

Energy Tidbits

January 21, 2024

Produced by: Dan Tsubouchi

IEA “OPEC+ supply management policies may tip the oil market into a small deficit at the start of the year” i.e., OPEC cuts working

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 1999 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. Our 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 our review of investor days, conferences and earnings calls focusing on sector developments that are relevant to the sector. Our target is to write on 48 to 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. IEA had a negative message on oil in its OMR but an overlooked quote was “and “OPEC+ supply management policies may tip the oil market into a small deficit at the start of the year” i.e., OPEC's policies are working. [\[click here\]](#)
2. Libya says it is restoring Sharara oil production today, should get Libya back to ~1.2 mmb/d. [\[click here\]](#)
3. US and Houthis keep going back and forth on missile/drone attacks ie. no end in sight to Red Sea attacks. [\[click here\]](#)
4. HH natural gas prices are down \$0.71 WoW to \$2.52 as NOAA forecasts a hot end to Jan and warmer than normal Feb. [\[click here\]](#)
5. US Climate Envoy Kerry says it's a “policy necessity” for increased US oil supply to help keep gasoline prices “low enough that you don't have revolutions in countries all around the world”. [\[click here\]](#)
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 [\[LINK\]](#).

Dan Tsubouchi
Chief Market Strategist
dtsubouchi@safgroup.ca

Ryan Dunfield
CEO
rdunfield@safgroup.ca

Aaron Bunting
COO, CFO
abunting@safgroup.ca

Ryan Haughn
Managing Director
rhaughn@safgroup.ca

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Table of Contents

Natural Gas: -154 bcf draw from US gas storage; now +350 bcf YoY surplus	7
Figure 1: US Natural Gas Storage	7
Figure 2: US Natural Gas Storage – Historical vs Current	7
Natural Gas: NOAA forecasts much warmer than normal temperatures to end Jan	7
Figure 3: NOAA 6-10 day temperature outlook as of Jan 20	8
Figure 4: NOAA 8-14 day temperature outlook as of Jan 20	8
Natural Gas: NOAA forecasts warmer than normal Feb	8
Figure 5: NOAA Temperature Outlook for February	9
Figure 6: NOAA Historical US Temperate Ranks by State	10
Natural Gas: NOAA forecasts warmer than normal Feb/Mar/Apr	10
Figure 7: NOAA Seasonal Temperature Outlook for Feb/Mar/Apr	10
Figure 8: US Statewide Average Temperature Ranks (Feb/Mar/Apr 2023)	11
Natural Gas: 62% of US homes have winter home heating fueled by natural gas	11
Figure 9: Fuels for winter home heating of US homes	12
Figure 10: Fuels for winter home heating by region	12
Natural Gas: EIA, US shale/tight natural gas to dip below 99 bcf/d in Feb 2024	12
Figure 11: EIA Major Shale/Tight Natural Gas Production	13
Figure 12: MoM Change – Major Shale/Tight Natural Gas Production	14
Natural Gas: Red Sea forcing US LNG to Asia via the Cape of Good Hope	14
Figure 13: Laden US LNG transits by route	14
Figure 14: LNG on water for 20 days or more	15
Natural Gas: Mexico Pacific, ExxonMobil complete option for LT LNG Offtake Deal	15
Figure 15: Long-Term LNG Buyer Deals Since July 1, 2021	16
Natural Gas: India December natural gas production basically flat MoM at 3.57 bcf/d	16
Natural Gas: India LNG imports flat MoM at 2.73 bcf/d in December, up +0.29 bcf/d YoY	17
Natural Gas: Above normal temperatures in Japan in December	17
Figure 16: JMA Mean Temperature Anomalies Dec 2023	17
Figure 17: Japan Mean Temperature Anomalies Nov 2022	18
Natural Gas: Japan weather warmer than normal next 30 days, thru mid Feb	18
Figure 18: JMA Jan 20 -Feb 19 Temperature Probability Forecast	19

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Natural Gas: Japan LNG stocks up WoW, up YoY, and above 5-yr average	19
Figure 19: Japan LNG Stocks.....	19
Natural Gas: China natural gas production +2.9% YoY in December.....	19
Natural Gas: Western Europe forecast to warm for end of Jan/early Feb	20
Figure 20: ECMWF Jan 22-29 Temperature Probability Forecast	20
Figure 21: ECMWF Jan 29-Feb 5 Temperature Probability Forecast	21
Natural Gas: Europe storage drops big again WoW to 76.17%, flips to YoY deficit	21
Figure 22: European Gas Storage Level.....	21
Oil: US oil rigs -2 WoW to 497 rigs, US gas rigs +3 WoW to 120 rigs	22
Figure 23: Baker Hughes Total US Oil Rigs.....	22
Oil: Total Cdn rigs up +10 rigs to 223 total rigs	22
Figure 24: Baker Hughes Total Cdn Oil Rigs	22
Oil: US weekly oil production estimates up +0.100 mmb/d WoW to 13.300 mmb/d	23
Figure 25: EIA's Estimated Weekly US Field Oil Production.....	23
Figure 26: EIA's Estimated Weekly US Oil Production	23
Oil: North Dakota est 700,000 b/d of Bakken shut in on Jan 17, long slow recovery	24
Oil: Chevron reassured North Dakota they didn't buy Hess to spin the Bakken off.....	25
Oil: US shale/tight oil production in Feb 2024 in past 6-mth range of 9.6 to 9.7 mmb/d.....	25
Figure 27: US Major Shale/Tight Oil Production.....	26
Figure 28: MoM Changes in US Major Shale/Tight Oil Production	26
Oil: EIA DUCs down MoM in December, 11 th straight monthly decrease in DUCs	26
Figure 29: Estimated Drilled Uncomplete Wells in 2023	27
Oil: Chevron CEO sees US oil growth if producers return to “ways of the past”.....	27
Oil: US SPR reserves now -74.321 mmb lower than commercial crude oil reserves	28
Figure 30: US Oil Inventories: Commercial & SPR	28
Figure 31: US Oil Inventories: SPR Less Commercial	28
Oil: US gasoline prices +0.01 this week to \$3.08	28
Oil: Crack spreads widened \$0.37 WoW to \$24.47	28
Figure 32: Cushing Crude Oil 321 Crack Spread Jan 19, 2014 to Jan 19, 2024	29
Oil: Moving into period when Cdn heavy oil differentials normally seasonally narrow	29
Figure 33: WCS less WTI oil differentials	30
Oil: Refinery inputs up +0.135 mmb/d WoW to 16.653 mmb/d	30
Figure 34: US Refinery Crude Oil Inputs	30

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Oil: Wood Mackenzie estimates 1.8 mmb/d of US refinery capacity is offline	31
Oil: US net oil imports -0.528 mmb/d WoW as oil exports up +1.707 mmb/d WoW	31
Figure 35: US Weekly Preliminary Imports by Major Country	31
Oil: Pemex says new Olmeca refinery will be at max production capacity by March 31	31
Oil: Russian refineries processing oil down 27,000 b/d against Dec average	32
Figure 36: Russia refinery runs thru Jan 10 week	33
Oil: Russia crude oil shipments for Jan 14 week are above its commitment for 2024	33
Figure 37: Russia's seaborne crude shipments thru Jan 14 week	33
Oil: Drones hit Novatek's Ust-Luga complex, reminds Russia's Baltic Sea is at risk	34
Figure 38: Russia's LNG/natural gas infrastructure around Ust-Luga	34
Figure 39: Tankers loading crude at Russia terminals	35
Oil: OPEC MOMR: unchanged 2024 demand, 2025 demand +1.8 mmb/d YoY	35
Figure 40: Supply/Demand Balance 2023, Dec MOMR	36
Figure 41: Supply/Demand Balance 2023, Jan MOMR	36
Oil: IEA increases 2024 demand, but non-OPEC supply growth to outpace	37
Figure 42: IEA Global Demand Forecast by OMR Report	38
Oil: Red Sea escalation, US and Houthis go back and forth on missile/drone attacks	38
Oil: Maersk CEO, Red Sea could disrupt "for a few months at least, hopefully shorter"	39
Figure 43: Suez Canal vs Cape of Good Hope shipping routes	40
Oil: EIA estimates 8.8 mmb/d & 4.1 bcf/d thru Bab el Mandeb/Red Sea chokepoint	40
Figure 44: Bab el-Mandeb Strait, a world oil chokepoint	41
Figure 45: Bab el-Mandeb Strait, a world oil chokepoint	41
Figure 46: Crude oil, Condensate & Petroleum Products Flows Thru Strait of Hormuz	42
Figure 47: Volumes thru the Strait of Hormuz 2018-1H23	42
Oil: Libya cuts deal with protests, resuming Sharara oil production today	42
Oil: Multiple negatives on Chinese consumers, investors and households this week	43
Figure 48: China New Home Prices Fell for 7 straight months	44
Figure 49: Foreign investors sold most Chinese stocks since Oct 2022	44
Figure 50: China New Home Prices Fell for 7 straight months	45
Oil: China scheduled domestic flights down 1.6% WoW, didn't confirm a breakout	45
Figure 51: China scheduled domestic flights from BNEF Aviation Indicators Weekly reports	46
Figure 52: China Scheduled Domestic flights per Jan 15 report	46
Figure 53: China Scheduled International Flights per Jan 15 report	46

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Oil: Baidu China city-level road congestion at year ago levels.....	46
Figure 54: China city-level road congestion for the week ended Jan 17	47
Figure 55: China city-level road congestion for the week ended Jan 17	48
Oil: China oil production +4.6% YoY in December	48
Oil: Vortexa crude oil floating storage est 73.71 mmb at Jan 19, +1.15 mmb WoW.....	49
Figure 56: Vortexa Floating Storage Jan 1, 2000 – Jan 19, 2024, posted Jan 20 at 9am MT.....	50
Figure 57: Vortexa Estimates Posted 9am MT on Jan 20, Jan 13 and Jan 6	50
Oil: Vortexa crude oil floating storage WoW changes by regions	50
Figure 58: Vortexa crude oil floating by region	51
Oil: BNEF – global oil and product stocks surplus narrows WoW to 0.9 mmb.....	51
Figure 59: Aggregate Global Oil and Product Stockpiles	52
Oil: TomTom mobility: Asia-Pacific, NA down WoW, Europe up WoW.....	52
Figure 60: Mobility Indicators.....	52
Oil & Natural Gas: More cold in Alberta should help extend Cdn winter drilling	52
Energy Transition: Kerry “ <i>policy necessity</i> ” for more oil supply to avoid revolutions	53
Energy Transition: Kerry blames EV misinformation & community holding up wind.....	54
SAF transcript of John Kerry comments on Bloomberg on Jan 17	54
Energy Transition: Ford cuts F-150 Lighting production due to less demand.....	55
Energy Transition: EV share of sales up MoM ahead of reduced tax credits	58
Figure 61: US EV and Hybrid monthly sales	58
Capital Markets: Comments from Davos.....	59
Capital Markets: Great 9 months for Japanese stocks following Buffett interview	60
Figure 62: Nikkei/Topix Performance and Foreign buying of Japanese stocks	61
05/18/23: It was clear that foreign investors were following Buffett into Japan.....	61
Figure 63: Positive flows into Japanese equities for 7 th straight week	62
Capital Markets: Americans moved to low-tax states in 2023.....	62
Figure 64: State Individual Income Tax Rates 2023	63
Capital Markets: Foreign investors buy \$11.4bn in Canadian securities, mainly debt.....	63
Figure 65: Foreign Investment in Canadian debt securities	64
Demographics: China’s population shrinks for the 2 nd year in a row.....	64
Figure 66: China population.....	64
Twitter: Thank you for getting me to 10,000 followers.....	65
LinkedIn: Look for quick energy items from me on LinkedIn	65

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Misc Facts and Figures..... 65

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Natural Gas: -154 bcf draw from US gas storage; now +350 bcf YoY surplus

It's a story of too little, too late. North America finally had some cold weather, and it's beginning to show on the EIA weekly gas storage. But HH prices were down big to end the week at \$2.52.. For the week of Jan 12, the EIA reported a -154 bcf draw, bigger than the -82 bcf/d draw reported for the week of Jan 13, 2023. Total storage is now 3.182 tcf, representing a surplus of +350 bcf YoY compared to a surplus of +436 bcf last week. Two weeks ago was the highest storage has been in 5 years, with the previous high being 3,460 bcf from 2020. Total storage is +320 bcf above the 5-year average, up from the +348 bcf surplus last week. Below is the EIA's storage table from its Weekly Natural Gas Storage report [\[LINK\]](#).

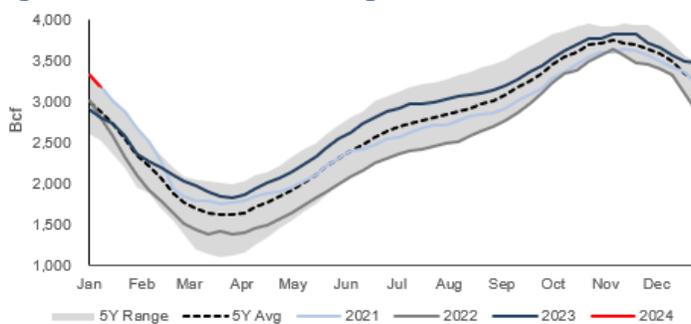
Figure 1: US Natural Gas Storage

Region	Stocks billion cubic feet (Bcf)				Historical Comparisons			
	01/12/24	01/05/24	net change	implied flow	Year ago (01/12/23)		5-year average (2019-23)	
					Bcf	% change	Bcf	% change
East	715	757	-42	-42	667	7.2	675	5.9
Midwest	873	924	-51	-51	790	10.5	798	9.4
Mountain	208	220	-12	-12	148	40.5	153	35.9
Pacific	257	275	-18	-18	157	63.7	212	21.2
South Central	1,128	1,160	-32	-32	1,069	5.5	1,024	10.2
Salt	332	332	0	0	305	8.9	311	6.8
Nonsalt	796	828	-32	-32	763	4.3	713	11.6
Total	3,182	3,336	-154	-154	2,832	12.4	2,862	11.2

Totals may not equal sum of components because of independent rounding.

Source: EIA

Figure 2: US Natural Gas Storage – Historical vs Current



Source: EIA, SAF

Natural Gas: NOAA forecasts much warmer than normal temperatures to end Jan

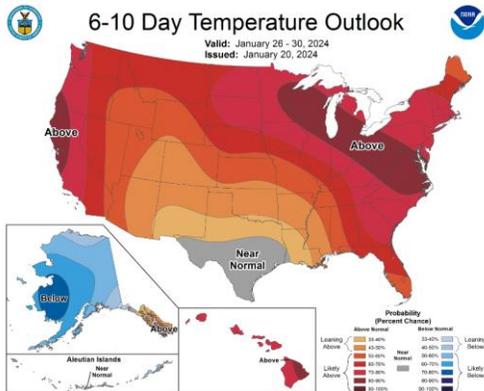
On Thursday evening, we tweeted [\[LINK\]](#) "HH down \$0.61 since Jan 12, looks like more HH #NatGas price weakness ahead. @NOAA updated 6-10 & 8-14 day cover Jan 24-Feb 1, calls for warmer than normal end to Jan. @NOAA updated Feb outlook calls for a little warmer than normal Feb. #OOTT." NOAA updates its 6-10 & 8-14 day temperature outlooks every day. Yesterday's updated temperature outlooks have a similar temperature outlook. Yesterday, we tweeted [\[LINK\]](#) "Continued negative to HH #NatGas. HH closed Fri at \$2.52, down \$0.79 from \$3.31 on Jan 12. @NOAA updated 6-10 & 8-14 day temperature outlook

NOAA 6-10 & 8-14 day temp outlook

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

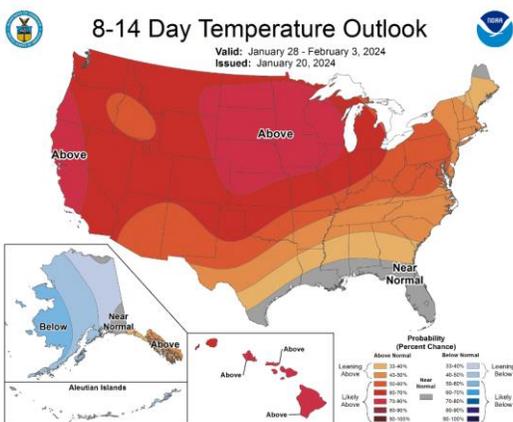
casts much warmer than normal for Jan 26-Feb 3, which is part of the normal peak winter weather demand period. #OOTT.” A hot end to Jan is never good, especially after it was warmer than normal in Nov and Dec. Last week’s (Jan 14, 2023) Energy Tidbits memo included our warning “Our concern is that if it turns warmer than normal in late Jan and starts Feb that way, HH gas prices will give up their recent gains.” And that has happened. Below are the NOAA 6-10 day and 8-14 day temperature outlooks posted yesterday, Jan 20.

Figure 3: NOAA 6-10 day temperature outlook as of Jan 20



Source: NOAA

Figure 4: NOAA 8-14 day temperature outlook as of Jan 20



Source: NOAA

Natural Gas: NOAA forecasts warmer than normal Feb

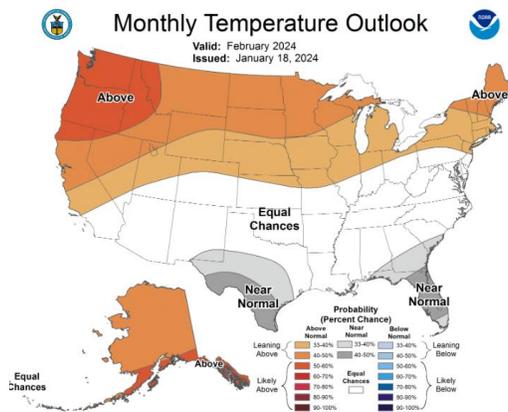
Our Thursday tweet noted above also included NOAA’s Jan 18 “Official 30-Day Forecasts”, which is their temperature outlook for Feb. [\[LINK\]](#). If you combine it with the same day issued 6-10 and 8-14 day outlooks that covered Jan 24-Feb 1 and called for much warmer than normal temperatures across all of the US, NOAA must be calling for temperatures to turn colder in the southern 2/3 of the US over Feb. NOAA’s Feb outlook calls for warmer than normal temperatures for the northern 1/3 of the US, normal temperatures for the middle third

Warmer than normal Feb

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.

and below normal temperatures for the SE and Texas. The problem for natural gas is that after a warm Nov and Dec and warmer end to Jan, this type of temperature outlook for Feb will continue to be another negative to HH prices. But the caveat is always that weather forecasts are far from 100%.

