sales YoY % change

	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.
	2025	2024	2024	2024	2024	2024
			Y/	y\$		
Retail Sales	-5.2%		-8.4%	-4.8%	-8.7%	
Food, Alcohol & Tobacco						
Meat						
Vegetables & Fruits	8.8%					
			-24.2%			
Other .	14.8%					
(incl. department stores)						
				-5.8%		
						-8.8%
	-24.6%					
Department stores						-18.0%
Books, Newspapers & Stationery	-18.8%					
Chinese Drugs & Herbs						
						-18.3%
Medicines & Cosmetics						
Note 1: Figures are not seasonally a	idjusted.					
Note 2: Figures for the latest month		ct to revie				
Source: Hong Kong Government Inf						
Source: Hong Kong Government Int		enter				

Source: Bloomberg

Oil: China oil imports -5.0% YoY, 10.42 mmb/d during Jan-Feb period

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: Aramco keeps oil demand growth rate, within tight 2025 EIA, IEA and OPEC range On Tuesday, we posted [LINK] "No change to @SaudlAramco forecasts for #Oil demand growth. See comparison of oil demand growth forecasts: IEA Feb OMR: +1.10 mmbd YoY. Aramco Q4: +1.30 mmbd YoY/ EIA Feb STEO: +1.37 mmbd YoY. OPEC Feb MOMR: +1.45 mmbd YoY. #OOTT." Saudi Aramco released Q4 and held its Q4 call on Tuesday. Aramco includes its oil demand outlook, which is an unchanged oil demand growth forecast of +0.9 mmb/d YoY for 2024 and +1.3 mmb/d YoY for 2025. Aramco highlighted that the 2025 oil demand growth is driven by Asia (close to 60% of global oil demand growth), fuels and petrochemicals continue to drive growth with the chemicals +0.5 mmb/d YOY and trsport fuels +0.7 mmb/d YoY driven by a recovery in jet fuel. Aramco also highlighted global oil inventories are at 5-yr lows. Our post reminded that there is a tight range of oil demand growth forecasts for 2025, which means there hasn't been a really big debate on oil demand forecasts for 2025, unlike what we saw in 2024.

Tight range of oil demand YoY growth for 2025



Figure 43: Comparison of YoY oil demand growth forecasts

	YoYOil Den	nand Growth Foreca	ist	
million b/d	2024 YoY	2025 YoY	2026 YoY	
EIAFeb STEO	0.90	1.37	1.04	
EIAJan STEO	0.90	1,39	1.05	
EIADec STEO	0.89	1.29	-	
EIANov STEO	0.99	1.22	-	
EIAOct STEO	0.92	1.29	-	
EIASept STEO	0.94	1.52	-	
EIA Aug STEO	1.14	1.61	IEAdemand (mill	ion b/d)
			2024	2025
IEAFeb OMR	0.87	1.10	102,894	103,998
IEAJan OMR	0.94	1.06	102.901	103.956
IEADec OMR	0.84	1.08	102.807	103.887
IEANov OMR	0.92	0.99	102.817	103.807
IEAOct OMR	0.86	1.00	-	
IEASept OMR	0.90	0.95	-	
IEA Aug OMR	0.97	0.95	-	
OPEC Feb MOMR	1.54	1.45	1.43	
OPEC Jan MOMR	1.54	1.45	1.43	
OPEC Dec MOMR	1.61	1.45	-	
OPEC Nov MOMR	1.82	1.54	-	
OPEC Oct MOMR	1.93	1.64	-	
OPEC Sept MOMR	2.03	1.74	-	
OPEC Aug MOMR	2.11	1.78	-	
Russia (Novak Dec 25)	1.20	1.25	-	
Saudi Aramco Q4, Mar 4/25	0.90	1.30		
Saudi Aramco CEO Jan 21/25	0.90	1.30		
Saudi Aramco Q3 Nov4/24	1.10	1.20	-	
Saudi Aramco Q2	1.60	1.40	-	

Source: EIA, IEA, OPEC, Saudi Aramco, Russia via TASS

Oil: Vortexa crude oil floating storage -1.89 mmb WoW to 74.22 mmb on Mar 7

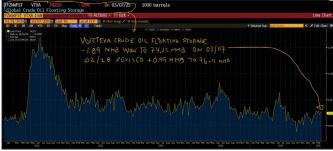
We are referencing the Vortexa crude oil floating storage data posted on the Bloomberg terminal as of 9am MT yesterday. Note that these estimates get revised over the course of the week and the revisions can go back months. We do not check daily for the revisions, so our comments on the new estimates are compared to the prior week's Vortexa estimates posted on Bloomberg on Mar 1 at 9am MT. (i) Yesterday morning, we posted [LINK] "Vortexa crude #Oil floating storage. 74.22 mmb on 03/07, -1.89 mmb WoW vs revised up 02/28 of 76.11 mmb. 7-wk moving average keeps going higher, 74.69 mmb on 03/07, last 3 wks are 1st times >70 since Aug. Been ~6 wks since China stopped unloading some sanctioned RUS 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 8, Bloomberg posted Vortexa crude oil floating storage estimate for Mar 7 was 74.22 mmb, which was -1.89 mmb WoW vs revised up Feb 28 of 76.11 mmb. Note Feb 28 was revised +0.99 mmb to 76.11 mmb vs 75.12 mmb originally posted at 9am on Mar 1. (iii) Revisions. Six of the past seven prior weeks were revised up but most modest other than Feb 14 revised +5.77 mmb, such that the average revision for the prior seven weeks was +1.79 mmb. Here are the revisions for the prior seven weeks compared to the estimates originally posted on Bloomberg at 9am MT on Mar 1. Feb 28 revised +0.99 mmb. Feb 21 revised +2.30 mmb. Feb 14 revised +5.77 mmb. Feb 7 revised +1.83 mmb. Jan 31 revised +2.42 mmb. Jan 24 revised -2.03 mmbb. Jan 17 revised +1.23 mmb. (iv) The last three weeks have been the first time since Aug that the 7-week moving average is over 70 mmb and the 7-week moving average keeps moving higher. The 7-week moving average to Mar 7 is 74.69 mmb vs last week's then 7-week moving average of 72.47 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

Vortexa floating storage



impact Covid in March/April 2020. (vii) Mar 7 estimate of 74.22 mmb is -54.80 mmb vs the 2023 peak on June 25, 2023 of 129.92 mmb. Recall Saudi Arabia stepped in on July 1, 2023 with its voluntary cuts. (viii) Mar 7 estimate of 74.22 mmb is -4.23 mmb YoY vs Mar 8, 2024 of 78.45 mmb. Below are the last several weeks of estimates posted on Bloomberg as of 9am on Mar 8, Mar 1, and Feb 22.