Figure 5: NOAA Temperature Outlook for February



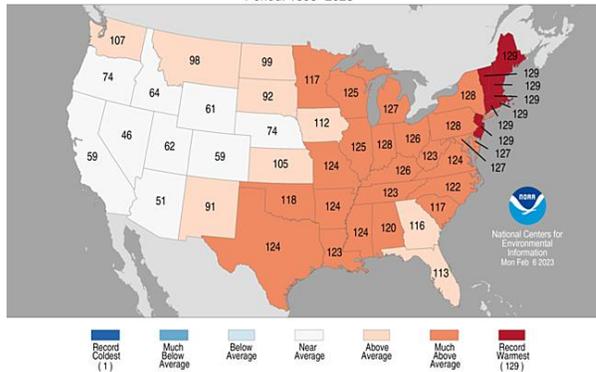
Source: NOAA

NOAA Feb 2023 temperatures in US was the 28th hottest in last 129 years

Here is what we wrote in our March 12, 2023 Energy Tidbits memo. “On Thursday, we tweeted [LINK](#) “Never good for #NatGas prices when its HOT in winter. Key reason why HH #NatGas fell from >\$7 pre Xmas to <\$3 in Jan and stayed there. Feb was 28th hottest followed Jan was 8th hottest in last 129 yrs. Dec/Jan/Feb was 17th hottest in last 128 yrs. Thx @NOAA. #OTT.” All of the populous eastern half of US was well above normal temps in Feb with the Virginia experiencing some of the hottest temps on record. Feb’s hotter than normal weather followed Jan being the 8th hottest month in 129 years. No surprise, natural gas prices remained lower thru Feb with HH prices falling from \$7 just before Xmas to an average of \$2.56 in Feb, a ~60% decline in just two months. Our tweet Thursday included NOAA’s below Jan average temperature ranks.”

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 6: NOAA Historical US Temperate Ranks by State
Statewide Average Temperature Ranks
January 2023
Period: 1895–2023



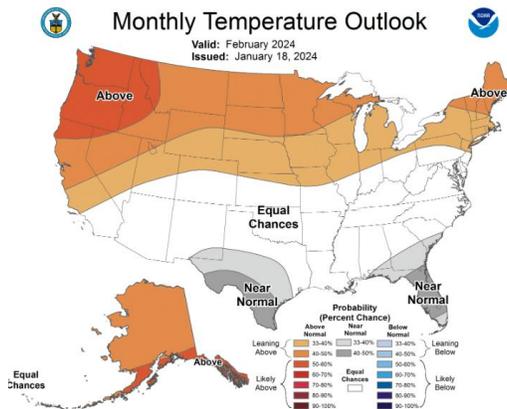
Source: NOAA

Natural Gas: NOAA forecasts warmer than normal Feb/Mar/Apr

We could have but didn't include NOAA's Thursday update for its seasonal temperature outlook [LINK](#), which is the next three-months temperature outlook, in this case now for Feb/Mar/Apr. This is dated Jan 18 as is the above 30-day outlook. And their F/M/A temperature outlook looks almost the same as their Feb temperature outlook – warmer than normal for northern 1/3 of the US including the populous NE and Great Lakes, normal for the middle 1/3 and colder than normal for SE and parts of Texas. If this turns out to be right, it would mean less than normal end of winter weather demand for natural gas. But the caveat is always that weather forecasts are far from 100%.

Warmer than normal Feb

Figure 7: NOAA Seasonal Temperature Outlook for Feb/Mar/Apr



Source: NOAA

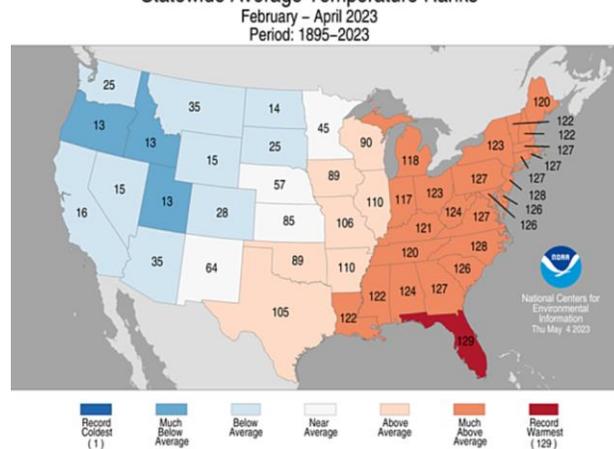
Feb/Mar/Apr 2023 was basically normal temperatures

The 3-month period Feb/Mar/Apr 2023 was the 50th warmest in the last 129 years, which NOAA ranked as “near average”. But that was misleading as it was very

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.

warm in the key natural gas regions in the populous eastern half of the US especially around the NE US and Great Lakes. In fact, many of the eastern states were near record warmer temperatures for Feb/Mar/Apr 2023. So overall, it was likely a little less than normal end of winter temperatures, but the near record temperatures in the eastern half of the US meant that overall weather driven demand would have been less than normal, especially given the near record high temperatures in the eastern half of the US in Feb 2023..

Figure 8: US Statewide Average Temperature Ranks (Feb/Mar/Apr 2023)
Statewide Average Temperature Ranks



Source: NOAA

Natural Gas: 62% of US homes have winter home heating fueled by natural gas

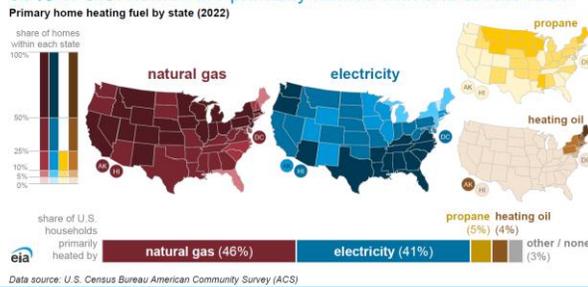
We are keeping this item in our memos for Jan and Feb as one of the common questions we get is on where is it important to be cold in the US for natural gas. Here is what we wrote in our Nov 19, 2023 Energy Tidbits memo on overview of US home heating by fuel. “Our primary focus for winter weather tends to be in the US NE and around the Great Lakes for the combination of population density, areas that have colder winters, and a higher percentage of the US homes in these regions that primarily use natural gas for heating. Below is the EIA’s map from Oct showing the primary fuel source for heating homes. (i) On Thursday, we tweeted [\[LINK\]](#) “62% of US homes winter heated directly (46%) and indirectly (16%) by #natgas. All direct fuel % splits unchanged YoY ie. #natgas 46%, electricity 41%, etc. @EIAgov #natgas fuels 40% of electricity for home heating ie. indirect 16% #OOTT.” (ii) Natural gas continues to be the major fuel for “direct” fuel for home heating with 46% of US homes followed by electricity 41%, propane 5%, heating oil 4% and other/none at 3%. Note these % shares are unchanged vs last year. (iii) much of the electricity is provided by natural gas. (iii) Natural also is the major fuel to generate electricity. On a direct basis, electricity is the primary source for heating 41% of US homes. The EIA notes that natural gas provides the fuel for 40% of electricity. The EIA wrote “Last winter, electricity generation fueled by natural gas reached a new record of 619 billion kilowatthours (kWh), accounting for nearly 40% of all generation in the U.S. electric power sector. We forecast a similar level and share of natural gas generation for winter 2023–24. The addition of new natural gas-fired generating capacity has been one factor keeping natural gas the largest source of power

Natural gas home heating

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

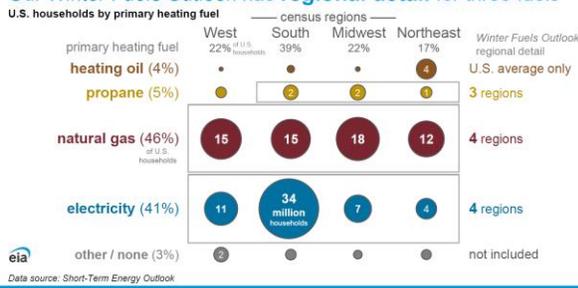
generation. By October 31, we expect U.S. natural gas generating capacity to have grown by 4.7 gigawatts (GW) from the previous October.” iv) Adding the indirect and direct, natural gas provides the fuel for 62% of US homes.”

Figure 9: Fuels for winter home heating of US homes
 97% of U.S. homes are primarily heated with one of four fuels



Source: EIA

Figure 10: Fuels for winter home heating by region
 Our Winter Fuels Outlook has regional detail for three fuels



Source: EIA

Natural Gas: EIA, US shale/tight natural gas to dip below 99 bcf/d in Feb 2024

US natural gas production is still up strong YoY with the US shale/tight natural gas plays up 3.9 bcf/d YoY. After an upwards revision in November’s DPR that brought gas production as far back as May back above 99 bcf/d all the way through December, the EIA revised historical months back down in December’s DPR, largely due to a change in data methodology. Here’s what the EIA wrote on their website: “Our data vendor for oil and gas production data, Enverus, reported a change in the Texas Railroad Commission’s (TX RRC) methodology for reporting natural gas production that discontinued applying a “well separation extraction loss factor” to condensate production reported by operators. For example, the impact of the methodology change lowers TX RRC reported natural gas gross production by 914 million cubic feet per day, nearly 3% in the month of January 2022. The December Drilling Productivity Report released on December 18, 2023, reflects this revision”. The EIA also wrote on their website “The Drilling Productivity Report (DPR) rig productivity metric new-well oil/natural gas production per rig can become unstable during periods of rapid decreases or increases in the number of active rigs and well completions. The metric uses a fixed ratio of estimated total production from new wells divided by the region’s monthly

Shale/tight gas production

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

rig count, lagged by two months. The metric does not represent new-well oil/natural gas production per newly completed well. The DPR metric legacy oil/natural gas production change can become unstable during periods of rapid decreases or increases in the volume of well production curtailments or shut-ins. This effect has been observed during winter weather freeze-offs, extreme flooding events, and the 2020 global oil demand contraction. The DPR methodology involves applying smoothing techniques to most of the data series because of inherent noise in the data". This is in light of the very cold weather North America had last week, and we can see the shut-in of production in North Dakota mentioned in last week's memo as an example of how quickly wells can be shut in and production operations (ie. trucking) come to a standstill when temperatures drop. On Monday, Bloomberg reported that Justin Kringstad of the North Dakota Pipeline Authority (NDPA) said the North Dakota shut-in cut their associated gas production around 1.6-1.8 bcf/d. This means that the EIA's Bakken estimate for January will be too high. (i) On Tuesday, the EIA released its monthly Drilling Productivity Report for January 2024 [LINK](#), which is the EIA's forecast for oil and natural gas production from the major shale/tight oil and gas basins for the current month (in this case January) and next month (February). (ii) The EIA forecasts US shale/tight natural gas for January at 99.077 bcf/d, which is up slightly from last month's January estimate of 99.026 bcf/d. February natural gas production is estimated to be 98.891 bcf/d. (iii) The Permian is estimated to be above 24.000 bcf/d for 4 months; Nov 24.020 bcf/d, Dec 24.144 bcf/d, Jan 24.271 bcf/d, and Feb 24.144 bcf/d. (iv) Haynesville has been falling gradually for the past 5 consecutive months; from Oct 16.804 bcf/d, Nov 16.673 bcf/d, Dec 16.528 bcf/d, Jan 16.385 bcf/d and Feb 16.297 bcf/d. (vii) Remember US shale/tight gas is ~90% of total US natural gas production. So, whatever the trends are for shale/tight gas are the trends for US natural gas in total. Below is our running table showing the EIA DPR data for the shale/tight gas plays, and the MoM changes in major shale/tight natural gas production. Our Supplemental Documents package includes the EIA DPR.

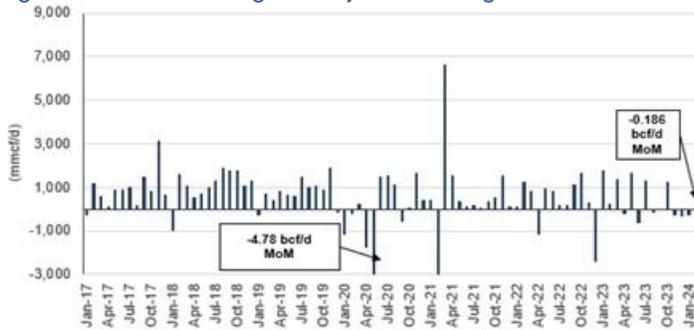
Figure 11: EIA Major Shale/Tight Natural Gas Production

mmcf/d													Dec DPR			Jan DPR				
	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Feb YoY	Feb YoY%	Feb MoM	Feb MoM%	Jan	Jan	Change
Anadarko	6,644	6,533	6,613	6,622	6,872	6,796	6,743	6,911	6,855	6,792	6,739	6,894	6,667	23	0%	-27	0%	6,704	6,694	-10
Appalachia	34,896	35,148	34,673	35,594	35,720	35,809	36,266	35,738	36,224	36,036	35,826	35,642	35,483	685	2%	-159	0%	35,630	35,642	12
Bakken	3,093	3,104	3,172	3,211	3,292	3,346	3,366	3,493	3,446	3,454	3,466	3,479	3,489	397	13%	10	0%	3,479	3,479	0
Eagle Ford	7,108	7,503	7,367	7,489	7,397	7,469	7,312	7,511	7,442	7,369	7,316	7,267	7,221	114	2%	-46	-1%	7,126	7,267	141
Haynesville	16,865	16,600	16,832	17,178	16,417	16,713	15,884	15,980	16,804	16,673	16,528	16,365	16,297	-66	-3%	-86	-1%	16,365	16,385	0
Niobrara	4,900	4,978	5,030	5,131	5,268	5,254	5,363	5,351	5,318	5,331	5,338	5,338	5,339	439	9%	1	0%	5,338	5,338	-1
Permian	21,851	22,682	23,015	22,993	22,618	23,520	23,784	23,752	23,869	24,020	24,144	24,271	24,363	2,542	12%	122	1%	24,363	24,271	-92
Total	95,358	96,749	96,524	96,219	97,584	96,909	96,739	98,735	99,978	99,677	99,357	99,077	98,891	3,533	4%	-186	0%	99,026	99,077	51

Source: EIA, SAF

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 12: MoM Change – Major Shale/Tight Natural Gas Production



Source: EIA Drilling Productivity Report

Source: EIA, SAF

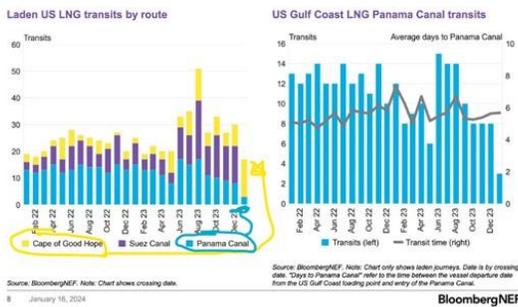
Natural Gas: Red Sea forcing US LNG to Asia via the Cape of Good Hope

On Tuesday, we tweeted [LINK](#) “More US LNG now having to go around Cape of Good Hope and more US LNG on the water for longer, First, Panama Canal backup pushed more US LNG to Suez. Now, US LNG avoiding Suez due to #Houthis. Thx @BloombergNEF LNG Trade Weekly Jan 16, 2024. #OTT #NatGas.” Our tweet included the below charts from BloombergNEF LNG Trade Weekly Jan 16, 2024. The first chart shows how the Panama Canal restricted volumes ended up sending more US LNG to Asia going thru the Red Sea. And now with the Red Sea, it shows more US LNG to Asia going around the Cape of Good Hope. The second charge shows how LNG on water for 20 days or more is up YoY in Jan.

US LNG to Asia taking longer

Figure 13: Laden US LNG transits by route

Laden US LNG transits
(as of January 14, 2024)



Source: BloombergNEF. Note: Chart shows crossing date.

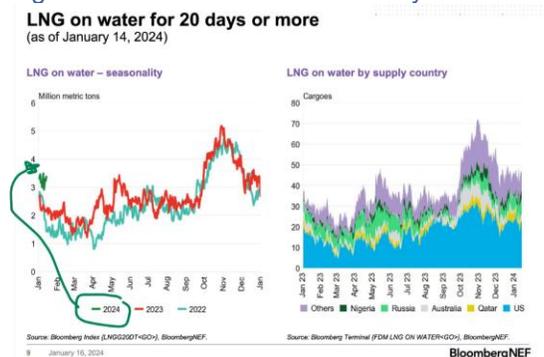
Source: BloombergNEF. Note: Chart only shows laden journeys. Date is by crossing date. “Days to Panama Canal” refers to the time between the vessel departure date from the US Gulf Coast loading point and entry of the Panama Canal.

BloombergNEF

Source: BloombergNEF

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 14: LNG on water for 20 days or more



Source: BloombergNEF

Natural Gas: Mexico Pacific, ExxonMobil complete option for LT LNG Offtake Deal

Long-term LNG deal

There was a significant slowdown in long-term LNG deals in since the end of H1/22 compared to the activity seen from July 1, 2021 through June 30, 2022. That's because most, if not all the available long term LNG supply available before 2026 was locked up in the July 1, 2021 through June 30, 2022 rush. Since that first rush, there have been a lesser number of long term deals. The long-term deals now being done are generally for long-term supply starting in 2026 or later. There have been some very long-term LNG deals even out past 2050. And the big LNG suppliers have been stepping in more to lock up other long-term LNG supply to add to their supply portfolio to be able to use to supply to their customers. This week, there was a major long-term LNG deal. (i) On Tuesday, Mexico Pacific Ltd announced they signed an additional long-term LNG Sales and Purchase Agreement (SPA) deal with ExxonMobil LNG Asia Pacific (Singapore) [\[LINK\]](#), whereby ExxonMobil will purchase 0.16 bcf/d from Mexico Pacific's Train 3 at their Saguaro Energia project on Mexico's west coast for 20 years beginning in 2024. ExxonMobil's head of Global LNG and SVP, Mr. Peter Clarke, said, "Bringing additional North American LNG to global markets advances energy security and helps to lower emissions in many countries with high energy demand...Long term contracts play an essential role in underpinning the investments that will be required to advance the energy transition. We look forward to working with Mexico Pacific to continue growing our portfolio and deliver Permian natural gas to global markets". Our supplemental documents package contains the Mexico Pacific news release.

There have been 20.04 bcf/d of long-term LNG supply deals since July 1, 2021

We first highlighted this abrupt shift to long term LNG supply deals 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 included a table of the deals done in that short two week period. We continue to update that table, which now shows 20.04 bcf/d of long-term LNG deals since July 1, 2021. 61% of the deals have been by Asian LNG buyers, but we are now seeing rest of world locking up long term supply deals post Russia/Ukraine. Note in our non-Asian LNG deals will major LNG players (ie. Chevron, Shell, etc) buying for their LNG portfolio supply. China has been particularly active in this space, accounting for 59% of all

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Asian LNG buyers in long term contracts since July 1, 2021. Below is our updated table of Asian and Europe LNG buyers new long-term supply deals since July 1, 2021. Our Supplemental Documents package includes our July 14, 2021 blog.