Figure 44: Vortexa Floating Storage Jan 1, 2000 – Mar 7, 2025, posted Mar 8 at 9am MT



Source: Bloomberg, Vortexa

Figure 45: Vortexa Estimates Posted 9am MT on Mar 8, Mar 1, and Feb 22

Posted Mar 8, 9am MT	Mar 1, 9am MT	Feb 22, 9am MT				
FZWWFST VTXA Ind€ 94) Sug	FZWWFST VTXA Inde 94) Su	FZWWFST VTXA Inde 94) SL				
01/01/2020 = 03/07/2025 =	01/01/2020 = 02/28/2025 =					
1D 3D 1M 6M YTD 1Y 5	1D 3D 1M 6M YTD 1Y	1D 3D 1M 6M YTD 1Y				
FZWWFST VT	FZWWFST VT	FZWWFST VT				
Date Last Px	Date Last Px	Date Last Px				
Fr 03/07/2025 74215	Fr 02/28/2025 75119	Fr 02/21/2025 64348				
Fr 02/28/2025 76111	Fr 02/21/2025 68415	Fr 02/14/2025 73815				
Fr 02/21/2025 70716	Fr 02/14/2025 72691	Fr 02/07/2025 75086				
Fr 02/14/2025 78464	Fr 02/07/2025 73317	Fr 01/31/2025 76545				
Fr 02/07/2025 75146	Fr 01/31/2025 75414	Fr 01/24/2025 72881				
Fr 01/31/2025 77833	Fr 01/24/2025 72402	Fr 01/17/2025 70785				
Fr 01/24/2025 70368	Fr 01/17/2025 69915	Fr 01/10/2025 62067				
Fr 01/17/2025 71148	Fr 01/10/2025 60985	Fr 01/03/2025 53602				
Fr 01/10/2025 61133	Fr 01/03/2025 52278	Fr 12/27/2024 64562				
Fr 01/03/2025 53477	Fr 12/27/2024 62750	Fr 12/20/2024 63427				
Fr 12/27/2024 64271	Fr 12/20/2024 64515	Fr 12/13/2024 65881				
Fr 12/20/2024 64144	Fr 12/13/2024 66507	Fr 12/06/2024 73265				

Source: Bloomberg, Vortexa

Oil: Vortexa crude oil 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 Feb 28 was revised +0.99 mmb. The largest revision was Asia +1.22 mmb. (ii) Asia was revised up for give of the six prior weeks, which then put Jan 31, Feb 7 and Feb 14 as three consecutive weeks over 40 mmb, which hasn't happened since last Jun/Jul. Asia floating storage doubled in Jan when China surprised by becoming stricter on taking sanctioned tankers related to Russia from 19.48 mmb on Jan 3 reaching a high of a revised +4.36 mmb to 42.34 mmb on Feb 14. 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 38.41 mmb (was 36.92 mmb), but it includes the big weeks in the aftermath of the surprise China change. (iii) Total floating

Vortexa floating storage by region

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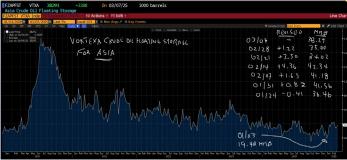
storage on Mar 7 of 74.22 mmb is -1.89 mmb vs revised up Feb 28 of 76.11 mmb. The major WoW changes were Middle East +5.17 mmb WoW, North Sea -3.50 mmb WoW, Asia +3.29 mmb WoW, and Other -3.08 mmb WoW. (iv) Below is the table we created of the WoW changes by region posted on Bloomberg at of 9am MT yesterday. Our table also includes the "Original Posted" regional data for Feb 28 that was posted on Bloomberg at 9am MT on Mar 1.

Figure 46: Vortexa crude oil floating storage by region

Vortexa crude oil floa	ting storage by region			Original Posted	Recent Peak	
Region	Mar7/25	Feb 28/25	WoW	Feb 28/25	Jun 23/23	Mar 7 vs Jun 23/23
Asia	38.29	35.00	3.29	33.78	74.06	-35.77
North Sea	0.19	3.69	-3.50	3.71	6.79	-6.60
Europe	6.63	8.92	-2.29	8.78	6.05	0.58
Middle East	12.70	7.53	5.17	7.19	6.59	6.11
West Africa	6.80	6.56	0.24	7.06	7.62	-0.82
US Gulf Coast	0.18	1.90	-1.72	2.16	1.53	-1.35
Other	9.43	12.51	-3.08	12.44	29.79	-20.36
Global Total	74.22	76.11	-1.89	75.12	132.43	-58.21
Vortexa crude oil floa	iting storage posted or	Bloomberg 9am N	/IT on Mar8			
Source: Vorteya Bloo	mherg					

Source: Bloomberg, Vortexa

Figure 47: Vortexa crude oil floating storage for Asia Jan 1, 2020 thru Mar 7, 2025



Source: Bloomberg, Vortexa

Oil: Global oil & product stocks flipped to a deficit of -3.80 mmb from +5.70 mmb

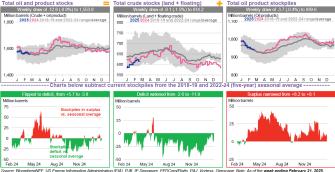
On Monday, BloombergNEF posted its "Oil Price Indicators" weekly, which provides good charts depicting near-term global oil demand and supply indicators. (i) Note BloombergNEF uses different periods to determine the surplus/deficit, sometimes using a four-year average for 2018-2019 and 2022-2024, and other times using a five-year average for 2018-2019 and 2022-2024. In both cases they do not include 2020 and 2021 in the averages. (ii) The global stockpile for crude oil and products flipped to a deficit of -3.80 mmb for the week ending February 21, from a surplus of +5.70 mmb for the week ended February 14. (iii) Total crude inventories (incl. floating) saw a draw of -1.5% WoW to 614.20 mmb. (iv) Land crude oil inventories decreased -0.7% WoW to 544.70 mmb, widening their deficit from -15.70 mmb to -16.70 mmb against the five-year average (2018-2019 and 2022-24). (v) The gasoil and middle distillate stocks were up +1.1% WoW to 224.50 mmb, with inventories flipping to a surplus of +0.10 mmb from a deficit of -3.20 mmb. Jet fuel consumption by international departures in the week starting March 3 is set to slightly increase by +5,300 b/d WoW, while consumption by domestic passenger departures is forecasted to decrease by -33,300 b/d WoW. Below is a snapshot of aggregate global stockpiles.