Figure 15: Long-Term LNG Buyer Deals Since July 1, 2021

Long-Term LNG Buyer Deals Since July 1, 2021								Long-Term LNG Buyer Deals Since July 1, 2021							
Date	Buyer	Seller	Country	Volume	Duration	Start	End	Date	Buyer	Seller	Country	Volume	Duration	Start	End
			Buyer / Seller	(bcf/d)	Years						Buyer / Seller	(bcf/d)	Years		
Asian LNG Deals															
Jul 7, 2021	CNOOC	Petronas	China / Canada	0.30	10.0	2022	2032	Jul 28, 2021	PGNiG	Venture Global LNG	Poland / US	0.26	20.0	2023	2043
Jul 9, 2021	CPC	QatarEnergy	Taiwan / Qatar	0.16	15.0	2022	2037	Nov 12, 2021	Engie	Cheniere	France / US	0.11	20.0	2021	2041
Jul 9, 2021	Guangzhou Gas	BP	China / US	0.13	12.0	2022	2034	Mar 7, 2022	Shell	Venture Global LNG	US / US	0.26	20.0	2024	2044
Jul 12, 2021	Korea Gas	QatarEnergy	Korea / Qatar	0.25	20.0	2025	2045	Mar 16, 2022	NFE	Venture Global LNG	US / US	0.13	20.0	2023	2043
Sep 29, 2021	CNOOC	QatarEnergy	China / Qatar	0.50	15.0	2022	2037	Mar 16, 2022	NFE	Venture Global LNG	US / US	0.13	20.0	2023	2043
Oct 7, 2021	Shenzhen	BP	China / US	0.04	10.0	2023	2032	May 2, 2022	Engie	NextDecade	France / US	0.23	15.0	2026	2041
Oct 11, 2021	ENN	Cheniere	China / US	0.12	13.0	2022	2035	May 17, 2022	PGNiG	Sempra Infrastructure	Poland / US	0.40	20.0	n.a.	n.a.
Nov 4, 2021	Unipet	Venture Global LNG	China / US	0.46	20.0	2023	2043	May 25, 2022	RWE Supply & Trading	Sempra Infrastructure	Germany / US	0.30	15.0	n.a.	n.a.
Nov 4, 2021	Sinopec	Venture Global LNG	China / US	0.53	20.0	2023	2043	Jun 9, 2022	Equinor	Cheniere	Norway / US	0.23	15.0	2026	2041
Nov 5, 2021	Sinochem	Cheniere	China / US	0.12	17.5	2022	2040	Jun 21, 2022	EnBW	Venture Global LNG	Germany / US	0.20	20.0	2026	2046
Nov 22, 2021	Foran	Cheniere	China / US	0.04	20.0	2023	2043	Jun 22, 2022	INEOS Energy	Sempra Infrastructure	UK / US	0.21	20.0	2027	2047
Dec 6, 2021	Guangdong Energy	QatarEnergy	China / Qatar	0.13	10.0	2024	2034	Jun 22, 2022	Chevron	Venture Global LNG	US / US	0.26	20.0	n.a.	n.a.
Dec 8, 2021	S&T International	QatarEnergy	China / Qatar	0.13	15.0	2022	2037	Jun 22, 2022	Chevron	Cheniere	US / US	0.26	15.0	2027	2042
Dec 10, 2021	Sunfire Green Energy	QatarEnergy	China / Qatar	0.13	15.0	2022	2037	Jul 12, 2022	Shell	Mexico Pacific Ltd	US / Mexico	0.34	20.0	2026	2046
Dec 15, 2021	SFPC Guangdong	BP	China / US	0.03	10.0	2023	2033	Jul 13, 2022	Vitol	Delfin Midstream	US / US	0.07	15.0	n.a.	n.a.
Dec 20, 2021	CNOOC Gas & Power	Venture Global LNG	China / US	0.26	20.0	2023	2043	Aug 9, 2022	Centrica	Delfin Midstream	UK / US	0.13	15.0	2026	2041
Dec 29, 2021	Foran	BP	China / US	0.01	10.0	2023	2032	Aug 24, 2022	Shell	Energy Transfer	US / US	0.28	20.0	2026	2046
Jan 11, 2022	ENN	Novatek	China / Russia	0.08	11.0	2024	2035	Oct 6, 2022	EnBW	Venture Global LNG	Germany / US	0.26	20.0	2022	2042
Jan 11, 2022	Zhejiang Energy	Novatek	China / Russia	0.13	15.0	2024	2039	Dec 6, 2022	ENGIE	Sempra Infrastructure	France / US	0.12	15.0	n.a.	n.a.
Feb 4, 2022	CNPC	Gazprom	China / Russia	0.98	30.0	2023	2053	Dec 20, 2022	Galp	NextDecade	Portugal / US	0.13	20.0	n.a.	n.a.
Mar 24, 2022	Guangdong Energy	NextDecade	China / US	0.20	20.0	2026	2046	Dec 20, 2022	Shell	Oman LNG	UK/Oman	0.11	10.0	2025	2035
Mar 29, 2022	ENN	Energy Transfer	China / US	0.36	20.0	2026	2046	Jan 25, 2023	PKN ORLEN	Sempra Infrastructure	EU/US	0.13	20.0	2027	2047
Apr 1, 2022	Guangzhou Gas	Mexico Pacific Ltd	China / Mexico	0.26	20.0	n.a.	n.a.	Jan 30, 2023	BOTAS	Oman	Turkey / Oman	0.13	10.0	2025	2035
Apr 6, 2022	ENN	NextDecade	China / US	0.26	20.0	2026	2026	Mar 27, 2023	Shell	Mexico Pacific Ltd	UK / Mexico	0.15	20.0	2026	2046
Apr 22, 2022	Kogas	BP	Korea / US	0.20	18.0	2025	2043	Apr 24, 2023	Hartree Partners LP	Delfin Midstream	US / US	0.08	20.0	n.a.	n.a.
May 2, 2022	Gunvor Singapore Pte	Energy Transfer LNG	Singapore / US	0.26	20.0	2026	2046	Jun 21, 2023	Equinor	Cheniere	Norway / US	0.23	15.0	2027	2042
May 3, 2022	SK Gas Trading LLC	Energy Transfer LNG	Korea / US	0.05	18.0	2026	2042	Jul 22, 2023	SEFE	Venture Global LNG	EU/US	0.30	20.0	2026	2046
May 10, 2022	Exxon Asia Pacific	Venture Global LNG	Singapore / US	0.26	n.a.	n.a.	n.a.	Jul 14, 2023	ONEE (Morocco)	Shell	Africa/US	0.05	12.0	2024	2036
May 11, 2022	Petronas LNG	Venture Global LNG	Malaysia / US	0.13	20.0	n.a.	n.a.	Jul 18, 2023	IOCL	Adnoc	India/UAE	0.16	14.0	2026	2040
May 24, 2022	Hanwha Energy	TotalEnergies	Korea / France	0.08	15.0	2024	2039	Jul 28, 2023	OMV	BP	Austria/UK	0.13	10.0	2026	2036
May 25, 2022	POSCO International	Cheniere	Korea / US	0.05	20.0	2026	2036	Aug 4, 2023	ConocoPhillips	Mexico Pacific Ltd	US/Mexico	0.29	20.0	2025	2045
Jun 5, 2022	China Gas Holdings	Energy Transfer	China / US	0.09	20.0	2026	2051	Nov 22, 2023	BAStF	Cheniere	Germany / US	0.10	17.0	2026	2043
Jul 5, 2022	China Gas Holdings	NextDecade	China / US	0.13	20.0	2027	2047	Aug 30, 2023	Shell	UAE / Oman	US / Oman	0.11	10.0	2025	2035
Jul 20, 2022	PetroChina	Cheniere	China / US	0.24	24.0	2026	2050	Oct 11, 2023	TotalEnergies	QatarEnergy	France / Qatar	0.46	27.0	2026	2053
Jul 26, 2022	PTT Global	Cheniere	Thailand / US	0.13	20.0	2026	2046	Oct 18, 2023	Shell	QatarEnergy	Netherlands / Qatar	0.46	27.0	2026	2053
Jul 27, 2022	Exxon Asia Pacific	NextDecade	Singapore / US	0.13	20.0	2026	2046	Oct 23, 2023	ENI	QatarEnergy	Italy / Qatar	0.13	27.0	2026	2053
Sep 2, 2022	Woodside Singapore	Commonwealth	Singapore / US	0.33	20.0	2026	2046	Oct 31, 2023	Vitol	Chesapeake Energy	Sweden / US	0.13	15.0	2028	2043
Nov 21, 2022	Sinopec	QatarEnergy	China / Qatar	0.53	27.0	2026	2053	Nov 29, 2023	OMV	Cheniere	Netherlands / US	0.11	15.0	2029	2044
Dec 26, 2022	INPEX	Venture Global LNG	Japan / US	0.13	20.0	n.a.	n.a.	Dec 5, 2023	Woodside Energy	Mexico Pacific Ltd	Australia / Mexico	0.17	20.0	2024	2044
Dec 27, 2022	JERA	Oman LNG	Japan / Oman	0.11	10.0	2025	2035	Total Non-Asian LNG Buyers New Long Term Contracts Since Jul/21							
Jan 19, 2023	ITOCHU	NextDecade	Japan / US	0.13	15.0	n.a.	n.a.	7.73							
Feb 7, 2023	Exxon Asia Pacific	Mexico Pacific Ltd	Singapore / Mexico	0.26	20.0	n.a.	n.a.	Total New Long Term LNG Contracts since Jul/21							
Feb 23, 2023	China Gas Holdings	Venture Global LNG	China / US	0.26	20.0	n.a.	n.a.	20.04							
Mar 6, 2023	Gunvor Singapore Pte	NextDecade	Singapore / US	0.26	15.0	2027	2042	*Excludes Asian short term/spot deals							
Apr 28, 2023	JERA	Venture Global LNG	Japan / US	0.13	20.0	n.a.	n.a.	*on Dec 20, 2021 CNOOC agreed to buy an additional 0.13 bcf/d from Venture Global for an undisclosed shorter period							
May 16, 2023	KOSPO	Cheniere	Korea / US	0.05	19.0	2027	2046	Source: Bloomberg, Company Reports							
Jun 1, 2023	Bangladesh Oil	QatarEnergy	Bangladesh / Qatar	0.24	15.0	2026	2031	Prepared by SAF Group - https://safgroup.ca/news-insights/							
Jun 21, 2023	Petro Bangle	Oman	Bangladesh / Oman	0.20	10.0	2026	2036								
Jun 21, 2023	CNPC	QatarEnergy	China / Qatar	0.53	27.0	2027	2054								
Jun 26, 2023	ENN LNG	Cheniere	Singapore / US	0.24	20.0	2026	2046								
Jul 5, 2023	Zhejiang Energy	Mexico Pacific Ltd	China / Mexico	0.13	20.0	2027	2047								
Aug 8, 2023	LNG Japan	Woodside	Japan / Australia	0.12	10.0	2026	2036								
Sep 7, 2023	Petrochina	ADNOC	China / UAE	n.a.	n.a.	n.a.	n.a.								
Nov 2, 2023	Foran	Cheniere	China / US	0.12	20.0	n.a.	n.a.								
Nov 4, 2023	Sinopec	QatarEnergy	China/Qatar	0.39	27.0	2026	2053								
Nov 27, 2023	Gunvor Singapore Pte	Delfin Midstream	Singapore / US	0.10	15.0	n.a.	n.a.								
Dec 20, 2023	ENN	ADNOC	Singapore / UAE	0.13	15.0	2028	2043								
Jan 5, 2024	GAIL	Vitol	India / Singapore	0.13	10.0	2026	2036								
Jan 8, 2024	Shell	Ksi Lisims LNG	Singapore / Canada	0.26	20.0	2027	2047								
Jan 16, 2024	ExxonMobil	Mexico Pacific Ltd	Singapore / Mexico	0.16	20.0	2024	2044								
Total Asian LNG Buyers New Long Term Contracts Since Jul/21				12.31											

Source: SAF

Natural Gas: India December natural gas production basically flat MoM at 3.57 bcf/d

India domestic natural gas production peaked in 2010 at 4.6 bcf/d, and then ultimately declined to average 2.8 bcf/d in 2020-2021. India returned to modest growth in 2021/2022. There were several months of basically flat production but production growth has returned in 2023. On Tuesday, India's Petroleum Planning and Analysis Cell released their monthly report for December's natural gas and oil statistics [LINK]. India's domestic natural gas production for December was 3.57 bcf/d, which was basically flat MoM from 3.58 bcf/d in November. On a YoY basis, natural gas production was up +6.13% from 3.36 bcf/d in December 2022. Our Supplemental Documents package includes excerpts from the PPAC monthly.

India natural gas production flat MoM

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Natural Gas: India LNG imports flat MoM at 2.73 bcf/d in December, up +0.29 bcf/d YoY

For the past several years, India has increased LNG imports whenever domestic natural gas production was flat or decreased. But the overriding factor in 2022 was the high LNG prices. India is always viewed as an extremely price sensitive buyer in terms of its LNG imports. We saw this in periods of low LNG prices such as June to Oct 2020 when India had a big ramp up in LNG imports. But with the sky-high LNG prices in 2022, India did their best to minimize LNG imports. But then LNG prices pulled back in 2023 and we have been seeing some India LNG imports move up or down in line with domestic production moving down or up. But there is also some opportunistic buying when LNG prices are this weak. On Tuesday, India's Petroleum Planning and Analysis Cell released their monthly report for November's natural gas and oil statistics [\[LINK\]](#). Over the past 3 years, India's LNG imports declined from a 2020-2021 peak of 3.84 bcf/d in Oct 2020 to just 2.85 bcf/d in Jan 2021 and lower in 2022. Additionally, November's LNG imports were 2.73 bcf/d, which is essentially flat MoM from 2.75 bcf/d in November. LNG imports are now up +12.03% YoY from 2.43 bcf/d in December 2022. Our Supplemental Documents package includes excerpts from the PPAC monthly.

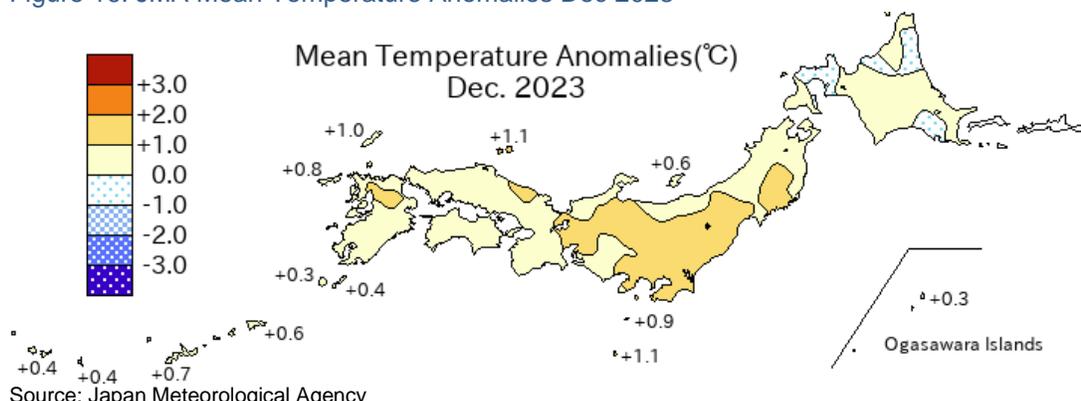
India LNG imports up YoY

Natural Gas: Above normal temperatures in Japan in December

No one should have been surprised by the Japan Meteorological Agency's recap of December 2023 temperatures that it was above normal temperatures, which meant that any electricity demand, including for natural gas, would be less than normal. On Monday, the Japan Meteorological Agency posted its climate recap for December [\[LINK\]](#). It included the below mean temperature anomalies map. The JMA wrote "*Monthly mean temperatures were significantly above normal in eastern Japan, because the region was less affected by cold air.*"

A warm Dec in Japan

Figure 16: JMA Mean Temperature Anomalies Dec 2023

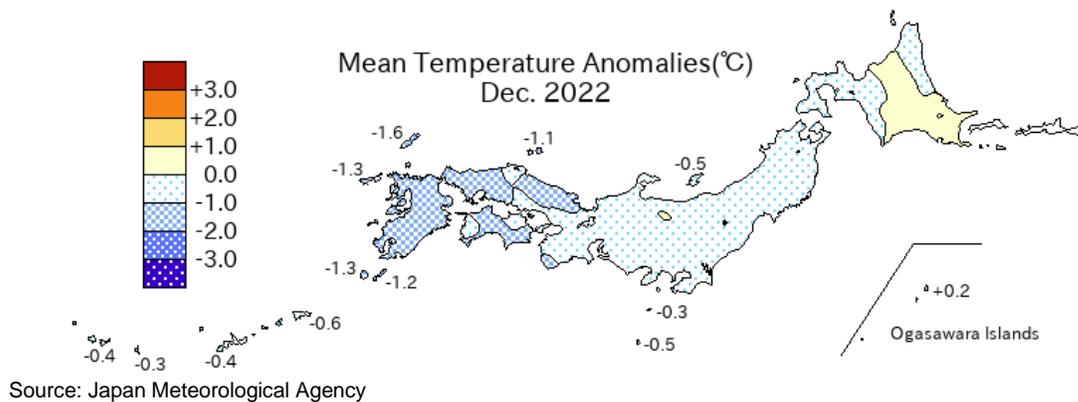


Year ago, Dec 2022 was cold across most of Japan

It was warm in Dec 2023, but last year's December showed colder than normal temperatures. The JMA's climate recap for Dec 2022 [\[LINK\]](#) included the below mean temperature anomalies map. The JMA wrote "*Monthly mean temperatures were below normal in easter/western Japan due to cold air inflow from the Continent.*"

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 17: Japan Mean Temperature Anomalies Nov 2022



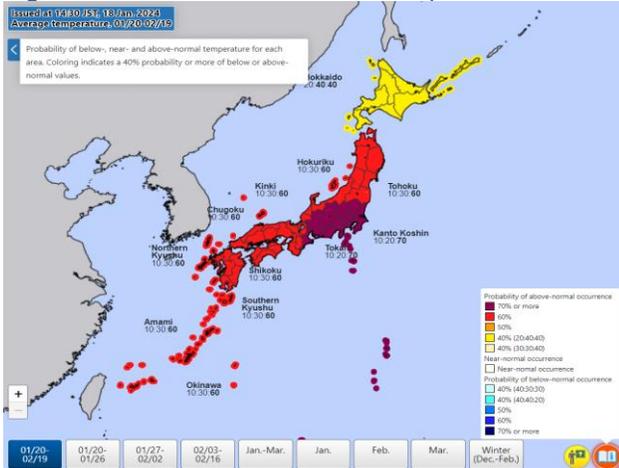
Natural Gas: Japan weather warmer than normal next 30 days, thru mid Feb

Japan is the #2 LNG importer just behind China. It's now Jan and JKM LNG markets are no longer really worried about a risk to winter LNG prices especially with the current forecasts for a much warmer in late Jan thru mid Feb in Japan. And, in Japan, that really takes it thru any winter weather driven natural gas demand period. We have been warning for weeks that it is setting up a repeat of winter 2022/23 where the warm winter led to JKM LNG prices being held back for months. This is when JKM LNG prices should be high and not showing JKM LNG futures around \$9.55 for March. Every Thursday, the Japan Meteorological Agency updates its 30-day outlook [\[LINK\]](#). The January 18 update calls for much than normal temperatures for the rest of January and into the first half of February. The JMA forecast is for Jan 20 – Feb 19, With the later two weeks in particular being extremely warmer than normal across the bottom half of Japan. Below is the JMA's 30-day temperature probability forecast for Jan 20 – Feb 19.

Japan's 30-day temperature forecast

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 18: JMA Jan 20 -Feb 19 Temperature Probability Forecast



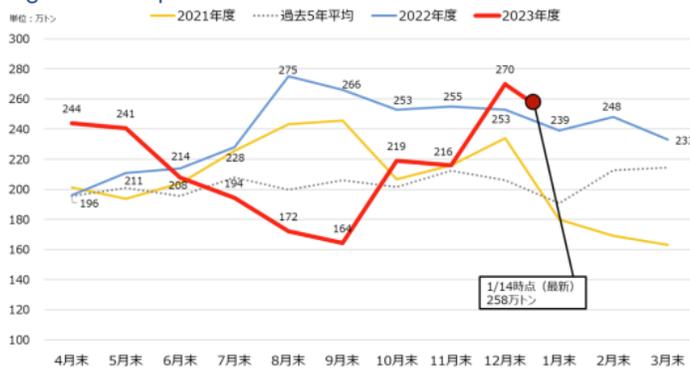
Source: Japan Meteorological Agency

Natural Gas: Japan LNG stocks up WoW, up YoY, and above 5-yr average

After last week’s big draw in LNG storage for Japan, this week had a modest build. Stocks are back above 2022 levels and above the 5-year average. On Wednesdays, Japan’s METI releases its weekly LNG stocks data [\[LINK\]](#). LNG stocks on Jan 14 were 123.9 bcf, up +2.8% WoW from Jan 7 of 120.6 bcf, up +8.0% YoY from 114.8 bcf a year earlier, and well above the 5-year average for the end of January of 91.7 bcf. METI did not comment on the WoW increase. Below is the Japanese LNG stocks graph from the METI weekly report.

Japan LNG stocks up +2.8% WoW

Figure 19: Japan LNG Stocks



Source: METI

Natural Gas: China natural gas production +2.9% YoY in December

Our big concern on China’s LNG imports for the past 3 years was that China would continue to grow its domestic natural gas production and increase cheaper natural gas pipeline imports from Russia. Those factors have squeezed out LNG imports in 2022 and 2023. On Wednesday, Bloomberg reported that China natural gas production was +2.9% YoY in

China natural gas production

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

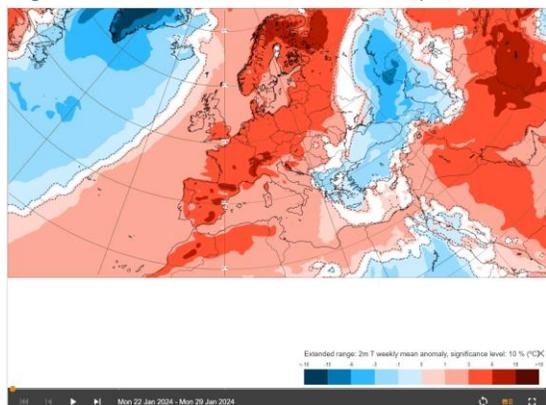
December to 23.8 bcf/d ie. +0.7 bcf/d YoY. The Chinese government website [\[LINK\]](#) also noted that over 2023, China's natural gas production was 22.3 bcf/d, up +1.0 bcf/d from 2022, which is the 7th annual YoY increase.

Natural Gas: Western Europe forecast to warm for end of Jan/early Feb

The short-term weather forecasts for Europe have been pretty accurate so far this winter. The ECMWF (European Centre for Medium-Range Weather Forecasts) temperature probability forecasts from yesterday forecasts warmer than normal temperatures over the next two weeks for western Europe. We have been warning that the warm start to winter (Nov/Dec) Our view remains for Europe gas prices is that it's been too warm this winter which meant markets haven't been worried about a natural gas/LNG issues this winter. Now it's 2/3 thru Jan, it's clear that Europe natural gas markets aren't worried about natural gas or LNG supply risks this winter. And our concern has been that a weak Europe natural gas market to end winter will lead to months of soft Europe natural gas prices thru shoulder season and into summer or like 2023. Last winter 2022/23 was a hot winter in Europe, Asia and the US, and it held back prices for most of 2023.

Europe temperature forecast

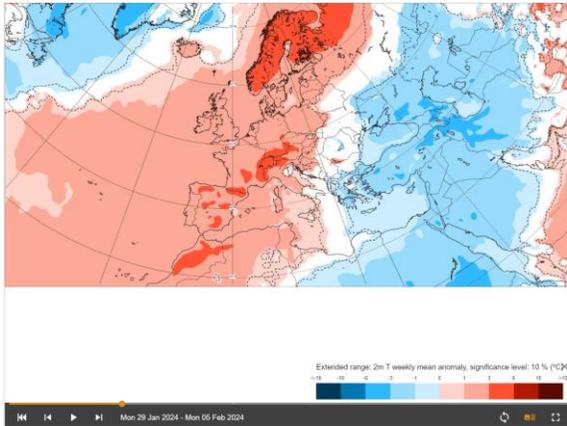
Figure 20: ECMWF Jan 22-29 Temperature Probability Forecast



Source: ECMWF

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 21: ECMWF Jan 29-Feb 5 Temperature Probability Forecast



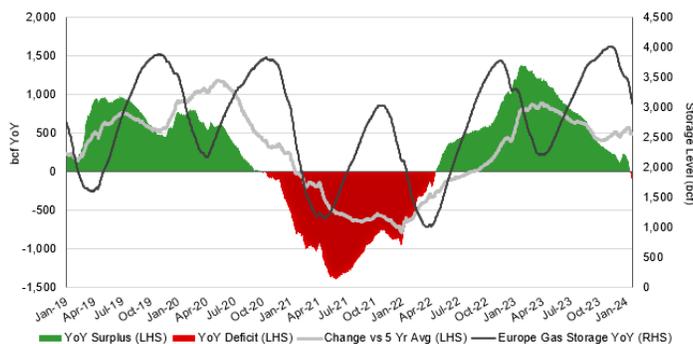
Source: ECMWF

Natural Gas: Europe storage drops big again WoW to 76.17%, flips to YoY deficit

The cold temperatures more typical of winter in Europe over the past couple weeks has finally led to draws in EU gas storage. We think the impact of delayed LNG shipments noted in last week’s memo is continuing this week, as more and more tankers avoid the Red Sea and instead take the long way around Africa. Bloomberg reported today there were delays in shipments for the upcoming week due to a storm in the Atlantic. Please note that Europe generally refers to the start of winter natural gas withdraw season as starting Oct 1, whereas North America refers to the start of winter natural gas season as starting Nov 1. After entering winter essentially full at over 99%, Europe is now drawing on its gas storage. This week, Europe storage decreased by -4.76% WoW to 76.17% on Jan 18 vs 80.93% on Jan 11. Storage is now -3.92% lower than last year’s levels of 82.32% on Jan 11, 2022. But remember the panic of late 2021 on natural gas, it was because Europe gas storage was only 67.21% full on Dec 1, 2021. Below is our graph of Europe Gas Storage Level.

Europe gas storage

Figure 22: European Gas Storage Level



Source: Bloomberg, SAF

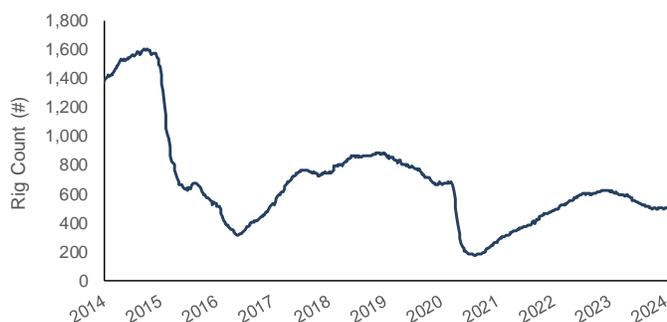
The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Oil: US oil rigs -2 WoW to 497 rigs, US gas rigs +3 WoW to 120 rigs

On Friday, Baker Hughes released its weekly North American drilling rig data. (i) Total US oil rigs were -2 rigs WoW to 497 oil rigs as of Jan 19. US oil rigs went below 520 rigs on Aug 25 and stayed there for 4 weeks and for the last 14 weeks have been between 494 and 507 oil rigs. (ii) The major basin changes for oil rigs were Permian -1 rig WoW to 303 oil rigs, Mississippian +1 rig WoW to 2 oil rigs, Cana Woodford +1 rig WoW to 22 oil rigs, Barnett -1 rig WoW to 0 rigs, and Others -2 rigs WoW to 67 rigs. (iii) US gas rigs were up +3 rigs WoW to 117 gas rigs.

**US oil rigs -2
WoW**

Figure 23: Baker Hughes Total US Oil Rigs



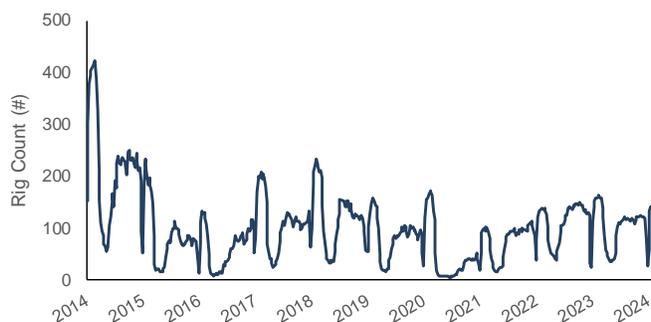
Source: Baker Hughes, SAF

Oil: Total Cdn rigs up +10 rigs to 223 total rigs

The big bounce back in rig count after Christmas tapered off this week. For the week of Jan 19, total Cdn rigs were up +10 WoW to 223 total rigs. On a per province basis, Alberta was up +12 rigs WoW to 159 rigs, BC was down -2 rigs WoW to 21 rigs, Saskatchewan was up +1 rig WoW to 38 rigs and Newfoundland dropped their 1 offshore rig. Cdn oil rigs were up +7 rigs WoW to 140 oil rigs and are down -13 oil rigs YoY. Cdn gas rigs were up +3 rigs WoW to 83 gas rigs, which is down -5 rigs YoY.

**Cdn total rigs up
WoW**

Figure 24: Baker Hughes Total Cdn Oil Rigs



Source: Baker Hughes, SAF

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

US oil production up WoW

Oil: US weekly oil production estimates up +0.100 mmb/d WoW to 13.300 mmb/d

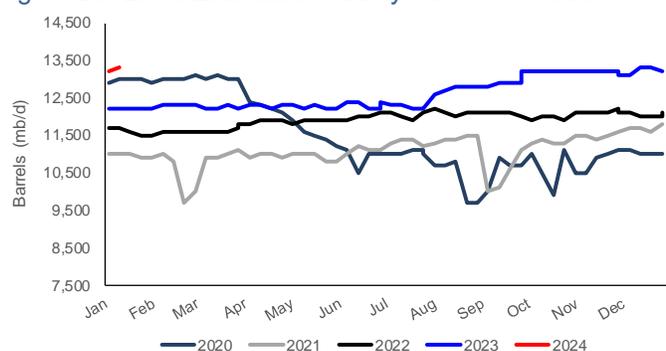
Last month, there was a third upward adjustment (this time a +0.200 mmb/d adjustment) to the EIA weekly estimates in H2/23. The first was in August, when our Aug 13, 2023 Energy Tidbits memo highlighted the EIA increased their weekly US oil production estimates by +0.4 mmb/d. Then, our Oct 15th Energy Tidbits memo highlighted the EIA's second big, another +0.4 mmb/d, adjustment to the weekly production estimates. On Wednesday, Dec 20th, the EIA wrote "When we release the Short-Term Energy Outlook (STEO) each month, the weekly estimates of domestic crude oil production are reviewed to identify any differences between recent trends in survey-based domestic production reported in the Petroleum Supply Monthly (PSM) and other current data. If we find a large difference between the two series, we may re-benchmark the weekly production estimate on weeks when we release STEO. This week's domestic crude oil production estimate incorporates a re-benchmarking that increased estimated volumes by 189,000 barrels per day, which is about 1.4% of this week's estimated production total". This 3rd EIA adjustment was needed to bring the weekly production estimates in line with the EIA's actuals. The latest Form 914 (with October actuals) was +0.048 mmb/d higher than the weekly estimates of 13.200 mmb/d. This week, the EIA's production estimates were up +0.100 mmb/d WoW to 13.300 mmb/d for the week ended January 12. Alaska was up +0.042 mmb/d WoW to 0.435 mmb/d. Below is a table of the EIA's weekly oil production estimates.

Figure 25: EIA's Estimated Weekly US Field Oil Production

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

Source: EIA

Figure 26: EIA's Estimated Weekly US Oil Production



Source: EIA, SAF

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Oil: North Dakota est 700,000 b/d of Bakken shut in on Jan 17, long slow recovery

On Friday, we tweeted [\[LINK\]](#) “Today, North Dakota estimates still 400,000 b/d of #Oil is still offline and warns “A lot of times, these things take a month from the time that it hits until we see back to normal production”. Didn’t specify #NatGas offline. See 📌 SAF transcript. #OOTT.” On Friday, North Dakota held its monthly Directors Cut webcast to review November oil and gas production data. One of the first comments by North Dakota’s Lynn Helms was the status of shut-in North Dakota oil production from the deep freeze. Helms did not comment on shut-in associated natural gas, only oil. But since the natural gas in North Dakota is almost all from associated natural gas from oil wells, there would still be a big shut-in impact of natural gas. Helms said that the peak oil shut-in was 700,000 b/d on Jan 17, but was down to 400,000 b/d on Friday. Helms also warned that recovery of all the oil doesn’t happen overnight and warned some can take some time to recovery. We made the below transcript of his comments.

Bakken shut in oil from the cold

SAF transcript of North Dakota’s comments on shut in oil from the cold

Here is the transcript we made of North Dakota’s Lynn Helms on the shut-in oil production from the cold. SAF Group created transcript of comments by North Dakota Director of Mineral Resources, Lynn Helms and Justin J. Kringstad, Director North Dakota Pipeline Authority on the monthly Directors Cut webcast on Jan 19, 2024. [\[LINK\]](#) Items in “*italics*” are SAF Group created transcript. At 6:15 min mark, Helms “*I do want to talk about what January is going to look like. It started in. Justin kind of tracks this for us. He has access to some numbers that let us look at production, not quite in real time, but pretty much as the days develop. The cold weather hit a week ago, January 11 was the first indication that this Arctic blast was going to have an effect on the oilpatch. By January 12, it looked like we were down almost 300,000 b/d. The worst of it was the 17th, two days go, when it looked like we were down about 700,000 b/d. So if you think 1.3 minus 700, that’s way below a million barrels a day. It looks like as of yesterday, we were still down 500,000. And as of today, about 400,000. So we are coming back out of that. But we are probably still well below a million barrels a day of production in North Dakota.*” At 7:52 min mark, Helms “*Once the wells get shut in or curtailed, then it becomes really, really difficult to bring them back on production, especially at minus 30 or minus 70 wind chills. People can’t go out and work on the wells, so it’s very hard to put them back on. It will be a long slow recovery. A lot of times, these things take a month from the time that it hits until we see back to normal production. So like I said December should be good but January is going to be a very very bad month in terms of production numbers. We still think it will be good in terms of gas capture. But all of the overall numbers are going to be down.*”

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Oil: Chevron reassured North Dakota they didn't buy Hess to spin the Bakken off

North Dakota says Chevron reassured them they didn't buy Hess to spin the Bakken off. At 21:12 min mark of the monthly Directors Cut webcast [\[LINK\]](#), North Dakota's Lynn Helms said *"I'm trying to get an audience with Chevron management when I am in Houston. I'm hopeful that will happen. We have extended an invitation for them to come to the Williston Basin conferences. We're pretty confident they will be through FTC, SEC business by then and somebody from Chevron will be here to talk to North Dakota on what their plans are for North Dakota. The encouraging thing about Chevron is they are a big enhanced oil recovery company. And they have reassured us that they did not buy Hess to spin the Bakken off. They didn't buy it just for their Gulf of Mexico assets. They bought it= for unconventional and Gulf of Mexico assets. They have a big stake in the Permian and so they hope to use some technology transfers back and forth. Things they learn here from Hess is doing and things that are going on in the Permian."*

Chevron on the Hess Bakken

Oil: US shale/tight oil production in Feb 2024 in past 6-mth range of 9.6 to 9.7 mmb/d

On Tuesday, the EIA released its monthly Drilling Productivity Report for January 2024 [\[LINK\]](#), which is the EIA's forecast for oil and natural gas production from the major shale/tight oil and gas basins for the current month (in this case January) and the next month (in this case February). (i) There were notices posted on the EIA website about changes in methodology and the impact of cold weather on production estimates. Last week's (Jan 14, 2024) Energy Tidbits memo highlighted North Dakota oil production shut-in that occurred as a result of extremely cold temperatures. This doesn't get accurately reflected in the EIA Drilling Productivity Report estimates for shale/tight oil. And as noted above, on Friday, North Dakota estimated production was hit by 700,000 b/d on Jan 17, but was down to 400,000 b/d hit on Jan 19, and also warned that it will be a long slow recovery ie. Jan and Feb production will be impacted. So these EIA estimates for Bakken for Jan and Feb are too high. (ii) Here's what the EIA wrote on their website: *"Our data vendor for oil and gas production data, Enverus, reported a change in the Texas Railroad Commission's (TX RRC) methodology for reporting natural gas production that discontinued applying a "well separation extraction loss factor" to condensate production reported by operators. For example, the impact of the methodology change lowers TX RRC reported natural gas gross production by 914 million cubic feet per day, nearly 3% in the month of January 2022. The December Drilling Productivity Report released on December 18, 2023, reflects this revision".* The EIA also wrote *"The Drilling Productivity Report (DPR) rig productivity metric new-well oil/natural gas production per rig can become unstable during periods of rapid decreases or increases in the number of active rigs and well completions. The metric uses a fixed ratio of estimated total production from new wells divided by the region's monthly rig count, lagged by two months. The metric does not represent new-well oil/natural gas production per newly completed well. The DPR metric legacy oil/natural gas production change can become unstable during periods of rapid decreases or increases in the volume of well production curtailments or shut-ins. This effect has been observed during winter weather freeze-offs, extreme flooding events, and the 2020 global oil demand contraction. The DPR methodology involves applying smoothing techniques to most of the data series because of inherent noise in the data".* (iii) US shale/tight oil in Feb continues the now 5-month trend of being flat at just below 9.7 mmb/d. The EIA is forecasting immaterial MoM production decreases in January of -1,000 b/d MoM to 9.681 mmb/d and another -1,000 b/d to 9.680 mmb/d in February. So basically flat production to start 2024. (iv) January's 9.681 mmb/d figure was revised downward by -

Shale/tight oil production

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

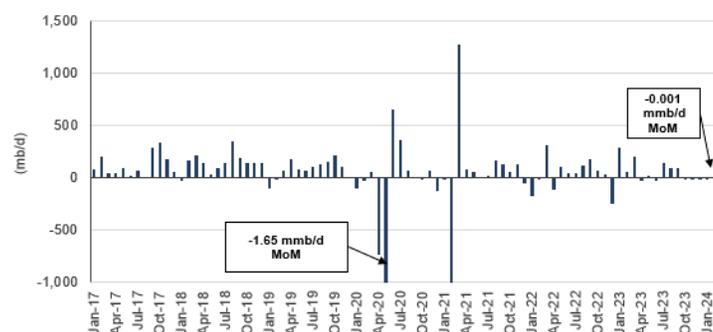
9,000 b/d compared to December's DPR which had Jan at 9.692 mmb/d. Oil production will have been sustained at or just below 9.7 mmb/d for six months now with September at 9.701 mmb/d, October at 9.603 mmb/d, November at 9.683 mmb/d, December at 9.683 mmb/d, January at 9,682 mmb/d, and now February at 9.820 mmb/d. (v) Permian shale/tight oil production was retroactively revised downwards slightly in more recent months, but has still been above 5.900 mmb/d since August. Permian is now August at 5.908 mmb/d, September at 5.929 mmb/d, October at 5.944 mmb/d, November at 5.956 mmb/d, December at 5.962 mmb/d, January at 5.969 mmb/d, and now February at 5.974 mmb/d. (vi) US shale/tight oil production is +454,000 b/d YoY to 9.680 mmb/d in February 2024. The major change areas are Permian +264,000 b/d YoY, Bakken at +113,000 b/d YoY, and Niobrara at +77,000. (vii) Note that shale/tight oil is approx. ~75% of total US production, so whatever the trends are for shale/tight oil are normally the trends for US oil in total. Below is our table of running DPR estimates of shale/tight oil production and our graph of MoM changes in major shale/tight oil production.