Global oil stocks

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Source: BloombergNEF

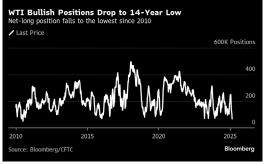
Oil: Bloomberg Oil Demand Monitor, Trump's Tariffs Leave Traders on Edge

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 weighing the impact on fuels use in countries like China and why WTI bullish positions have reached a 14-year low. Bloomberg noted that oil traders are trying to gauge the impact that President Trump's tariffs on imports will have on the global economy, and specifically on fuel demand. This has been reflected in the decrease in net-long positions in WTI, which have reached its lowest point since 2010. Short-only positions have ramped up to the highest point in over 13 months. Bloomberg also described how escalating trade tensions with the US are another headwind for China's growth. China saw oil usage fall -1.2% last year, with a -2.0% decrease in demand forecasted in 2025 for the world's largest oil importer. Bloomberg reported "Oil traders are attempting to gauge the likely repercussions for the global economy — and fuel demand — of US President Donald Trump's plans to impose widespread tariffs on imports from several key trading partners. Hedge funds have signaled their concerns about the potential impact of a trade war on the oil outlook, slashing net-long positions in US benchmark West Texas Intermediate to the lowest since 2010. They bolstered short-only positions to the highest in more than 13 months. ... Escalating trade tensions with the US pose another headwind for growth in China. The largest oil importer saw usage fall 1.2% last year, with a further drop in oil products demand of 2% forecast for 2025. The Trump administration has plans to double tariffs on Asia's powerhouse economy to 20%." Our Supplemental Documents package includes the Bloomberg Oil Demand Monitor.

Bloomberg oil demand monitor







Source: Bloomberg

Oil: Europe airports daily traffic 7-day moving average -2.2% below pre-Covid

Yesterday morning, we posted [LINK] ""EU air traffic (arrivals/departures) still stuck below pre-Covid. 7-day moving average as of: Mar 6: -2.2% below pre-Covid. 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 taffic 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 -2.2% below pre-Covid, which follows -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].

Europe airports daily traffic

Figure 50: Europe Air Traffic: Daily Traffic Variation to end of Mar 6



Source: Eurocontrol

Oil: Spain petroleum products consumption, gasoline & jet fuel up YoY, diesel down

The story is unchanged in Spain for gasoline and jet fuels consumption – continued strength and no signs of reaching peak consumption. There are always monthly variations, as automotive fuel consumption remained flat YoY in Jan and decreased -4.6% MoM from Dec. Gasoline (+6.8%) and jet fuel (+7.1%) were up YoY, while diesel (-1.6%), LPG (-1.8%), and fuel oil (-16.0%) were down YoY. This follows the strong petroleum products consumption growth seen from all product groups for year-end 2024. On Monday, Cores reported Spain's monthly oil and petroleum consumption for the month of January [LINK]. Cores wrote "In

Spain petroleum products consumption



January, automotive fuel consumption remains stable (+0.0%) compared to January 2024, while it decreases compared to December 2024 (-4.6%). Gasoline prices are up (+6.8% vs. Jan-24) and diesel prices are down (-1.8%), while both gasoline prices (-8.0%) and diesel prices (-3.5%) are down compared to December 2024." Below is a table showing the breakdown of demand by fuel type in January. Our Supplemental Documents package includes the Cores report.

Figure 51: Spain's January Oil Demand Product Breakdown (thousand mt)

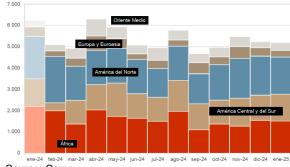
		Consumos		Tasas Variación (%) Interanuales			
Productos Petroliferos	Enero 2025	Enero 2025 Acumulado Anual		Enero 2025	Acumulado Anual	Año Móvil	
Gasolinas Automoción	504	504	6.550	6,8%	6,8%	6,7%	
Gasóleos Automoción	1.726	1.726	21.793	-1,8%	-1,8%	-0,3%	
Combustibles de Automoción	2.231	2.231	28.342	0,0%	0,0%	1,2%	
GLP	199	199	2.132	-1,8%	-1,8%	1,9%	
Gasolinas*	505	505	6.555	6,8%	6,8%	6,7%	
Querosenos	537	537	7.423	7,1%	7,1%	10,8%	
Gasóleos*	2.506	2.506	29.798	-1,6%	-1,6%	-0,2%	
Fuelóleos	662	662	8.432	-16,0%	-16,0%	3,3%	

Source: Cores

Oil: Spain's oil imports were down -17.0% YoY in January

On Wednesday, Cores reported Spain's oil imports for the month of January [LINK]. The report showed that oil imports decreased by -17.0% YoY in January. Cores reported that imports by OPEC ("OPEP" here) members decreased by -31.7% YoY, and total imports from OPEC suppliers was at 36.7%. This follows a strong 2024 when Spain oil imports were up +4.9% compared to 2023. The reports said, "Crude oil imports by OPEC member countries decreased by 31.7% in the month vs. Jan-24 and accounted for 36.7% of the total. Crude oil imports from all member countries increased year-on-year except Nigeria (-55.1% vs. Jan-24) and Libya (-34.3%). Crude oil imports from non-OPEC countries decreased in the month (-5.1% vs. Jan-24), and accounted for 63.3% of the total." Below is a graph showing Spain's oil imports, and a table showing the breakdown of imports by OPEC or Non-OPEC countries. Our Supplemental Documents package contains the official report by Cores.

Figure 52: Spain's oil Imports by geographical location (thousand mt)



Source: Cores

Spain's oil imports



Figure 53: Spain's January oil imports OPEC breakdown (thousand mt)

Total	5.182	-17,0	100,0	5.182	-17,0	63.530	2,0	100,0
OPEP	1.902	-31,7	36,7	1.902	-31,7	23.426	-13,0	36,9
No-OPEP	3.280	-5,1	63,3	3.280	-5,1	40.104	13,3	63,1
OCDE	1.922	-10,6	37,1	1.922	-10,6	22.090	1,0	34,8
No-OCDE	3.260	-20,3	62,9	3.260	-20,3	41.440	2,5	65,2
UF	54	-39.0	11	54	-39 0	523	32 1	0.8

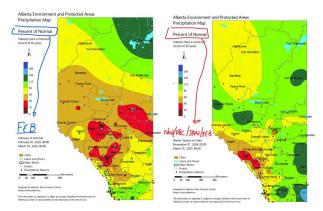
Source: Cores

Oil & Natural Gas: Low snowfall levels throughout Alberta in Feb

On Thursday, we posted [LINK], "Low snowfall in Feb in Alberta. ~half of Alberta had <85% of normal winter accumulated precipitation. yellow/brown/red. Most of rest was 85-115% of normal. light green Low winter snowfall is positive for flood risk in Calgary but negative for wildfire risk. #OOTT". This week, Alberta posted the accumulated precipitation maps for Feb. Feb was another month of low snowfall across most of Alberta with only a small pocket in the NE Alberta above normal snowfall. For the winter Nov 1 thru Feb 28 accumulated precipitation winter, there have only been small pockets that above normal accumulated precipitation with the rest of Alberta split between normal accumulated precipitation and below normal precipitation. There are some very low snowfall areas such as around Banff and Canmore that are ~25% of normal winter accumulated precipitation. The big negatives for low snowfall are that it increases the wildfire risk and is bad for the farming sector. The one area that likes the less than normal snowfall along the Rockies is the Calgary region as it is a big reduction in flooding risk in the summer. Below is the Alberta accumulated precipitation vs normal for Feb and for Nov/Dec/Jan/Feb.