Figure 27: US Major Shale/Tight Oil Production

Thousand b/d	2024												Feb MoM	Feb MoM%	Dec DPR	Jan DPR	Jan Change			
	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan						Feb	Feb YoY	Feb YoY%
Anadarko	394	406	406	421	422	421	411	406	405	399	395	392	391	-2	-1%	-1	0%	389	392	3
Appalachia	152	152	153	155	148	137	139	144	154	152	149	147	145	-7	-5%	-2	-2%	138	147	9
Bakken	1,191	1,158	1,165	1,165	1,196	1,206	1,245	1,337	1,302	1,301	1,302	1,304	1,303	113	9%	-1	0%	1,308	1,304	-4
Eagle Ford	1,132	1,177	1,154	1,179	1,196	1,206	1,181	1,171	1,162	1,153	1,150	1,149	1,147	14	1%	-2	0%	1,149	1,149	-1
Haynesville	36	35	35	35	31	32	32	31	32	32	32	31	31	-5	-13%	0	0%	32	31	-1
Niobrara	613	645	650	663	675	663	693	683	687	691	691	690	689	77	13%	-1	0%	690	690	1
Permian	5,710	5,852	5,830	5,799	5,715	5,855	5,908	5,929	5,944	5,956	5,962	5,969	5,974	264	5%	5	0%	5,986	5,969	-17
Total	9,227	9,425	9,393	9,416	9,383	9,520	9,609	9,701	9,603	9,683	9,682	9,681	9,680	454	5%	-1	0%	9,692	9,681	-10

Source: EIA, SAF

Figure 28: MoM Changes in US Major Shale/Tight Oil Production



Source: EIA, SAF

Oil: EIA DUCs down MoM in December, 11th straight monthly decrease in DUCs

We have been warning that we see a key risk to how much US oil production can sustainably grow in 2024 is the need to increase rig counts (not have less frac spreads) to replenish the inventory of Drilled Uncompleted wells at higher levels and the challenge for oilfield services to add capacity to increase frac spreads and completions. The biggest problem in the past with the EIA's Drilling Productivity Report [\[LINK\]](#) estimate of Drilled Uncompleted wells was that the data had been constantly revised and sometimes significantly. (i) The EIA estimates DUCs were down -91 MoM (-963 YoY) in December to 4,374 DUCs. Note that November's data had a net upwards revision of +23 DUCs to 4,438 DUCs. (ii) To put in perspective, there were 8,883 DUCs in the height of the Covid slowdown in June 2020, 5,214 DUCs in

DUCs down in December

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

December 2021, 5,337 DUCs in December 2022 and now 4,374 DUCs in Dec 2023. (iii) It looks like DUCs have steadily decreased over the past 11 months with 5,456 DUCs in February, 5,366 DUCs in March, 5,244 DUCs in April, 5,151 DUCs in May, 5,056 DUCs in June, 4,897 DUCs in July, 4,805 DUCs in August, 4,650 in September, 4,529 DUCs in October, 4,438 DUCs in November and now 4,374 in December. (iv) We still believe there is still the need for drilling rigs to pick up to replenish the DUC inventory if the US is to have sustained strong oil growth in 2024 and beyond. (v) The largest YoY December DUCs declines are the Eagle Ford (-321 YoY), Bakken (-279 YoY), and Permian (-152 YoY). (vi) Note that shale/tight oil is approx. ~70% of total US production, so whatever the trends are for shale/tight oil are normally the trends for US oil in total. Below is our table of running DPR estimates of shale/tight oil production.

Figure 29: Estimated Drilled Uncomplete Wells in 2023

Drilled Uncompleted								Dec DPR		Jan DPR				
	June	July	Aug	Sept	Oct	Nov	Dec	Dec YoY	Dec YoY %	Dec MoM	Dec MoM %	Nov	Nov Change	
Anadarko	747	742	735	725	715	706	699	-63	-8%	-7	-1%	696	706	10
Appalachia	833	814	804	781	771	768	768	-84	-10%	0	0%	761	768	7
Bakken	492	451	414	370	352	337	323	-279	-46%	-14	-4%	329	337	8
Eagle Ford	493	453	428	401	381	361	352	-321	-48%	-9	-2%	372	361	-11
Haynesville	749	741	744	742	738	734	735	68	10%	1	0%	736	734	-2
Niobrara	839	805	791	751	724	695	667	-132	-17%	-28	-4%	700	695	-5
Permian	903	891	889	880	848	837	830	-152	-15%	-7	-1%	821	837	16
Total	5,056	4,897	4,805	4,650	4,529	4,438	4,374	-963	-18%	-64	-1%	4,415	4,438	23

Source: EIA, SAF

Oil: Chevron CEO sees US oil growth if producers return to “ways of the past”

On Tuesday, we tweeted [\[LINK\]](#) “Headline \$CVX CEO replies “it can go higher” when asked if US #Oil supply can go higher. BUT caveats go higher saying if US were to return to “ways of the past” ie. focus on growth instead of less capex/more return of cash to shareholders.

See 🗨️ transcript! Thx @lisaabramowicz1 @FerroTV. #OOTT.” The headlines were on how Chevron CEO Mike Wirth said US oil production can go higher. No question that is what Wirth said. However, if you listen to his entire answer, Wirth seems to qualify that statement by saying that is assuming the US oil producers return to “ways of the past” when they allocated cash flow to growth and not now where they also prioritize returning cash flow shareholders. It doesn’t sound like he is saying growth under the ways of today. Our tweet included the transcript we made of Wirth’s comments. “At 1:54 min mark, Wirth “Certainly US supply [oil] growth has surprised people to the upside. And I think it has helped calm markets a little bit. But it certainly has no ability to cover up a big disruption in the Middle East. That will fundamentally change the supply dynamics in the world if you were to see shipping halted, disrupted or seriously disturbed. And so I do think that the US supply has helped kind of calm markets over the longer cycle but there is no capacity to respond in the short term to an interruption like that.” Ferro “13 million barrels a day. Can we just sort of frame this just for a moment. How much potential is left. How much higher can that number go?” Wirth “It can go higher. The US is blessed with an abundant resource base. The constraints tend to be right now the capital spending of suppliers. How fast suppliers will go. A decade ago, companies in our industry were growing too fast in the Permian Basin, in particular, and investors were unhappy with that. I think we’ve seen companies throttle back capital spending, return cash to shareholders more consistently. If they were to return to ways of the past, you could see that number go higher. I don’t see that going on right now. But the US has upside.”

Chevron CEO on US oil growth potential

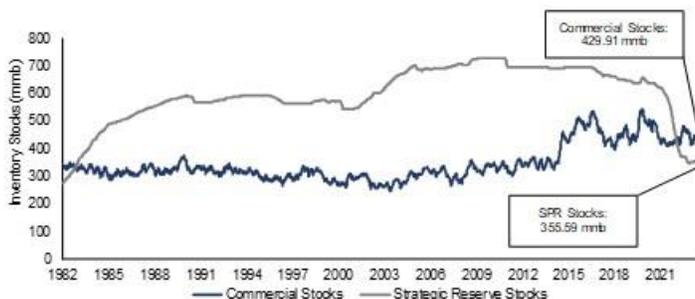
The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Oil: US SPR reserves now -74.321 mmb lower than commercial crude oil reserves

US SPR reserves

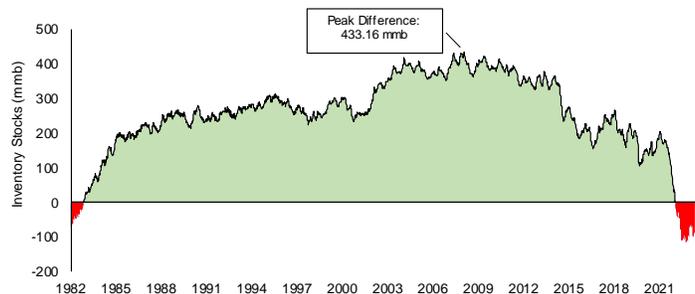
Oil in the US Strategic Petroleum Reserves (SPR) continues to be much lower than total US commercial crude oil reserves. The SPR went back below commercial for the first time since 1983 in the Sept 16, 2022 week. The deficit narrowed this week after a draw in commercial oil stocks of -2.492 mmb. The EIA’s weekly oil data for January 12 [\[LINK\]](#) saw the SPR reserves increase +0.596 mmb WoW to 355.590 mmb, while commercial crude oil reserves decreased -2.492 mmb to 429.911 mmb. There is now a -74.321 mmb difference between SPR reserves and commercial crude oil reserves. The below graphs highlight the difference between commercial and SPR stockpiles.

Figure 30: US Oil Inventories: Commercial & SPR



Source: EIA, SAF

Figure 31: US Oil Inventories: SPR Less Commercial



Source: EIA, SAF

Oil: US gasoline prices +0.01 this week to \$3.08

US gasoline prices

It seems like US gasoline prices, at least for now, seem to be holding around \$3.10 for the past month on a national average. Yesterday, AAA reported that US national average prices were \$3.08, which is up \$0.01 WoW, down \$0.02 MoM and \$0.21 YoY. Remember the big gasolie crisis in summer 2022 started to see US gasoline prices ease below \$4 in August 2022 and were helped in Q4/22 by the SPR releases.

Oil: Crack spreads widened \$0.37 WoW to \$24.47

Crack spreads basically flat this week

We remind that oil demand is driven by refiners and their ability to make money by processing oil and selling petroleum products. So crack spreads are a good indicator if

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

refiners will be looking to buy more or less oil. Crack spreads have been bouncing around +/- \$2 for the last two months. This week, crack spreads were +\$0.37 to \$24.47, which followed \$24.10 on Jan 12, \$21.71 on Jan 5, \$23.57 on Dec 29, \$22.87 as of Dec 22, \$24.79 on Dec 15, \$22.56 on Dec 8, \$22.50 on Dec 1, \$23.36 on Nov 24, \$23.95 on Nov 17, and \$22.39 on Nov 10. Crack spreads at \$24.47 are a little above the high end of the more normal pre-Covid that was more like \$15-\$20, which should support the continued normal seasonal ram up in refinery runs.

Explaining 321 crack spread

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, which was \$24.47 as of the Friday Jan 19, 2024 close.

Figure 32: Cushing Crude Oil 321 Crack Spread Jan 19, 2014 to Jan 19, 2024



Source: Bloomberg

Oil – Moving into period when Cdn heavy oil differentials normally seasonally narrow

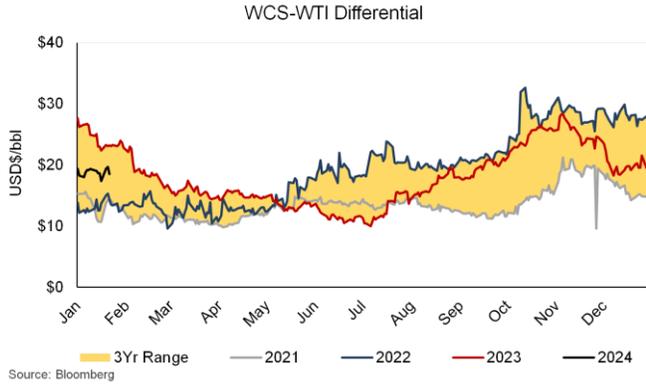
Every year we include this reminder that we are moving into the period of normal seasonal narrowing of Cdn heavy oil differentials. There is no hard and fast rule because there are always unplanned events. But there are also global items that impact Cdn heavy oil differentials. Another example is Enbridge differentials. However, in the next couple months, we will be moving into the time of the year that normally sees Cdn heavy oil differentials narrow. This is the time of year, when refineries tend to maximize production of asphalt ahead of the annual summer paving season. As is said in Canada, there are two seasons in Canada – winter and paving season. Below is graph showing WCS-WTI differentials that shows this normal seasonal trend of narrowing WCS-WTI differentials from Feb thru May. We have seen Cdn heavy oil differentials narrowing already and a key factor for that is the OPEC+ cuts, which tend to first be on heavy/medium sour barrels that would tend to compete with Cdn heavy/medium barrels. WCS less WTI differential closed on Jan 19 at \$18.20, which

WCS differentials normally narrow in spring

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

was down WoW from \$18.80 on Jan 12 at \$18.80. Jan 19, 2024 at \$18.20 compares to \$23.80 on Jan 19, 2023, \$13.50 on Jan 19, 2022 and \$13.80 on Jan 19, 2021.

Figure 33: WCS less WTI oil differentials



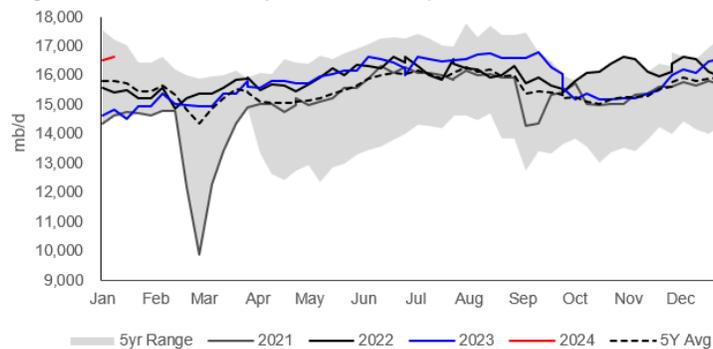
Source: Bloomberg

Oil: Refinery inputs up +0.135 mmb/d WoW to 16.653 mmb/d

The EIA reports on crude oil inputs into refineries for the week ended January 12 so it doesn't reflect the refineries that went off line this week due to the cold weather and power supply outages. There are always unplanned issues that impact crude oil inputs into refineries, but refineries around the world follow seasonal patterns for their maintenance. There was the normal summer ramp up that lasted a little longer than normal given the big crack spreads. We saw the decline in crude oil inputs for the fall turnarounds and US refineries have been in their normal seasonal winter ramp up so we have been seeing a steady increase in crude oil inputs. On Thursday, the EIA released its estimated crude oil input to refinery data for the week ended January 12 [LINK]. The EIA reported crude oil inputs to refineries were up +0.135 mmb/d this week to 16.653 mmb/d and are up +1.799 mmb/d YoY. Refinery utilization was down -30 bps WoW to 92.6%, which is +730 bps YoY.

**Refinery inputs
+0.135 mmb/d
WoW**

Figure 34: US Refinery Crude Oil Inputs



Source: EIA, SAF

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Oil: Wood Mackenzie estimates 1.8 mmb/d of US refinery capacity is offline

On Friday, Bloomberg reported on Wood Mackenzie data, writing “The effects of Winter Storm Gerri persist, with 1.5m b/d of crude capacity remaining offline this week on the US Gulf Coast and 1.8m b/d of refining capacity idled across the US, according to data from Wood Mackenzie. * While some crude capacity has been restored, other locations have shut units, keeping size of capacity loss stable.” Bloomberg also noted that some of the offline capacity is due to maintenance. Ie. “Largest crude unit at Motiva Enterprises 626k b/d Port Arthur refinery, the 345k b/d VPS-5 CDU, has been shut since Jan. 8 for turnaround.” One of the high profile refineries offline due to weather is the TotalEnergies 238,000 b/d Port Arthur Texas refinery that was shut in early Tuesday due to a loss of power.

1.8 mmb/d refinery capacity offline

Oil: US net oil imports -0.528 mmb/d WoW as oil exports up +1.707 mmb/d WoW

The EIA reported US “NET” imports were down -0.528 mmb/d to 2.391 mmb/d for the January 12 week. US imports were up +1.179 mmb/d to 7.420 mmb/d against exports which were +1.707 mmb/d WoW to 5.029 mmb/d. (i) Venezuela weekly imports. We know why the EIA doesn’t have any data in the row for Venezuela weekly oil imports but we still don’t know if the weekly oil imports are off or if Venezuela is included in the weekly oil imports in the Others number. But we do know that Chevron continues to import >100,000 b/d from Venezuela into the Gulf Coast. Give the EIA credit for putting out weekly oil import estimates, but it’s a reminder that we have to be careful about using the weekly oil import estimates. Rather we need to make sure we go to the monthly data for oil imports. ii) The WoW increase in US imports was driven mostly by “Top 10”. Top 10 was up +0.792 mmb/d. Some items to note on the country data: (i) Canada was up +0.631 mmb/d to 4.188 mmb/d. (ii) Saudi Arabia was down -0.061 mmb/d to 0.413 mmb/d. (iii) Mexico was up +0.234 mmb/d to 0.756 mmb/d. (iv) Colombia was down -0.008 mmb/d to 0.212 mmb/d. (v) Iraq was down -0.128 mmb/d to 0.064 mmb/d. (vi) Ecuador was up +0.120 mmb/d to 0.150 mmb/d. (vii) Nigeria was down -0.018 mmb/d to 0.147 mmb/d.

US net oil imports

Figure 35: US Weekly Preliminary Imports by Major Country

(thousand b/d)	Oct 13/23	Oct 20/23	Oct 27/23	Nov 3/23	Nov 10/23	Nov 17/23	Nov 24/23	Dec 1/23	Dec 8/23	Dec 15/23	Dec 22/23	Dec 29/23	Jan 5/24	Jan 12/24	WoW
Canada	3,723	3,387	3,485	3,873	3,835	3,846	3,243	3,972	3,572	3,686	3,428	3,796	3,557	4,188	631
Saudi Arabia	208	436	294	192	242	224	141	400	316	406	75	139	474	413	-61
Venezuela	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	609	614	1,004	465	366	971	571	876	633	851	380	952	522	756	234
Colombia	150	146	74	364	316	217	143	289	214	215	157	129	220	212	-8
Iraq	127	182	351	187	283	36	178	166	85	22	380	239	192	64	-128
Ecuador	0	92	133	61	36	126	112	252	233	49	142	83	30	150	120
Nigeria	48	89	30	39	70	79	174	226	111	162	80	95	165	147	-18
Brazil	63	221	168	234	135	257	148	274	255	197	238	305	249	264	15
Libya	47	86	106	0	86	86	0	87	87	86	0	171	0	7	7
Top 10	4,975	5,253	5,645	5,415	5,369	5,842	4,710	6,542	5,506	5,674	4,880	5,909	5,409	6,201	792
Others	967	760	780	979	1,004	687	1,123	966	1,011	1,076	1,396	986	832	1,219	387
Total US	5,942	6,013	6,425	6,394	6,373	6,529	5,833	7,508	6,517	6,750	6,276	6,895	6,241	7,420	1,179

Source: EIA, SAF

Oil: Pemex says new Olmeca refinery will be at max production capacity by March 31

Yesterday, Pemex CEO Oropeza said its new 340,000 b/d Olmeca refinery will be running at full capacity by the end of March. Pemex posted a video on Twitter/X in Oropeza in Spanish but it had English translation running on the bottom. [\[LINK\]](#). Oropeza said “we are very excited because in a matter of weeks, this refinery, this great project, is going to enter commercial production. First we will start producing diesel, then regular gasoline and, by the end of March, all three will be at their maximum production capacity.”

Olmeca refinery update

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

01/04/24: Pemex Olmeca refinery to process 243,000 b/d in 24, 320,000 b/d in 25

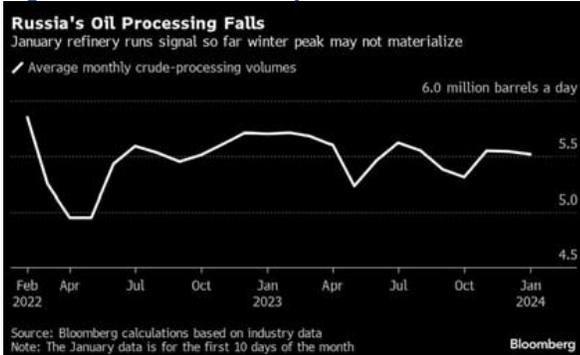
Here is what we wrote in our Jan 7, 2024 Energy Tidbits memo. *“Going into 2023, Mexico’s (Pemex) ramp up in its existing refineries capacity utilization and the start up of the new 340,000 b/d Olmeca (formerly known as Dos Bocas) was expected to have a big reduction to Mexico oil exports including to the US Gulf Coast. But that didn’t happen as Olmeca start was delayed and Pemex had a series of problems at its refineries in the first 4-months of 2023. But Olmeca is ramping up and that means Pemex should be increasing the amount of its domestic oil production that it refines in Mexico and therefore there should be less Mexico oil for export. On Thursday, the WSJ reported “Speaking at President Andrés Manuel López Obrador’s morning press conference, Romero Oropeza said Pemex’s six refineries in Mexico processed 794,000 barrels a day of crude oil last year, while its Deer Park refinery in Texas processed 270,000 barrels a day. With the new refinery in operation, Pemex expects to raise its total crude processing to 1.5 million barrels a day this year, and to increase that to nearly 1.8 million barrels a day by 2026, he added. The new refinery is located in Dos Bocas, in southern Tabasco state. The Olmeca refinery, one of López Obrador’s flagship infrastructure projects, is expected to process 243,000 barrels a day this year and raise that to 320,000 barrels a day in 2025, Romero Oropeza said.”*

Oil: Russian refineries processing oil down 27,000 b/d against Dec average

On Tuesday we tweeted [\[LINK\]](#) *“Less than normal Russia refining runs = more #Oil than normal for export. Russian refining volumes not showing signs of normal seasonal ramp up. Thx @ja_herron @business @vikatona @Kpler”*. On Tuesday, Bloomberg reported *“Russia’s oil processing fell in the first ten days of 2024, signaling that the traditional winter refining peak might not materialize this year amid remaining restrictions on exports of some types of diesel. The nation’s facilities processed 5.52 million barrels of crude a day from Jan. 1 to Jan. 10, down almost 27,000 barrels a day - or 0.5% - from the average for most of December, according to a person with knowledge of industry data. Lower refinery runs at Gazprom Neft PJSC’s and Bashneft PJSC’s facilities contributed to the overall decline, the person said. The halt of a unit at Lukoil’s PJSC refinery in Nizhny Novgorod has had limited impact on the company’s primary processing so far, according to the person.”* Recall the storms mentioned in last week’s report covering the Dec 27 week, which caused refining output to decline by 200,000 b/d. The winter is usually strong for refineries in Russia so this drop in refining output is uncharacteristic but somewhat expected given the export restrictions. Bloomberg also reported on Monday that a Lukoil gasoline refinery had to undergo unscheduled maintenance, which should negatively impact next week’s processing figures. Our supplemental documents package includes the Bloomberg report.

Russia oil refinery runs

Figure 36: Russia refinery runs thru Jan 10 week



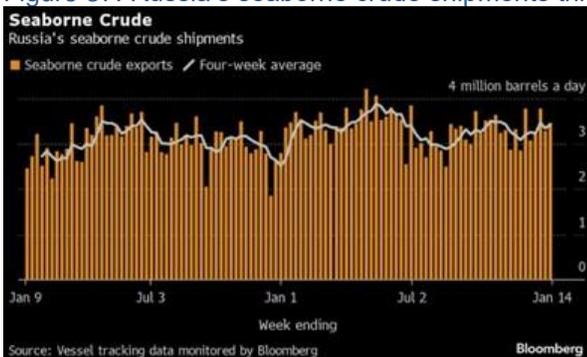
Source: Bloomberg

Oil: Russia crude oil shipments for Jan 14 week are above its commitment for 2024

In a break from last week's in-line export figures, it looks like Russia breached its OPEC+ commitment for OPEC shipments this week. On Tuesday, we tweeted [\[LINK\]](#) "Russian Crude Flows Defy Red Sea Chaos to Exceed OPEC+ Target' Great weekly recap of Russian #Oil shipments from @JLeeEnergy @business. #OOTT". Bloomberg had reported "Russia's seaborne crude shipments shrugged off attacks on shipping in the southern Red Sea to register gains in the latest week, as Moscow failed to match export cuts that it pledged to its OPEC+ allies. About 3.43 million barrels a day of crude were shipped from Russian ports in the four weeks to Jan. 14, tanker-tracking data monitored by Bloomberg show. That was up by 94,000 barrels a day from the period to Jan. 7." The export cuts promised by Moscow should be 500,000 b/d lower than the May-June 2023 average, split between crude oil and refined petroleum products. The 4-week average as of Jan 14 shows they are only roughly 150,000 b/d of crude exports below that May-June baseline, Bloomberg reports. Bloomberg also noted that the Houthi attacks in the Red Sea aren't deterring Russian ships from using the Suez canal, as their Asia-destined cargoes are thought to be relatively safe from deliberate Houthi targeting (although there was a missile that missed a Russian crude transport last Friday). Our Supplemental Documents package includes the Bloomberg report.

Russia oil shipments exceeds commitment

Figure 37: Russia's seaborne crude shipments thru Jan 14 week



Source: Bloomberg

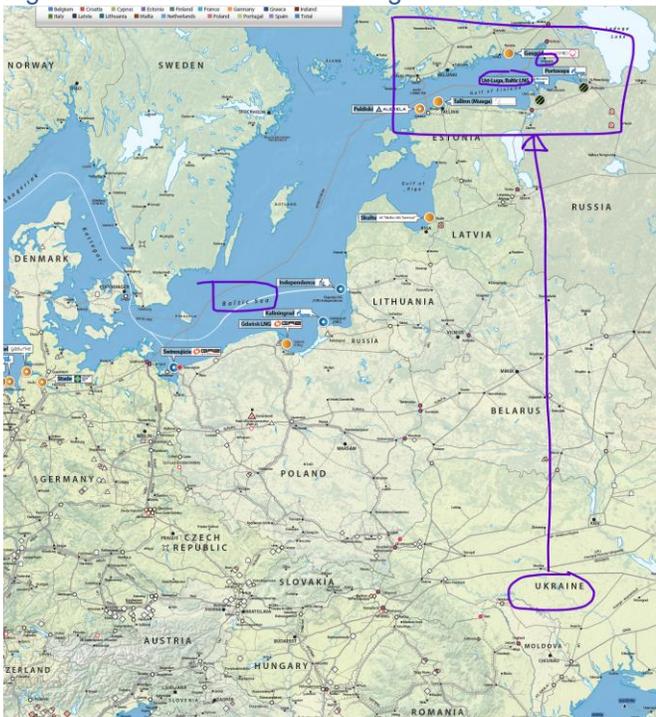
The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Oil: Drones hit Novatek's Ust-Luga complex, reminds Russia's Baltic Sea is at risk

Earlier this morning, we tweeted [LINK](#) "Drones hit Novatek's Ust-Luga operations @Reuters. This is a reminder that Russia's major Baltic Sea #Oil export loading terminals at Ust-Luga and Primorsk are also at risk for drone attacks. See 📌 @GIEBrussels #LNG map & @JLeeEnergy loading table. #OOTT [LINK](#)." This is breaking morning news so there isn't a lot of detail and, since it's Russia, there likely won't be a lot of details. But reports are that the damage is localised in the complex that "processes natural gas condensate into naphtha, jet fuel and ship fuel components according to Novatek's website." Ust-Luga is also the site of Novatek's under construction Baltic LNG project. We thought the big reminder from this drone attack is that it also means that Russia's two big oil export terminals for the Baltic Sea are at risk – their Ust-Luga and nearby Primorsk oil loading terminals. Our tweet had the below GIE LNG infrastructure map and also Bloomberg's crude loadings by terminal table.

Drones hit Ust-Luga complex

Figure 38: Russia's LNG/natural gas infrastructure around Ust-Luga



Source: GIE

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 39: Tankers loading crude at Russia terminals



Source: Bloomberg

Oil: OPEC MOMR: unchanged 2024 demand, 2025 demand +1.8 mmb/d YoY

On Wednesday at 5:30am MT, OPEC released its Monthly Oil Market Report Dec. (i) We thought the takeaway was neutral but would be positive if markets believed in OPEC's first look at 2025 oil demand being +1.8 mmb/d YoY. Compared to the December MOMR. There was a big decline to OPEC's non-OPEC supply growth forecast and no change to demand projections in 2023 and 2024. It's not common that demand forecasts are completely unchanged, so this might raise some questions. While OPEC forecasts 2025 demand to outstrip non-OPEC supply growth that year, which would be a positive, we don't think markets buy into their 2025 outlook. (ii) There were no revisions to 2023 demand, staying flat at +2.46 mmb/d YoY growth to 102.11 mmb/d. (iii) Quarterly demand changes for 2023. Q1/23 decreased to 101.30 mmb/d (was 101.57). Q2/23 increased to 101.75 mmb/d (was 101.47). Q3/23 increased to 102.21 mmb/d (was 102.12 mmb/d), and Q4/24 was down to 103.18 mmb/d (was 103.28). (iv) No change to 2024 demand growth either, with the biggest quarterly revision being Q2/24 up +0.28 mmb/d to 103.92 mmb/d (was 103.64). (v) OPEC still forecasts increasing oil demand for OECD countries at +0.26 mmb/d YoY to 46.02 mmb/d in 2024, i.e. not reaching peak oil demand. (vi) Non-OECD is forecast +1.99 mmb/d YoY to 58.34 mmb/d (was 58.28 mmb/d) in 2024 with the largest growth being China +0.63 mmb/d YoY to 16.78 mmb/d and the Middle East +0.38 mmb/d YoY to 9.01 mmb/d. Other Asia non-OECD is up +0.31 mmb/d YoY to 9.59 mmb/d, and India +0.22 mmb/d YoY to 5.56 mmb/d. (vii) Non-OPEC supply was increased for 2023 at +2.08 mmb/d YoY (was +1.78) and full year average of 67.59 mmb/d (was 69.06 mmb/d). For 2024, OPEC forecasts non-OPEC supply at +1.34 mmb/d YoY to 70.40 mmb/d (from 68.96 mmb/d). Key YoY non-OPEC growth areas for 2024 are US +0.60 mmb/d (from +0.61), Canada +0.24 mmb/d (unchanged), Guyana at +0.16 mmb/d (unchanged), Brazil at +0.12 mmb/d (unchanged), Norway +0.12 mmb/d (unchanged) and Kazakhstan +0.06 mmb/d (was +0.08). They also included Angola in this non-OPEC supply growth at -0.04 mmb/d. (viii) OPEC also now has 2025 predictions. Non-OPEC supply in 2025 is expected to grow by +1.27 mmb/d to 71.67 mmb/d, with major growth areas in North America at +0.70 mmb/d (US +0.60 mmb/d) and Latin America +0.27 mmb/d. OPEC forecasts world demand growth to be +1.85 mmb/d at 106.21 mmb/d. (ix) OPEC Secondary Sources for December were +82,000 b/d MoM to 26.700 mmb/d. There were no major changes on a country basis, but some MoM changes were Nigeria +0.100 mmb/d to 1.418 mmb/d, Kuwait -0.023 mmb/d to 2.545 mmb/d and Iraq +0.023 mmb/d to 4.292 mmb/d. Note that OPEC is forecasting higher Russian production in 2024 vs. what they

OPEC Monthly Oil Market Report

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

said in December's MOMR; it is now 10.77 mmb/d, up from 10.62 mmb/d last month. (ix) Direct Communications (what the OPEC countries report). There were a few items to note vs what countries directly reported vs Secondary Sources estimates: Iran does not provide production numbers. Iraq does its norm and says it produced less at 4.086 mmb/d in Dec vs. Secondary Sources of 4.292 mmb/d, Saudi Arabia says it produced 8.944 mmb/d in Dec vs Secondary Sources of 8.956 mmb/d, and Venezuela does its norm and says it produced more at 802,000 b/d vs. Secondary Sources of 786,000 b/d. (x) Our Supplemental Documents package includes excerpts from the January OPEC MOMR.

OPEC Jan MOMR sees slightly smaller draw on global oil stocks in Q4/23

Here's what we wrote in our Dec 17 tidbits memo: "The item that caught our eye on the OPEC MOMR forecasts is their forecast for big oil stock draws in Q4/23. We tweeted [\[LINK\]](#) "#OPEC's big #Oil call in its monthly Dec MOMR. Call on OPEC est +2.73 mmb/d QoQ to 31.12 mmb/d in Q4/23. Vs Secondary Sources OPEC Oct 27.895 mmb/d & Nov 27.837 mmb/d. Could be almost 3 mmb/d deficit in Q4/23! #OOTT." This is the big call in OPEC's MOMR Dec -their forecast for a big increase deficit of demand vs non-OPEC supply in Q4/23. This is the argument that bulls have had is that that the physical markets is much tighter than expected. Dec MOMR forecasts a deficit of 31.12 mmb/d in Q4/23, which means if OPEC stays disciplined, it's a big hit to oi inventories in Q4/23." In the January MOMR there's still a big draw forecasted but not as big as the one in December's MOMR. non-OPEC production was bumped up to 74.61 mmb/d from 72.16 mmb/d estimated last month, with the overall deficit now at 28.58 mmb/d which still leaves -1.89 mmb/d coming out of storage if OPEC crude production is 26.69 mmb/d in Q4/23.

Figure 40: Supply/Demand Balance 2023, Dec MOMR

Table 10 - 1: Supply/demand balance for 2023*, mb/d

	2022	1Q23	2Q23	3Q23	4Q23	2023	Change 2023/22
(a) World oil demand	99.66	101.57	101.47	102.12	103.28	102.11	2.46
Non-OPEC liquids production	65.81	67.72	67.62	68.29	66.73	67.59	1.78
OPEC NGL and non-conventionals	5.39	5.44	5.47	5.43	5.43	5.44	0.05
(b) Total non-OPEC liquids production and OPEC NGLs	71.21	73.15	73.10	73.72	72.16	73.03	1.82
Difference (a-b)	28.45	28.42	28.37	28.40	31.12	29.08	0.63
OPEC crude oil production	28.86	28.82	28.28	27.56			
Balance	0.41	0.40	-0.10	-0.84			

Note: * 2023 = Forecast. Totals may not add up due to independent rounding.
Source: OPEC.

Source: OPEC MOMR Dec

Figure 41: Supply/Demand Balance 2023, Jan MOMR

	2022	1Q23	2Q23	3Q23	4Q23	2023	Change 2023/22
(a) World oil demand	99.66	101.30	101.75	102.21	103.18	102.11	2.46
Non-OPEC liquids production	66.98	68.79	68.76	69.46	69.21	69.06	2.08
OPEC NGL and non-conventionals	5.36	5.40	5.44	5.39	5.39	5.41	0.05
(b) Total non-OPEC liquids production and OPEC NGLs	72.34	74.20	74.20	74.86	74.61	74.47	2.12
Difference (a-b)	27.31	27.10	27.55	27.35	28.58	27.65	0.34
OPEC crude oil production	27.73	27.76	27.17	26.43	26.69	27.01	-0.72
Balance	0.41	0.66	-0.37	-0.92	-1.89	-0.64	-1.05

Note: * 2023 = Estimate. Totals may not add up due to independent rounding.
Source: OPEC MOMR Dec

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Oil: IEA increases 2024 demand, but non-OPEC supply growth to outpace

On Thursday, the IEA released its monthly Oil Market Report for January at 2am MT. They only release very limited public info, but Bloomberg provided detailed tables and added color from the report. (i) We see the report as slightly negative. While the IEA revised upwards their oil demand forecast for 2024 by +0.180 mmb/d, the downside comes from the IEA's forecast for non-OPEC supply growth being +0.3 mmb/d vs. the Dec OMR, which means there is a slight imbalance towards supply growth. (ii) IEA messaging is negative but an overlooked positive from the new IEA forecasts is that there may be draws in global oil stocks in Q1/24. If so, that would be a positive for oil. On Thursday, we tweeted [\[LINK\]](#) "#Oil price higher or lower on Feb 28? No question, negative messaging in @IEA OMR Jan. But despite macro economic, EVs impact, etc, OVERLOOKED is 'OPEC+ supply management policies may tip the oil market into a small deficit at the start of the year' ie #OPEC cuts worked. #OOTT." (iii) 2023 demand growth was kept flat, although Q4/23 was revised down to 102.0 mmb/d from Dec OMR 102.2 mmb/d, and Q3/23 up +100,000 b/d mmb/d to 102.9 mmb/d from 102.8 mmb/d in the Dec OMR. (iv) 2024 demand. Dec OMR 2024 demand forecast growth increased to +1.3 mmb/d, and demand is now at 103.0 mmb/d. Dec OMR was +1.1 mmb/d YoY to 102.8 mmb/d. (v) 2023 demand is still a record high, well above the pre-covid record of 100.5 mmb/d, and 2024 would be another new record for oil demand. Don't forget all the IEA comments years ago about pre-Covid could be peak demand. (vi) Remember what we saw in the last few OMRs, where the IEA fully walked back what stood out to us as an unusual assumption for their Q1/24 oil demand. In their June OMR, the IEA had a massive -2.0 mmb/d QoQ drop in Q1/24 vs Q4/23. The normal seasonal pattern is for Q1 to be down sequentially QoQ vs the prior year Q4. But the 2.0 mmb/d QoQ drop was way higher than normal. They walked that QoQ decline to -1.9 mmb/d in July OMR, then -1.6 mmb/d QoQ in Aug OMR, then -1.4 mmb/d QoQ in the Sept OMR, then -1.3 mmb/d QoQ in the Oct OMR, -1.3 mmb/d QoQ in the Nov OMR, and then the -0.8 mmb/d QoQ decline in the Dec OMR. Six months ago, we looked at some of the older pre-Covid OMR reports and didn't see any QoQ forecasts this big, rather it was more like 1.0 mmb/d QoQ. (vii) IEA slightly increased non-OPEC supply. Note that the IEA now includes Angola's production in this category since they left last month, which would be an impact of 1.1 mmb/d. For 2023, while the IEA did not provide growth numbers, Jan OMR 20-23 numbers were 69.1 mmb/d (so would be 68.0 mmb/d excl. Angola), which would be slightly higher than the Dec OMR which was 67.8 mmb/d. For 2024, non-OPEC supply growth is up to 1.5 mmb/d in the Jan OMR to 70.4 mmb/d from +1.2 mmb/d YoY to 69.0 mmb/d in the Dec OMR. The IEA has bumped African supply growth to +2.4 mmb/d YoY from +1.3 mmb/d, which we assume is due to their inclusion of Angola. The only change that was more than 0.1 mmb/d was from the Americas (including US) with 28.2 mmb/d vs Dec OMR at 27.9 mmb/d. (vii) Our Supplemental documents package includes the IEA release and the Bloomberg reports.