Low snowfall in Feb in Alberta

Figure 54: Alberta Precipitation Map for Feb & Nov-Feb vs normal



Source: Alberta

Oil & Natural Gas: TIPRO Texas oil and natural gas jobs up +1.9% in 2024, US +0.6% On Monday, Texas Independent Producers and Royalty Owners Association (TIPRO) posted its annual recap for 2024 that included updated oil and gas jobs data for the Texas upstream sector [LINK]. For 2024, there were 480,460 Oil & Gas workers in Texas alone, which is up +1.9% YoY from 471,631 in 2023, and for the entire US there were 2,055,516 people employed in Oil & Gas, up +0.6% YoY from 2,043,855 in 2023. TIPRO wrote "Despite facing a number of unique challenges, including geopolitical conflicts and an adversarial federal policy environment, the U.S. oil and gas industry continued to offer significant economic

TIPRO 2024 jobs update



support in 2024, while providing reliable and affordable energy to meet growing domestic and global demand. According to TIPRO, the U.S. oil and gas industry supported a total of 2,055,516 direct jobs in 2024, which represented a net increase of 10,694 direct jobs compared to 2023. Total direct and indirect jobs for the U.S. oil and gas industry exceeded 22 million last year. In Texas, direct industry employment was 480,460 in 2024, compared to 469,847 jobs the previous year, a net gain of 10,613, subject to revisions. California was the second largest employer (148,469), followed by Louisiana (95,065), Pennsylvania (77,925) and Oklahoma (68,413). Together, direct and indirect oil and gas employment totaled 2.8 million in Texas last year. These jobs also pay extremely well, with an average annual wage of \$128,876 in Texas, 74 percent higher than all average private sector wages in the state." Our Supplemental Documents package includes the TIPRO recap.

03/31/24: TIPRO Texas oil and natural gas jobs up +5.1% in 2023, US +2.8% Here is what we wrote in our March 31, 2024 Energy Tidbits memo about TIPRO's 2023 recap: "Last week the Texas Independent Producers and Royalty Owners Association (TIPRO) posted its annual recap, which included their updated their employment figures for the Texas upstream sector for FY 2023 [LINK]. By year-end 2023, there were 471,631 Oil & Gas workers in Texas alone, which is up +5.1% YoY from 448,064 in 2022, and for the entire US there were 2,043,855 people employed in Oil & Gas, up +2.8% YoY from 1,987,482 in 2022. TIPRO wrote "Despite facing a number of unique challenges, including geopolitical conflicts and an adversarial federal policy environment, the U.S. oil and gas industry continued to offer significant economic support in 2023, while providing reliable and affordable energy to meet growing domestic and global demand. According to TIPRO, the U.S. oil and gas industry supported a total of 2,043,855 direct jobs in 2023, which represented a net increase of 56,373 direct jobs compared to 2022. Total direct and indirect jobs for the U.S. oil and gas industry exceeded 24 million last year. In Texas, direct industry employment was 471,631 in 2023, compared to 448,064 jobs the previous year, a net gain of 23,567, subject to revisions. California was the second largest employer (148,729), followed by Louisiana (92,320), Pennsylvania (80,321) and Oklahoma (70,763). Together, direct and indirect oil and gas employment totaled 2.9 million in Texas last year. These jobs also pay extremely well, with an average annual wage of \$124,453 in Texas, 74 percent higher than all average private sector wages in the state"."

Oil & Natural Gas: Trump tells Greenlanders he will make them rich

As we were watching the Trump SOTU address, we posted [LINK] "Trump supporter or not. He knows how to make a straightforward sales pitch to Greenlanders on why they should choose to join the US. "we will keep you safe. we will make you rich". Only ~60,000 Greenlanders to make rich. #OOTT." Trump featured his sales pitch to Greenland in the SOTU. He said "And I also have a message tonight for the incredible people of Greenland. We strongly support your right to determine your own future. And if you choose, we welcome you into the United States of America. We need Greenland for national security and even international security. And we're working with everybody involved to try and get it, but we need it really for international world security And I think we're going to get it. One way or the other we're going to get it. We will keep you safe. We will make you rich. And together we will take Greenland to heights like you have never thought possible before. It's a very small

Trump's sales pitch to Greenlanders



population, but very, very large piece of land and very, very important for military security." Our tweet reminded there are less than 60,000 Greenlanders. We thought it was a simple message to Greenlanders and a message consistent with Trump's view on money – if Greenlanders choose to join the US, the US will make them rich.

Trump wants Greenland, would be a big strategic deal

Here is what we wrote in our Dec 29, 2024 Energy Tidbits memo on Trump wanting Greenland. "Trump wants Greenland, would be a big strategic deal. Early Monday morning, we posted [LINK] "Method to Trump madness! Greenland has huge strategic value for US is why Trump wants to buy Greenland again. US would control both ends of Northwest Passage and controlling major international shipping lanes has military and commercial value. See \$\iiint 08/18/2019 SAF Group Energy Tidbits memo. But expect Denmark/Greenlanders to reject. #OOTT." Last Sunday, Trump announced the appointment of his ambassador to Denmark and wrote ""For purposes of National Security and Freedom throughout the World, the United States of America feels that the ownership and control of Greenland is an absolute necessity." No surprise on Monday, Greenland Prime Minster Mute Egede rejected Trump's statement and wrote "Greenland is ours. We are not for sale and will never be for sale. We must not lose our long struggle for freedom." Trump raised interest in his first term and was rejected. Our post included what we wrote in our Aug 18, 2019 Energy Tidbits memo on Trump's first buy Greenland desire. It isn't an oil and gas upside, rather we see it as a hugely strategic position for the US as it would give the US control over both ends of the Northwest Passage. An, as seen elsewhere, controlling major shipping lanes is a strategic asset for both commercial and military reasons.".