Figure 42: IEA Global Demand Forecast by OMR Report

mmb/d	2022	Q1/23	Q2/23	Q3/23	Q4/23	2023	23-22	Q1/24	Q2/24	Q3/24	Q4/24	2024	24-23
Jan 24	99.6	100.2	101.8	102.9	102.0	101.7	2.1	101.7	102.7	103.7	103.8	103.0	1.3
Dec 23	99.6	100.2	101.7	102.8	102.2	101.7	2.1	101.4	102.4	103.4	103.9	102.8	1.1
Nov 23	99.6	100.3	101.7	103.0	102.8	102.0	2.4	101.5	102.4	103.5	104.1	102.9	0.9
Oct 23	99.6	100.4	101.8	102.7	102.6	101.9	2.3	101.3	102.2	103.5	103.9	102.7	0.8
Sep 23	99.6	100.4	101.7	102.6	102.5	101.8	2.2	101.1	102.6	104.0	103.5	102.8	1.0
Aug 23	100.0	100.6	102.0	102.9	103.1	102.2	2.2	101.5	102.6	104.2	104.3	103.2	1.0
July 23	99.9	100.5	101.4	103.1	103.3	102.1	2.2	101.4	102.6	104.3	104.5	103.2	1.1
June 23	99.9	100.5	101.6	103.4	103.5	102.3	2.4	101.5	102.5	104.1	104.4	103.1	0.8
May 23	99.9	100.5	101.3	103.0	103.1	102.0	2.1						
Apr 23	99.9	100.4	101.2	103.1	103.0	101.9	2.0						
Mar 23	99.9	100.7	101.3	101.9	101.9	101.5	1.6						
Feb 23	100.0	100.1	101.1	102.9	103.5	101.9	1.9						
Jan 23	99.9	99.6	100.8	102.9	103.5	101.7	1.8						
Dec 22	99.9	99.7	100.6	102.7	103.4	101.6	1.7						
Nov 22	99.8	99.6	100.5	102.3	103.0	101.4	1.6						

Source: IEA, Bloomberg, SAF

Oil: Red Sea escalation, US and Houthis go back and forth on missile/drone attacks

This week’s Red Sea action was a week of Houthis launch a drone/missile attack on the US/UK or commercial vessels in the Red Sea and the US retaliates with a drone strike on Houthis on land in Yemen. The US has to be hitting Houthis missile/drone capability but, after every US missile attack, the Houthis publicly say they aren’t stopping their Red Sea attacks. So at least for now, there is no sign of an end on either the US side or the Houthis to the back and forth of missiles/drone attacks in the Red Sea and on Yemen. On Thursday, Bloomberg reported “President Joe Biden said US air strikes against Iran-backed Houthi militants in Yemen will continue even though they have not halted the group’s attacks on Red Sea shipping. “Are they stopping the Houthis? No. Are they going to continue? Yes,” Biden told reporters at the White House on Thursday when asked if the American and British bombardment campaign has been effective.” On Friday, we tweeted [LINK](#) the Houthis leader’s response to Biden. We tweeted “Red Sea shipping disruptions to continue. Houthis not deterred by US/UK missile attacks. Houthis leader will continue to target ships in Red Sea and “we proceed with confidence and the American position does not intimidate us” #OOTT.” Our Supplemental Documents package includes the Houthis leader response.

Escalation in Red Sea

Houthis said they would target US/UK on land and at sea

One thing we haven’t seen yet from the Houthis was any drone/missile attacks against the US/UK anywhere but in the Red Sea, whereas they have threatened their interests on land and in the sea. Here is what we wrote in last week’s (Jan14, 2024) Energy Tidbits memo. “Even though the Houthis haven’t attacked post the US/UK attacks, the Houthis have reinforced they are not going away. On Friday, we tweeted [LINK](#) “Houthis threat to attack US/UK is also “on land” not just “at sea” “. the US and UK bear full responsibilitythis aggression will not go unanswered and without punishment. will not hesitate to target threat sources and all hostile targets on land and at sea ...” #OOTT”. Our tweet included the Almasirah news report that said “The Yemeni Armed Forces have announced that the US-British aggression against Yemen will not go unpunished, affirming that they will not hesitate to target hostile threat sources on land and at sea.” ““US-British enemy, as part of its support for the ongoing Israeli crimes in Gaza, launched a brutal aggression against Yemen with 73 airstrikes,” the official spokesman for Yemeni Armed Forces, Yahya Sare'e said in a

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

statement. He clarified that the aggression targeted the capital Sana'a, the provinces of Hodeidah, Taiz, Hajjah, and Sa'adah. "The airstrikes resulted in the martyrdom of five and the injury of six others." Sare'e affirmed that the US and UK bear full responsibility for their criminal aggression against the Yemeni people. He affirm that this aggression will not go unanswered and without punishment. He emphasized that the Yemeni Armed Forces will not hesitate to target threat sources and all hostile targets on land and at sea, in defense of Yemen, its sovereignty, and independence." Our Supplemental Documents package includes the Almasirah report."

We don't see the Houthis easily backing off and going away

We continue to believe the Houthis aren't going to go away in the near term. Here is what we wrote in last week's (Jan 14, 2024) Energy Tidbits memo. "No one knows how, when, if the fighting against the Houthis is going to end. But one thing to keep in mind is we just don't see the Houthis going away. Surely the US/UK hit some of the capabilities to launch missiles and drones. But the thing to keep in mind is that the Houthis have lasted eight years of getting bombed by the Saudis and never gave up. So unless the US and UK bomb them like crazy or unless someone goes into Yemen with ground forces and takes them out, we just don't see the Houthis going away. We just can't see the US bombing like crazy and there is absolutely no way the US or UK will send in ground troops to Yemen. So we think the Houthis will continue to threaten shipping and now US and UK interests. They may have less ballistic missile and drone capability but we see them still continuing."

Oil: Maersk CEO, Red Sea could disrupt "for a few months at least, hopefully shorter"

On Wednesday, Maersk CEO Vincent Clerc spoke at the Reuters Global Markets Forum in Davos. Reuters wrote [LINK](#) "Maersk and other large shipping lines have instructed hundreds of commercial vessels to stay clear of the Red Sea, sending vessels on the longer route around Africa in response to attacks on shipping by Iranian-backed Houthi militants. "So for us this will mean longer transit times and probably disruptions of the supply chain for a few months at least, hopefully shorter, but it could also be longer because it's so unpredictable how this situation is actually developing," said Clerc, speaking to the Reuters Global Markets Forum in Davos." And "This is extremely disruptive because you have close to 20% of global trade that transits through the Bab al-Mandab Strait. It's one of the most important arteries of global trade and global supply chains and it's clogged up right now," said Clerc."

Maersk warns Red Sea likely at least a few month

Avoiding the Red Sea adds 3,280 miles and 10-15 days via Cape of Good Hope

Here is an item from our Dec 24, 2023 Energy Tidbits memo. "The Suez Canal couldn't happen at a worse time given the Panama Canal is still running at far less capacity than normal due to the droughts. So it really only leaves the shippers/tankers with the option of going around the Cape of Good Hope. On Monday, we tweeted [LINK](#) "Avoiding Red Sea and going the long way around Cape of Good Hope for typical Singapore to Rotterdam for shipping adds ~3,280 miles and 10-15 days. Thx @jcgna @SPGCI #OOTT." Our tweet included the below map from Jennifer Gnana of Platts."

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 43: Suez Canal vs Cape of Good Hope shipping routes

Suez Canal vs. Cape of Good Hope shipping routes



Source: Global Maritime Hub, S&P Global Commodity Insights

Source: Platts

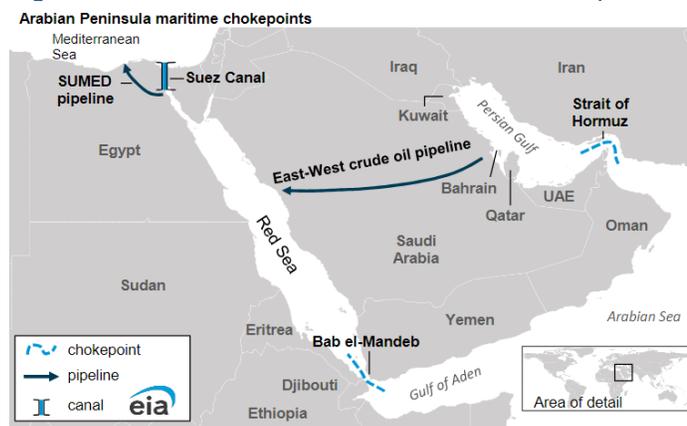
Oil: EIA estimates 8.8 mmb/d & 4.1 bcf/d thru Bab el Mandeb/Red Sea chokepoint

Here is what we wrote in our Dec 10, 2023 Energy Tidbits memo. “For the past few years and over the past couple months in particular, we have referenced the EIA’s Aug 27, 2019 brief “The Bab el-Mandeb Strait is a strategic route for oil and natural gas shipments”, which highlighted the volume of oil, petroleum products and LNG that goes thru the Red Sea and Bab el Mandeb every day. The EIA then wrote “In 2018, an estimated 6.2 million barrels per day (b/d) of crude oil, condensate, and refined petroleum products flowed through the Bab el-Mandeb Strait toward Europe, the United States, and Asia, an increase from 5.1 million b/d in 2014.” On Monday, the EIA updated the same data in a blog titled “Red Sea chokepoints are critical for international oil and natural gas flows” [\[LINK\]](#). The volumes thru the Bab el Mandeb and Red Sea are a lot higher. The EIA’s updated data for H1/23 estimates the volume was now up to 8.8 mmb/d and 4.1 bcf/d of LNG. Our Supplemental Documents package includes the EIA blog.”

Bab el Mandeb chokepoint.

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 44: Bab el-Mandeb Strait, a world oil chokepoint



Data source: U.S. Energy Information Administration

Source: EIA

Figure 45: Bab el-Mandeb Strait, a world oil chokepoint

Volume of crude oil, condensate, and petroleum products transported through the Suez Canal, SUMED pipeline, and Bab el-Mandeb Strait (2018–1H23)
million barrels per day

	2018	2019	2020	2021	2022	1H23
Total oil flows through Suez Canal and SUMED pipeline	6.4	6.2	5.3	5.1	7.2	9.2
crude oil and condensate	3.4	3.1	2.6	2.2	3.6	4.9
petroleum products	3.0	3.1	2.6	2.9	3.6	4.3
LNG flows through Suez Canal (billion cubic feet per day)	3.3	4.1	3.7	4.5	4.5	4.1
Total oil flows through Bab el-Mandeb Strait	6.1	5.9	5.0	4.9	7.1	8.8
crude oil and condensate	3.0	2.7	2.2	1.9	3.3	4.5
petroleum products	3.1	3.2	2.8	3.1	3.8	4.4
LNG flows through Bab el-Mandeb Strait (billion cubic feet per day)	3.1	3.9	3.7	4.5	4.5	4.1

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

Note: 1 H23=first half of 2023

Source: EIA

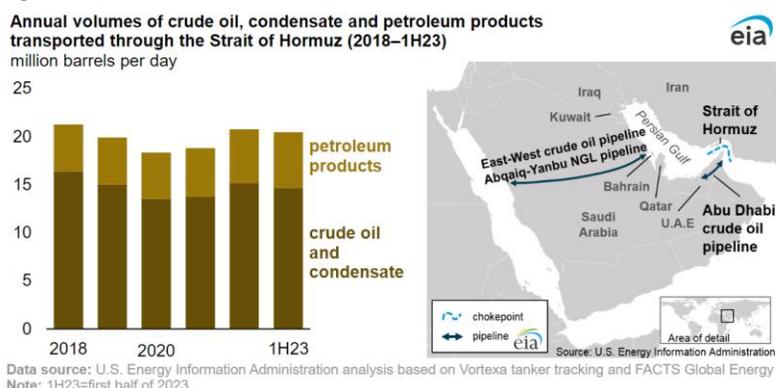
The Red Sea can be worked around, not so for the Strait of Hormuz

The reason why the Strait of Hormuz is considered the most important chokepoint for oil and LNG is that there isn't a workaround, to the most part, if the Strait of Hormuz becomes closed. The Red Sea/Bab el Mandeb can be worked around, it just means a much longer voyage. Here is what we wrote in our Nov 26, 2023 Energy Tidbits memo. *“To dated, the market has been focused on the Strati of Hormuz risk as it is the most important world oil chokepoint. We have been more worried to date on interruptions via the Red Sea and Bab el Mandeb but have also been noting how the Strait of Hormuz is more significant to supply if any interruption. And we have been included the EIA’s latest Strait of Hormuz blog, which is four years old. But on Tuesday, the EIA updated its Strait of Hormuz blog “The Strait of Hormuz is the world’s most important oil transit chokepoint” [LINK]. “The Strait of Hormuz, located between Oman and Iran, connects the Persian Gulf with the Gulf of Oman and the Arabian Sea. The Strait of Hormuz is the world’s most important oil chokepoint because large volumes of oil flow through the strait. In 2022, its oil flow averaged 21 million barrels per day (b/d), or the equivalent of about 21% of global petroleum*

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

liquids consumption. In the first half of 2023, total oil flows through the Strait of Hormuz remained relatively flat compared with 2022 because increased flows of oil products partially offset declines in crude oil and condensate.” “Between 2020 and 2022, volumes of crude oil, condensate, and petroleum products transiting the Strait of Hormuz rose by 2.4 million b/d as oil demand recovered after the economic downturn from the COVID-19 pandemic. In the first half of 2023, shipments of crude oil and condensates dropped because OPEC+ members implemented crude oil production cuts starting in November 2022. Flows through the Strait of Hormuz in 2022 and the first half of 2023 made up more than one-quarter of total global seaborne traded oil. In addition, around one-fifth of global liquefied natural gas trade also transited the Strait of Hormuz in 2022.” Our Supplemental Documents package includes the EIA blog. “

Figure 46: Crude oil, Condensate & Petroleum Products Flows Thru Strait of Hormuz



Source: EIA

Figure 47: Volumes thru the Strait of Hormuz 2018-1H23

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

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

Source: EIA

Oil: Libya cuts deal with protests, resuming Sharara oil production today

Earlier this morning, we tweeted [\[LINK\]](#) “Libya’s Sharara #Oil field to reopen today as govt negotiated end of protests after ~3 weeks. Was producing ~270,000 b/d pre shut-in, so

Libya oil production

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

should restore Libya production to 1.2 mmb/d. Thx @business @S_Elwardany Hatem Mohareb. #OOTT. Bloomberg had just reported “A Libyan official said the OPEC nation’s largest oil field will reopen later Sunday after it had been shuttered for about three weeks. Output at Sharara, which previously pumped about 270,000 barrels a day, will resume after the government in Tripoli agreed to implement most of the demands from protesters, Deputy Prime Minister Ramadan Boujannah told Libya’s Al-Ahrar TV.” Sharara had been shut-in since Wed Jan 3 and on Fri Jan 5, Bloomberg reported on comments from Libya’s oil minister saying Libya oil production had dropped to 981,000 b/d on Jan 4. And our tweet noted that this should restore production to over 1.2 mmb/d.

Prior to protests, Libya oil production was stable at 1.2 mmb/d

Prior to the protests two weeks ago, Libya oil production had been stable for the last several months at ~1.2 mmb/d. The last Libya NOC update was on Dec 28, when they tweeted [LINK](#) “Crude oil production reached 1,214,000 barrels per day, and condensate production reached 54,000 barrels per day during the past 24 hours.” Note that in its tweets and Facebook posts, the NOC has been consistent in providing separate production estimates for crude oil vs condensates.

Oil: Multiple negatives on Chinese consumers, investors and households this week

Every evening, we try to watch the Bloomberg Markets open shows for Asia and China. And it seemed like every night this week there were charts that showed how Chinese consumers, investors and households are being hit. And if Chinese consumers, investors and households are being hit, it means the Chinese economy is being hit. Here are the items we tweeted on Chinese consumers and households from Bloomberg TV.

Chinese
consumers

Chinese new and resales home prices keep going down

One of the big negatives for Chinese households is that new and resale home prices keep going down. On Tuesday night, we tweeted [LINK](#) “China economy negative. New-home prices in 70 cities in Dec down 0.45% MoM, Nov was down 0.37% MoM. steepest drop since Feb 2015. 2nd hand market also weak, sliding 0.79% in Dec, same pace as Nov. Thx @business C. Zhu, E. Dong, @YvonneManTV @DavidInglesTV. #OOTT”. Our tweet included the below Bloomberg TV graphs. Bloomberg also wrote “New-home prices in 70 cities, excluding state-subsidized housing, dropped 0.45% last month from November, when they declined 0.37%, National Bureau of Statistics figures showed Wednesday. The decrease was the steepest since February 2015. The second-hand market didn’t fare any better, with prices sliding 0.79%, the same pace as the previous month. China’s extended property downturn has been a major headwind for the economy.”