Trump has always wanted to buy Greenland as it would be of strategic value

Here is what we wrote in our Aug 18, 2019 Energy Tidbits memo. "Trump buying Greenland would be of strategic value. We recognize Trump was ridiculed for his asking his advisors about buying Greenland. We have no idea if Trump was truly serious about wanting to try to buy Greenland. Surely he would have expected Greenlanders to vote no especially as they are viewed as anti resource development. The primary reason being attributed for his interest is Greenland's mineral and oil potential. We would say no to oil and gas. its not that Greenland doesn't have oil and gas potential, its that it hasn't worked to date (albeit with only limited exploration wells) and the US doesn't need it. We were surprised that Trump defenders didn't try to stop the ribbing by noting Greenland as big strategic value to the US in a world of global warming. Not so much that Greenland would be accessible, rather Greenland's strategic location in a world of global warming and increasing ability for ships/tankers to move thru the Northwest Passage. If Greenland was the US, the US would effectively share the effective control at both ends of the Northwest Passage with Russia on one end and Canada on the other end. Not a bad positioning. As we have seen in 2019, effective control of major waterways has been a major issue in the Strait of Hormuz, Bab el Mandeb, Strait of Gibraltar, and Strait of Malacca. "

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Figure 55: Northwest Passage



Source: Geology.com

Electricity: Ontario 25% surcharge on electricity exports to NY, Michigan, Minnesota

On Tuesday, we posted [LINK] "Ontario adds 25% surcharge on electricity exported to New York, Michigan & Minnesota and "I won't hesitate to increase this surcharge or, if necessary, shut the electricity off completely" Ontario Premier @fordnation. No surprise, Ford just won 3rd straight majority taking 80 of 124 seats. #OOTT." On Friday, Premier Ford confirmed the 25% surtax is starting tomorrow. The Ontario surtax on electricity exports is separate from the Cdn government tariff response. Ontario will be hit hard by the any tariffs as it is the major provincial trade partner, apart from oil and natural gas, with the US. And as usual, Premier Ford had some great quotes such as "You touch the stove once, you get burned, you don't touch that stove again," Ford said. "We're going to make sure that we follow through with what we said we were going to do." Our Supplemental Documents package includes the Ontario Mar 4 release.

Ontario 25% surtax on electricity exports

Ontario surtax will hit hard certain regions of each state

We looked at the EIA data for international electricity imports for Michigan, Minnesota and New York, which are generally less than 10% of the electricity supplied in these states. However, Minnesota Governor Tim Waltz reminded there will be regional hits. The CBC reported "His office said the increased costs will be "particularly acute for industrial customers in the northeastern part of the state where energy and supply chains will get more expensive." For the states in total, the EIA reported that international electricity imports for 2023 as a percentage of total net electricity generation were 3.6% in Michigan, 11.5% in Minnesota, 6.1% in New York. were

China BYD sales

Energy Transition: China's BYD Feb sales, NEV up huge YoY, PHEV are 1.5x BEV Last Sunday morning, BYD posted its February BEV and PHEV sales data. We were able to included it in last week's (Mar 2, 2025) Energy Tidbits memo and we wrote "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. Our Supplemental Documents package includes the BYD release."

Figure 56: 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%
	250,279 364,400	40.1% 58.5%	160,212 162,555	49.5% 50.2%	90,067 201,845	56.2% 124.2%
BEV PHEV Commercial Vehicle - Bus	,				,	124.2%
PHEV Commercial Vehicle - Bus	364,400	58.5%	162,555	50.2%	201,845	
PHEV	364,400 739	58.5% 0.1%	162,555 526	50.2% 0.2%	201,845 213	124.2% 40.5%

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

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.

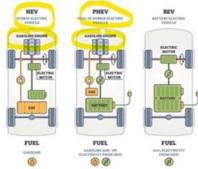


HEVs & PHEVs are really just more fuel-efficient ICE vehicles

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 57: HV vs PHEV vs BEV



Source: Engineering Infrastructure\

Energy Transition: EU makes annual EVs target compliance & penalty into 3 yrs period

On Monday, we posted [LINK] "Good news/Bad News for EU carmakers. Good news: EU "instead of annual compliance, Co's will get 3 years" to meet BEV targets & related penalties. Bad news: BEV targets & related penalties aren't reduced. Just become a future liability to catch up and/or pay. #OOTT." The EU posted what they saw is a reason to help the BEVs push while also not changing the EU's targets/goals and recognizing that some car companies have pushed to be compliant with the EV targets. The key was that the EU didn't reduce any BEV target complies or reduce any penalties. Rather they moved from an annual compliance to a three-year compliance and penalty. And, as the EU described it, it's banking and borrowing ie. you can borrow but have to pay it back. Not having to comply on an annual basis is better but we don't expect it will change the view of the car manufacturers of the increasing challenge to ramp up EVs sales in EU. The EU wrote "The second topic that we have discussed was the transition towards clean mobility. There is a clear demand for more flexibility on CO2 targets. The key principle here is balance. On the one hand, we need predictability and fairness for first movers, those who did their homework successfully. That means that we have to stick to the agreed targets. On the other, we need to listen to the voices of the stakeholders that ask for more pragmatism in these difficult times, and for technology neutrality. Especially when it comes to the 2025 targets and related penalties in case of non-compliance. To address this in a balanced manner, I will propose a focused amendment to the CO2 Standards Regulation this month. Instead of annual compliance, companies will get three years – this is the principle of banking and borrowing; the targets stay the same; they have to fulfil the targets. It means more breathing space for industry and more clarity, and without changing the agreed targets." Our Supplemental Documents package incudes the EU release.

EU moves from annual to 3 yr EV compliance

Energy Transition: Saudi Aramco continued reality check hydrogen costs too much

No one should have been surprised to see Saudi Aramco CEO Nasser's comments in the Q4 call on Tuesday that blue and green hydrogen still costs too much and, as a result, there still aren't buyers who are prepared to commit to deals that allow the commercial development of blue or green hydrogen. And, as a result, Saudi Aramco has pushed back its target for hydrogen from 2027 to 2030. Our Energy Tidbits memos have noted a range of views from other parties that are consistent with the Saudi Aramco view – the costs or hydrogen are

Aramco says hydrogen is still expensive



nowhere near competitive and buyers won't step up to provide the buyer commitment for a commercial blue or green hydrogen. On Tuesday, we posted [LINK] "Hydrogen reality check from @aramco CEO Nasser today. Still can't get buyer commitment for a commercial blue hydrogen project. Blue hydrogen costs \$200 per boe. Green hydrogen costs \$400 per boe. Push back potential 1st project from 2027 to 2030. Unchanged view from - 09/18/23 post. #Oil #NatGas will be needed for longer. #OOTT." Our post noted that Nasser's comments in the Q4 call are essentially the same as he said in September 2023. In the Q4 call, Nasser said "In blue hydrogen, we continue to evaluate our growth opportunities and will only go ahead if we secure offtake agreement with appropriate return. On this front commercial discussion ongoing. However, until these come to fruition, our focus is on discipline with a revised target of 2.5 million ton per annum by 2030 while continuing to pursue value-creating opportunities in this space." And then in the Q&A, Nasser replied "With regard to blue ammonia, you are absolutely right. We have been saying from day one, it is expensive. But if the offtake -- not only for blue hydrogen, it's even for green hydrogen. We always said that green hydrogen is around \$400 per barrel of oil equivalent or more and blue ammonia or blue hydrogen is around \$200 per barrel of oil equivalent. What we have done in Aramco is, we did the engineering to know that when bidding comes, we will know what to bid. Because bidding is basically based on an offtake, an offtake for a long-term we need to know exactly where to price our ammonia. And our number reflected the market today. We think we have adjusted it. We had 2.5 million tons per annum by 2027. Now we adjusted it to 2030. You are right, the 11 million ton is there. We did the engineering. We are waiting for the market to develop and the offtake. We are bidding right now at this stage. We did bidding a couple of months ago in Korea. We are waiting for the results of these bids. But the market is not developing quick enough considering the high cost and we understand that. And we said that from the beginning. But we are ready to avail any quantities provided the offtake is there. And we have been very prudent. We always said we will not kick start the project until the offtake is there. And this is what we have done."

9/18/23: Aramco CEO, green hydrogen is expensive at \$200-\$400/boe

Saudi Aramco's Q4/24 call comments on hydrogen are essentially unchanged oer the past 18 months. And we have not seen any reports in that period of any companies making any significant advancements in producing renewable/green hydrogen on a more cost-effective manner. Rather, industry has continued to warn for the last couple years that renewable/green hydrogen is nowhere near being cost competitive. Here is what we wrote in our Sept 24, 2023 Energy Tidbits memo. "As noted above, our tweet on the Saudi Aramco CEO Nasser speech was [LINK] "Reality checks from @aramco CEO today. Headlines "many shortcomings in the current transition approach" "aggregation of unrealistic scenarios". #GreenHydrogen costs \$200-\$400/boe. "#CCS can no longer be the bridesmaid" And more! #Oil #NatGas will be needed for longer. #OOTT." (ii) No one should be surprised that Nasser highlighted that green hydrogen is expensive and no buyers have stepped up to commit to buy any commercial sized quantities of hydrogen. Nasser said "Then there is Green Hydrogen. Today, "production" costs are in the range of \$200 to \$400 per barrel of oil equivalent, which is why commercial offtake agreements are hard to come by. I want to stress that alternatives like wind, solar, and hydrogen are considered to be the bedrock of transition." (iii) Nasser also highlighted how CCS is a



must have for the energy transition. Nasser said "I think it is time the world also gave greater attention to man-made carbon sinks, particularly CCS. It could be deployed in a variety of sectors, including hard-to-abate industries, power plants using coal and gas, biomass-based power stations, and even through Direct Air Capture. The potential climate gains would likewise be large. One scenario suggests that integrating CCS with cement plants might capture and store about 95% of CO2 emissions from the entire sector by 2050. But some estimates suggest that CCS capacity needs to grow 120 times by 2050 for countries to meet their net-zero commitments. CCS can no longer be the bridesmaid of transition; it is central to our industry's future, but even more importantly global climate goals. Last but not least, steel, aluminum, and cement account for about 20% of global CO2 emissions. In fact, if the cement industry were a country, it would be the third-largest emitter of CO2!".

01/24/25: Fortescue CEO, green hydrogen demand hasn't emerged

Here is what we wrote in our Jan 26, 2025 Energy Tidbits memo. "We have been highlighting for years that green hydrogen doesn't come anywhere near close to being economic or expected to be economic. Fortescue Energy is the green energy arm of Australian miner, Fortescue, and Reuters reported on comments by CEO Mark Hutchinson on the sidelines in Davos. On Friday, we posted [LINK] "If you're waiting for someone to pay you extra because it's green [hydrogen], forget it ... at the end of the day, the economics have to work" Fortescue Energy CEO. Green costs more than blue/grey & they can't attract buyers in scale. More #NatGas will be needed for longer. Thx @divyachowdhury @LPM94 #OOTT." Hutchinson seemed to keep optimism that green hydrogen could work in the future as they get costs down. But until then, Reuters wrote ""(The) green hydrogen, ammonia (sector) is not where we thought it would be," the CEO said on the sidelines of the World Economic Forum's annual meeting in the Swiss resort on Thursday "The demand hasn't emerged in the way it should, (but) over the next few years we're hoping demand will (rise) as prices come down," he said. "If you're waiting for someone to pay you extra because it's green, forget it ... at the end of the day, the economics have to work," he added."

BNEF tripled its forecast cost to produce Green Hydrogen

No one should be surprised by this week's Saudi Aramco CEO comments or Fortescue Jan 24, 2025 comments because the cost to make green hydrogen keep going higher and higher. Here is what we wrote in our Dec 29, 2024 Energy Tidbits memo. "BNEF triples its forecast cost to produce Green Hydrogen. We have been highlighting for years that we expect agencies and forecast groups to increase (hit) the costs of key energy transition items like Green Hydrogen. On Monday, we saw a massive change in message and a massive increase in costs to produce Green Hydrogen from BloombergNEF, who did an about-face from its history of forecasting declining costs to produce Green Hydrogen to one where they are tripling the future cost to produce Green Hydrogen. That is a WOW, moving from forecasting lower costs to a tripling of costs. On Monday, we posted [LINK] "Huge Green Hydrogen cost reality check! @BloombergNEF had in the past forecast steep declines in the price of green hydrogen....But in its forecast published Monday, the firm more than tripled its 2050 cost estimate, citing higher future costs for the electrolyzers



themselves". If world wants hydrogen, it will have to be from #NatGas. Thx @DavidBakerSF Payal Kaur #OOTT" This was from its Monday report "Green Hydrogen Prices Will Remain High for Decades, BNEF Warns." Our Supplemental Documents package includes the Bloomberg report."

BNEF, Green Hydrogen costs 4X cost of hydrogen from natural gas

And the costs to make green hydrogen are nowhere near competitive. Here is what we wrote in our Dec 29, 2024 Energy Tidbits memo. "BNEF, Green Hydrogen costs 4x cost of hydrogen from natural gas. We have also been highlighting the costs to produce Green Hydrogen as also multiples more than producing hydrogen from natural gas. BlombergNEF's revised view on the cost to produce Green Hydrogen now estimates Green Hydrogen costs 4X the cost to produce hydrogen from natural gas. The other problem is that, even though hydrogen from natural gas is way cheaper than green hydrogen, hydrogen from natural gas hasn't been able to attract long term customer buyers in size to give hydrogen developers the confidence to build sizeable hydrogen supply projects. On Monday, we posted [LINK] "Here's why Green Hydrogen projects are getting cancelled. Green hydrogen costs 4x more than hydrogen from #NatGas. Thx @MathisWilliam. That's bad enough. But @Equinor doesn't see blue hydrogen as being economic ie. no significant customer base. See - 10/24/24 post. #OOTT." Bloomberg wrote "As a result, hydrogen produced using clean energy costs four times as much as that made from natural gas, according to BNEF. Hardly surprising, then, that the majority of projects don't have a single customer stepping up to purchase the fuel. And without willing buyers, there can be no output." Our Supplemental Documents package includes the Bloomberg report.

Capital Markets: Trump to use Other People's Money to capitalize Bitcoin reserve

On Friday, we posted [LINK] "Trump supporter or not, he knows how to use Other People's Money for his benefit. US to use OPM, in this case Bitcoin seized from bad guys, to capitalize Bitcoin Strategic Reserve ie. no US \$\$ needed! Wonder how will he use OPM to obtain oil to fill SPR? #OOTT." The structure of the capitalizing may have surprised the market but it reminded us that Trump knows how to use OPM so it is something that we should expect to see more OPEC deals. On Thursday night, Trump's crypto czar, David Sacks, announced the creation of the Strategic Bitcoin Reserve. The negative market commentary after was that the US wasn't going to buy Bitcoin for the reserve. Rather they are capitalizing the reserve with their seized Bitcoin and any future acquisitions must be "budget-neutral strategies". Sacks wrote "The Reserve will be capitalized with Bitcoin owned by the federal government that was forfeited as part of criminal or civil asset forfeiture proceedings. This means it will not cost taxpayers a dime." Sacks also noted that US Digital Asset Stockpile will be funded the same way. Sacks wrote "IN ADDITION, the Executive Order establishes a U.S. Digital Asset Stockpile, consisting of digital assets other than bitcoin forfeited in criminal or civil proceedings. The government will not acquire additional assets for the Stockpile beyond those obtained through forfeiture proceedings." Our Supplemental Documents package includes the Sacks post.

Trump's Strategic Bitcoin Reserve



Capital Markets: UN FAO Food Price Index up MoM in Feb, up +8.2% YoY

We will want to watch how food commodity prices trend as they seem to be creeping higher. And if food commodity prices move higher, then it means that prices that flow thru to the grocery stores will likely up by an even higher amount. The UN FAO Food Price Index (FFPI) is a monthly food commodities measure and not an index of consumer food prices or food prices in grocery stores. However, increases or decreases in food commodity prices should, in theory, eventually work their way into grocery prices. But the big wildcard of commodities is that they have to be made into products and have to get thru the supply chain layers to reach grocery store shelves. The UN FFPI increased in February by +1.6% MoM compared to the revised January level. The index is up +8.2% YoY but remains -20.7% below the March 2022 peak. On Friday, the UN posted its monthly update of its FAO Food Price Index titled "The FAO Food Price Index rose in February 2025, driven by higher sugar, dairy and vegetable oil prices" [LINK]. Note that the index is calculated on a Real Price basis. The FFPI averaged 127.1 points in February, up 2.0 points from the January figures, and is up +9.7 points YoY. The FFPI reported categories saw significant increases in sugar, dairy, and vegetable oils, while meat remained stable. The Vegetable Oil Index was up +2.0% MoM and up +29.1% YoY. The increase was driven by higher palm, rapeseed, soy, and sunflower oil prices. The Dairy Price Index was up +4.0% MoM and up +23.2% YoY. The Cereal Price Index was up +0.8% MoM but still down -1.1% YoY. The Meat Price Index was immaterially changed by -0.1% MoM and up +4.8% YoY. The Sugar Price Index was up +6.6% MoM but down -15.8% YoY. Below is a chart of the FFPI in nominal and real terms.

FAO food price index

Figure 58: UN FAO Food Price Index



Source: UN FAO

Capital Markets: Most Canadian provinces remove US booze from store shelves

Ontario Premier Ford also took the lead in responding to the Trump tariffs by pulling all US booze from the shelves of the LCBO. All booze sales in Ontario are from the LCBO, which means the US booze is removed from all Ontario booze stores. On Tuesday, we posted [LINK] "Don't forget the LCBO is one of the largest buyers of wines & spirits in the world! And sold \$0.9 billion of US spirits & wine in last fiscal year. Also LBCO paid \$2.43 billion in dividends to Ont govt." The LBO is one of the largest buyers of alcohol in the world. As of our 7am MT news cut off, we have only seen similar actions from British Columbia, New Brunswick, Newfoundland and Labrador, and Nova Scotia.

US booze taken from Cdn store shelves

Jack Daniels CEO says taking product off the shelves is worse than a tariff Jack Daniels is part of Brown-Forman, wo held its Q4 call on Wednesday. CEO



Whiting noted that Canada is a small market for Brown-Forman but reminded taking products off the shelves is the worse thing because it means sales are zero. In the Q&A, CEO Whiting replied "recognizing Canada particularly is different than the others. So, yes, yesterday they removed basically American not just beverage alcohol, but a lot of American-made products have come off the shelves in Canada, which is tough. I mean, that's worse than a tariff, because it's literally taking your sales away. Completely removing our products from the shelves, that's a very disproportionate response to a 25% tariff. So, frustrating, and we're going to continue to try to fight for getting, as I said just a minute ago, these reciprocal to zero-for-zero tariffs is the best thing for our industry as a whole. And we're going to see how see how that all plays out. Now, Canada is not a massive company for Brown-Forman, and it's around 7% of our sales. So, we can withstand, and it's disappointing that some of our consumers aren't going to be able to get our bottles of Jack Daniel's up there because it's a big brand in Canada and popular. But we will see how this this plays out, and the rumors continue to float around Canada every day."

Oil: Only six changes in S&P TSX Composite Index quarterly reset

On Friday after the market close, the S&P announced the quarterly changes to the S&P/TSX Composite Index. There were only six changes that are effective at the start of trading on March 24. But the index buying and selling will be starting tomorrow. Added to the Composite Index are Endeavour Silver Corp and G Mining Ventures Corp. Deleted from the Composite Index are Interfor Corporation, Mattr Corp, MTY Food Group Inc and Storagevault Canada.

Changes to TSX Composite Index

Demographics: CDC "we apologize for any disruption" as they call back workers

We won't give the same level of criticism for the way the CDC did their mass layoffs a month ago and now having to call back some employees because we haven't seen the CDC saying what all companies do when they call their people their most important asset. But that doesn't mean we continue to highlight how the tech way of laying off people is one that makes it easy for managers to get rid of staff. The old days of layoffs aren't that many years ago and the old days made managers think long and hard about both hiring and laying off people. The toughest job for a manager was to call someone and have a face-to-face meeting telling someone they were being laid off. So given this is new way of laying off people, we aren't surprised by the lack of personal respect/concern for their employees in the CDC reported email to employees when they realized they laid off too many people a month ago. The CDC apologized for "any disruption" by their lay off notice and now calling the people back to work as if it was an inconvenience of a detour will driving home from work. AP reported "The nation's top public health agency says about 180 employees who were laid off two weeks ago can come back to work. Emails went out Tuesday to some Centers for Disease Control and Prevention probationary employees who got termination notices last month, according to current and former CDC employees. A message seen by the AP was sent with the subject line, "Read this e-mail immediately." It said that "after further review and consideration," a Feb. 15 termination notice has been rescinded and the employee was cleared to return to work on Wednesday. "You should return to duty under your previous work schedule," it said. "We apologize for any disruption that this may have caused." About 180 people received reinstatement emails, according to two federal health officials who were briefed on the tally but were not authorized to discuss it and spoke on condition of

CDC's email calling people back to work



anonymity."

01/23/24: eBay is another to use modern alyoffs communications method

Here is what we wrote in our Jan 28, 2024 Energy Tidbits memo on eBay mass layoff. 'eBay is another to use modern layoffs communication metod. Our primary concern with the modern way of communicating layoffs is that it doesn't help develop managers. Anyone who has had to layoff someone knows it is one of the toughest things to do as it should be. If you think you have it tough as a manager, put yourself in the shoes of the person being laid off. But now technology companies do mass layoffs by zoom and email like seen this week when the eBay CEO sent out his letter [LINK] "ensuring eBay's Long-Term Success", wherein he advised "The most significant and toughest of these decisions is to reduce our current workforce by approximately 1,000 roles or an estimated 9% of full-time employee" and that they would be advising employees "Shortly, we will begin notifying those employees whose roles have been eliminated and entering into a consultation process in areas where required. Leaders will communicate the news directly via Zoom, and your VP or eLT member will send an email once the notifications in their group have been completed. We request that all U.S. employees work from home on January 24th to provide some space and privacy for these conversations. We're committed to treating everyone with respect and empathy through this transition and providing impacted employees with support and resources." Every company, or at least almost every company, always talks about people as their most important asset or their competitive advantage. But we continue to believe firing people via zoom and email can't be a positive from the perspective of employees being fired and other employees who watch it happen. And we don't see how it makes the managers better managers of people. Firing people by email may make it easier to do, but the fear is that is that it doesn't make the manager think really hard about hiring someone. Anyone who has managed people knows that the hardest and most stressful thing to do as a manager is to sit face-to-face with someone and tell them they are being fired. But that is nowhere near as bad as the person getting fired. When a manager has to do that, it means they also think twice before hiring because you don't want to hire people if they aren't right or you don't need to position. So when we see eBay's process, we don't believe it has the impact on the manager's approach to staffing. They don't have some basic level of respect to someone who has been part of the team to tell them face-to-face. And as we see now, hiring and layoffs are now just part of a more regular part of business. Our Supplemental Documents package includes the eBay CEO note."

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.

Corey Conners in the hunt at the Arnold Palmer Invitational

It will be golf watching afternoon again today with the final round at the Arnold Palmer Invitational with Cdn star golfer Corey Connors in in the hunt. This is a signature PGA event, which means it's a small field, big payout event with \$4mm to the winner, \$2.2 mm to second, and \$1.4 mm to third. It seems like a course that suits Corey as it is a tough course requiring hitting the fairway. He always seems to do well on tough courses as opposed to wide open courses that reward the longest hitters. He is sitting 3rd at -8, following Colin Morikawa at -10 and Russell Henley at -9. There are only three other golfers within 5 shots of the lead: Jason Day at -7, Michael Kim and Tony Finau at -5.

Wine of the week: 2001 Vall Llach Priorat

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 Friday, I posted the wine of the week, the 2001 Vall Llach Priorat. The signature Vall Llach and its second wine, the Embriux, have been favorite Priorat wines. I bough a couple cases of each in the mid-2000s and there were some great years and I am down to about 3 or 4 of each. I decanted for a few hours. The 2001 Vall Llach had a recommended drinking window a decade ago but it was another example that great wines stay great for much longer than expected. Still drinking very well but I will put on my to drink the rest in 2025 and 2026.

Figure 59: 2001 Vall Llach Priorat





Read All Review

The flagship cuvee, the 2001 Vall Llach, was fashioned from 65-year old Carignan vines (50%), Merlot (35%), and Cabernet Sauvignon (15%). It spent 17 months in new French oak prior to bottling. This deep ruby/purple colored offering exhibits great intensity, a beautifully textured mid-palate, and a 45-second

Source: SAF Group, K&L Wines



Five years ago, March 12, 2020, was Alberta's first Covid lockdown

It was March 5, 2020 that Alberta announced its first case of Covid, although it was later determined the first case was actually Feb 24, 2020. But that quickly escalated and it's still hard to believe it's been five years since the lockdown in Alberta first happened. But it was March 12, 2020 that Alberta put its first restrictions cancelling all gatherings with more than 250 people. That quickly escalated all schools being closed on March 15, 20-20, and then the declaration of the public health emergency on March 17.

Haven't heard someone being called a numbskull for many decades

I can't remember how many decades ago it was since I have heard someone call someone else a numbskull. I think it was gong back to 60s or early 70s at the latest. But this week, Treasury Secretary Scott Bessent was at the Economic Club of New York event when he said "If you want to be a numbskull like Justin Trudeau and say, 'Oh we're going to do this,' then tariffs are going to go up." Bessent added, "If you want to sit back and havea discussion with the Commerce Department, USTR-they have my phone number too-then I am happy to have a discussion with our foreign counterparts." Mayb e Bessent's next out-of-date name will be dunce. If you look at Merriam Webster for the definition, they write "a dull or stupid person: dunce". Dunce is another word I haven't heard since the 60s. Imagine if they made a young teenager wear a dunce cap in school in these days?

Commerce Secretary Lutnick just missed the 9/11 attack

Older people can remember 9/11 as it was only a few years ago, but get reminded that that it was 24 years ago when we talk with younger people. I was having coffee this week with a mid-30's investment professional and talking about Howard Lutnick being sent out to communicate the changing message on Canada tariffs. He had never heard of Lutnick's 9/11 story. Lutnick was at Cantor Fitzgerald who lost 658 employees out of their 960 employees that worked in the 2 World Trade Center, that was hit by the hijacked United Airlines Flight 175. The only reason why Lutnick wasn't in the office that morning was that hey had taken his son to kindergarten that day. Lutnick's brother Gary died that day.