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 48: China New Home Prices Fell for 7 straight months

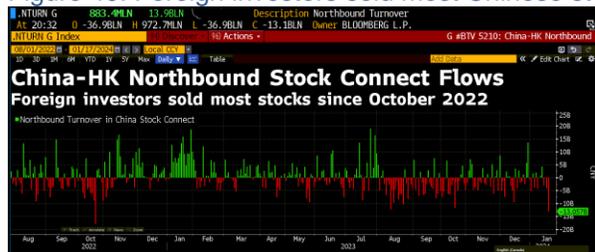


Source: Bloomberg

Foreign investors sold most Chinese stocks since Oct 2022

Chinese stock markets have had a brutal year and a key reason that we have been highlighted has been foreign investors have been net sellers of Chinese stocks. On Wednesday, we tweeted [\[LINK\]](#) “Foreign investors want to see something real that points to a reasonable chance of a sustained China recovery. Until then, more are moving to the sidelines. Thx @business. #OOTT.” Our tweet included the below graph that said “China-HK Northbound Stock Connect Flows: Foreign investors sold most stocks since October 2022”. We have included the chart many times in our weekly memos.

Figure 49: Foreign investors sold most Chinese stocks since Oct 2022

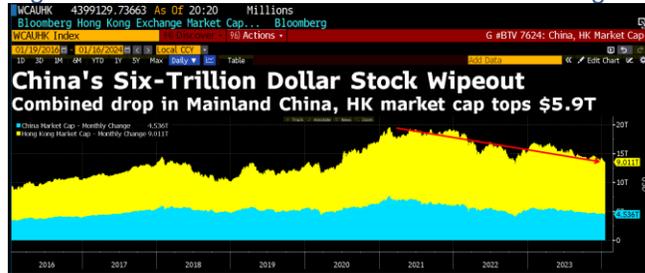


Source: Bloomberg

Combined drop in mainland China & Hong Kong market cap tops \$5.9 trillion

Chinese wealth in homes & stocks both keep going lower. On Wednesday, we tweeted [\[LINK\]](#) “Today’s reminder of wipe out of Chinese consumer “wealth” is \$6 trillion stock wipeout combined drop in mainland China, HK market cap reports @business. Yesterday’s reminder was continued drop in new and 2nd hand home prices. No wonder Chinese consumers are hesitant! #OOTT.”

Figure 50: China New Home Prices Fell for 7 straight months



Source: Bloomberg

Oil: China scheduled domestic flights down 1.6% WoW, didn't confirm a breakout

On Monday, we tweeted [\[LINK\]](#) "Stalled China recovery/consumers still cautious. China scheduled domestic flights -1.6% WoW to 91,926, gave back 1/2 of prior wk +3.3% gain. At 91,926 flts, back to yr ago Jan 17-23, 2023 level after China reopened post Covid restrictions. Thx @BloombergNEF Claudio Lubis #OOTT." On Monday, BloombergNEF posted its Aviation Indicators Weekly Jan 15, 2024 report, which covers scheduled domestic flights for the Jan 9-15 period. (i) Last week's (Jan 14, 2024) Energy Tidbits memo described the +3.3% WoW to 93,455 flights for the Jan 2-8 data being as "Neutral as one week does not make a trend but potentially the start of a break out as scheduled domestic flights had been stuck ~90,000 flights since the Nov 7-13 week." This week's data gave back half of those gains +3.3% WoW gains so this week's data didn't confirm a breakout. (ii) China scheduled domestic flights were -1.6% WoW to 91,926 flights for the Jan 9-15 week. This -1.6% WoW gave back half of the prior week (Jan 2-8) +3.3% WoW gain that was looking like it might be the first weekly breakout since the end of Nov that had seen scheduled domestic stuck around 90,000 flights from the Nov 7-13 week thru Dec 26-Jan 1 week. at 91,926 flights, it is back to the spring Apr 3-10 levels. For perspective, the big Super Golden Week holidays at the beginning of Oct saw 101,120 scheduled domestic flights for the Oct 3-9 week. We should see scheduled domestic flights ramp up at the end of Jan for Lunar New Year on Feb 10. The look ahead for the next four weeks is basically unchanged WoW. Today's Jan 15 report is "the number of scheduled domestic flights is set to grow 13% over the next four weeks to 103,910". This is basically unchanged vs last week's (Jan 8) report that said "The number of scheduled domestic flights is set to grow 10% over the next four weeks to 103,100." This is up vs last week's (Jan 2) report that said "The number of scheduled domestic flights is set to grow 12.2% over the next four weeks to 101,563." (iii) International travel scheduled flights is increased this week. And this increasing international flights is a big reason for the increase in domestic flights as more domestic feeder flights are needed to get people to major international airports. Today's Jan 15 report for the seven major China airlines flying internationally says the combined number of international flights by these seven major airlines "will rise by more than 285 a week to around 3,770 by the first week of February." Last week's Jan 8 report said "will rise by more than 245 a week to around 3,685 by the first week of February."

China
scheduled
domestic flights

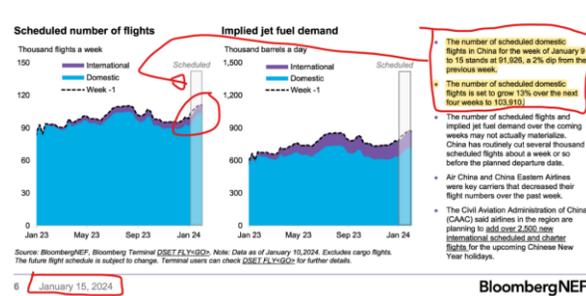
The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 51: China scheduled domestic flights from BNEF Aviation Indicators Weekly reports

Jan 9-15: -1.6% WoW to 91,926 flights	Jun 27-Jul 3: +1.9% WoW to 97,572
Jan 2-8: +3.3% WoW to 93,455	Jun 20-26: +3.4% WoW to 95,724
Dec 26-Jan 1: +1.3% WoW to 90,490	Jun 13-19: -0.9% WoW to 92,568
Dec 19-25: 89,330	June 6-12: -1.2% WoW to 93,328
Dec 12-18: n/a	May 30-Jun 5: +0.2% WoW to 94,486
Dec 5-11: +0.2% WoW to 90,012 flights	May 23-29: -0.1% WoW to 94,321
Nov 28-Dec 4: -0.1% WoW to 89,810	May 16-22: -2.8% WoW to 94,417
Nov 21-27: +0.4% WoW to 89,916	May 9-15: basically flat at 97,049
Nov 14-20: -0.2% WoW to 89,562	May 2-8: +2.8% WoW to 97,087
Nov 7-13: -2.6% WoW to 89,776	Apr 25-May 1: +0.04% to 94,471
Oct 31-Nov 6: -0.2% WoW to 92,146	Apr 18-24: +2.1% WoW to 94,138
Oct 24-30: -0.3% WoW to 92,361	Apr 11-17: +0.7% WoW to 92,231
Oct 17-23: -6.9% WoW to 92,638	Apr 3-10: -4.2% WoW to 91,567
Oct 10-16: -1.6% WoW to 99,490	Mar 28-Apr 3: +6.8% WoW to 95,624
Oct 3-9: +4.2% WoW to 101,120	Mar 21-27: +1.5% WoW to 89,513
Sept 26-Oct 2: +1.3% WoW to 97,009	Mar 14-20: -0.6% WoW to 88,166
Sept 19-25: essentially flat WoW to 95,742	Mar 7-13 week: -0.8% WoW to 88,675
Sept 12-18: -2.7% WoW to 95,853	Feb 27-Mar 3 week: -2.6% WoW to 89,430
Sept 5-11: -5.0% WoW to 98,469	Feb 21-27 week: +0.0% WoW to 91,828
Aug 29-Sep 4: -1.2% WoW to 103,637	Feb 14-20 week: -0.5% WoW to 91,561
Aug 22-28: +0.2% WoW to 104,932	Feb 7-13 week: -0.7% WoW to 92,007
Aug 15-21: -0.1% WoW to 104,716	Jan 31- Feb 6 week: +10.9% WoW
Aug 8-14: +0.8% WoW to 104,823	Jan 24-30 week: -9.2% WoW to 83,500
Aug 1-7: -0.4% WoW to 104,000	Jan 17-23 week: +7% WoW to 91,959
July 25-31: +0.4% WoW to 104,436	Jan 10-16 week: +20% WoW to 85,910
July 18-24: +1.3% WoW to 104,011	Jan 3-9 week: -5.3% WoW to 71,642
July 11-17: +2.8% WoW to 102,709	Dec 27-Jan 2 week: -5.6% WoW to 75,652
Jul 4-10: +2.4% WoW to 99,904	

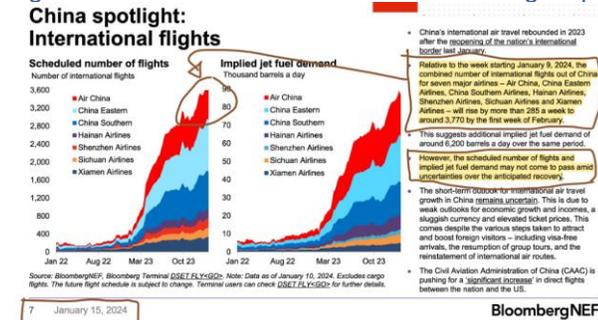
Source: BloombergNEF

Figure 52: China Scheduled Domestic flights per Jan 15 report



Source: BloombergNEF

Figure 53: China Scheduled International Flights per Jan 15 report



Source: BloombergNEF

Oil: Baidu China city-level road congestion at year ago levels

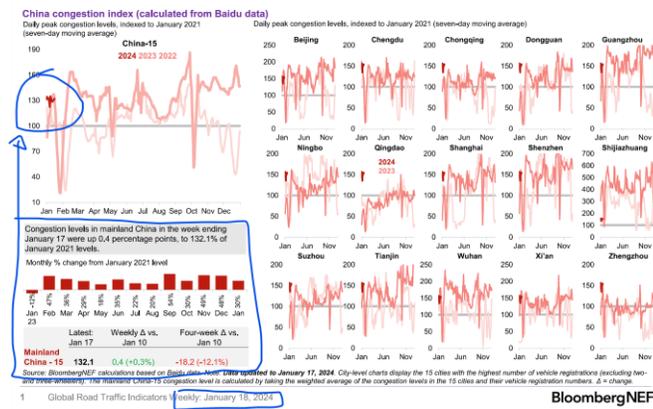
On Thursday, BloombergNEF posted its Global Road Traffic Indicators Weekly Jan 18 report, which was their third report since their holiday break in publishing. (i) BloombergNEF posted its Global Road Traffic Indicators Weekly Jan 18, 2024, which includes the Baidu city-level

China city-level traffic congestion

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.

road congestion for the week ended Jan 17. (ii) On Thursday, we tweeted [\[LINK\]](#) “Stalled China recovery. Graph looks like China Baidu city-level road congestion for week ending Jan 17 is right at the same level as a year ago. Reminder big city traffic drop coming up with Lunar New Year. Thx @BloombergNEF #OOTT.” (iii) Last week’s (Jan 11) report was titled “World rebounds from holiday slump”. There was no title this week, but the city-level road congestion for the week ending Jan 17 was only +0.3% WoW to 132.1% of January 2021 levels. So basically flat WoW. China reopened at the beginning of 2023 so city-level road congestion was very low to open Jan 2023, but then jumped up quickly in the first couple weeks of Jan 2023. So the YoY comparison for the first two weeks of Jan shows 2024 is up big, but the graph shows the last week of Jan 2024 is marginally less than the same last week of Jan 2023 ie. a year after reopening, the China city-level road congestion looks to be about the same. (iv) Note the below graph shows there was a huge drop off in city-level road congestion last year coming up and that is for Lunar new year holiday where people leave the cities and working. That will happen again this year with the big holiday and city traffic crashing during this period. (v) With the above reminder of the low start to Jan 2023, for the top 15 cities MTD to Jan 17, Jan 2024 is 139% of Jan 2021 levels, which is up huge compared to Jan 2023 that was 90% of Jan 2021 levels. But as noted in the graph, it looks like the last week in 2024 is slightly lower than a year ago. (vi) For the top 15 cities MTD to Jan 17, all but one are higher than Jan 2021. The only one down vs Jan 2021 is Qingdao, which is only 75% of Jan 2021 levels.

Figure 54: China city-level road congestion for the week ended Jan 17
Mainland China's city-level road congestion



Source: BloombergNEF

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 55: China city-level road congestion for the week ended Jan 17

Mainland China's city-level road congestion

- Table to the left shows monthly congestion levels indexed to the average daily peak congestion levels in January 2021 for each respective city.
- Table to the right shows monthly congestion levels indexed to the average daily peak congestion levels in the same month last year for each respective city.
- Three-color scale conditional formatting is set to red = 0, white = 100 and green = 200. It is possible for congestion levels to hit zero.
- Data below are downloadable by hitting [? <GO>] on the Terminal, or via the attached Excel on the BNEF website.

City	Indexed to January 2021 = 100												Indexed to same month in 2021 = 100																	
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan			
Chengde	95	31	99	154	145	138	124	140	128	127	158	128	137	160	153	97	98	280	100	92	97	117	100	115	97	116	129	116	159	
Beijing	76	38	107	172	164	150	138	151	138	137	179	163	172	161	149	67	38	107	283	105	91	96	101	104	118	89	128	151	104	149
Chongqing	34	62	83	136	126	131	110	131	109	115	130	124	127	122	119	65	75	83	239	98	90	82	108	101	107	84	121	130	88	113
Dongguan	135	102	81	125	111	119	99	116	105	88	124	114	129	121	109	98	84	200	103	94	88	104	95	95	95	85	110	122	101	108
Guangzhou	96	101	87	128	130	109	114	127	117	101	143	134	141	141	127	95	82	283	104	76	81	127	98	80	95	108	100	130	127	
Nanjing	144	112	81	189	172	154	135	158	131	146	181	164	166	168	164	148	84	81	287	106	107	106	128	111	111	127	156	142	188	
Qingdao	105	102	82	124	125	104	99	117	114	115	124	120	140	141	121	102	82	245	83	79	84	105	95	84	83	94	102	105	127	
Shanghai	188	87	78	147	149	129	124	131	121	123	161	150	153	141	119	126	47	74	241	102	95	104	111	113	110	101	116	119	119	
Shenzhen	178	109	79	167	169	138	130	165	143	148	180	165	169	141	137	113	75	287	117	94	100	133	100	98	101	114	109	100	185	
Shijiazhuang	107	176	117	207	193	188	165	182	175	165	205	188	188	181	168	144	44	317	110	104	129	133	153	144	160	117	116	200	115	240
Wulumuqi	148	87	88	158	152	121	106	97	114	107	159	139	110	127	118	107	88	288	98	97	98	102	111	117	100	99	112	102	118	
Tianjin	124	78	107	141	141	138	122	130	110	114	170	153	171	161	147	68	53	87	252	99	102	88	104	105	106	88	124	121	132	147
Wuhan	85	86	110	180	188	176	150	168	158	156	180	146	171	163	143	102	85	114	313	114	116	120	131	130	107	127	148	125	163	
Xian	112	101	116	147	138	131	122	138	122	111	184	137	156	148	144	102	108	118	185	176	79	80	103	113	115	97	126	126	184	184
Zhengzhou	34	66	93	113	95	95	89	94	98	92	100	82	100	111	101	69	69	93	181	85	88	105	104	76	117	83	88	122	101	103

Source: BloombergNEF calculations based on Baidu data. Note: Data updated to January 17, 2024. Values for the latest month are month-to-date. Mainland China-15 is the 15 cities with the highest number of vehicle registrations (excluding two- and three-wheelers). The mainland China-15 congestion level is calculated by taking the weighted average of the congestion levels in the 15 cities and their vehicle registration numbers.

Source: BloombergNEF January 18, 2024

Oil: China oil production +4.6% YoY in December

What is often overlooked is the fact that China is one of the world's top producers of crude oil, just behind Iraq in 2022, according to the EIA [LINK]. On Wednesday, Bloomberg reported that China crude oil production was +4.6% YoY in December to 4.25 mmb/d, i.e. +0.19 bcf/d YoY from December 2022. The government of China also noted [LINK] on January 9th that crude oil production over 2023 was overall 4.25 mmb/d, which was +0.06 mmb/d YoY from 2022.

China oil production

Oil: Doesn't seem like RSVs, Covid, etc are a major issue for China's medical system

China is warning that the upcoming Lunar New Year is likely to lead to increased Covid and other virus cases. But, at the same time, the authorities continue to indicate that the medical system is not under stress. Last Sunday afternoon, we tweeted [LINK] "Doesn't seem like respiratory diseases, Covid, flu or other viruses are a major issue in China as "the overall medical services currently stable and orderly". Of course, that is with the caveat that this is China state media. #OOTT." Last Sunday, Global Times (state media) reported "COVID-19 infections may rebound in China in January: China CDD" [LINK] included "The number of patients received at fever clinics in medical institutions across the country has shown a fluctuating decline since the New Year's Day, but there is a possibility of a rebound in the COVID-19 infection epidemic in China in January, according to Chinese health authorities on Sunday." But what caught our attention was "with the overall medical services currently stable and orderly." Global Times wrote "Mi Feng, a spokesperson with the National Health Commission, said at a Sunday press briefing that since the beginning of 2024, the number of patients received at fever clinics in medical institutions across the country has shown a fluctuating downward trend. At present, respiratory diseases are still mainly influenza, and the infection of COVID-19 is at a relatively low level, with the overall medical services currently stable and orderly." Our Supplemental Documents package include the Global Times report.

China's medical services stable and orderly

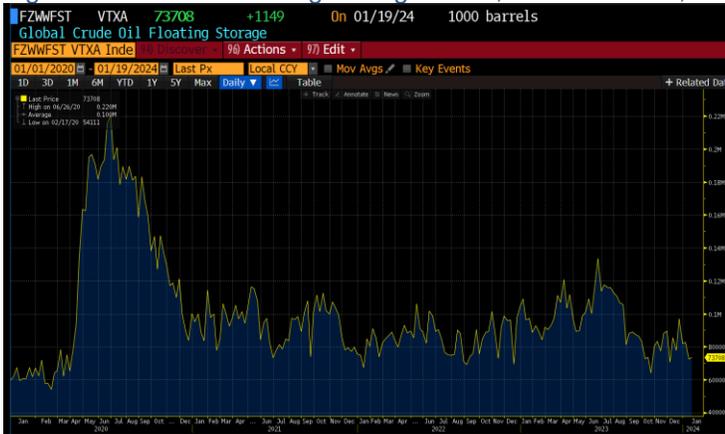
The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.

Oil: Vortexa crude oil floating storage est 73.71 mmb at Jan 19, +1.15 mmb WoW

We are referencing the Vortexa crude oil floating storage data posted on the Bloomberg terminal as of 9am MT yesterday. Note that these estimates get revised over the course of the week and the revisions can go back months. We do not check daily for the revisions, so our comments on the new estimates are compared to the prior week's Vortexa estimates posted on Bloomberg on Jan 13 at 9am MT. (i) Yesterday, we tweeted [\[LINK\]](#) "2nd consecutive week floating #Oil storage in low 70's. 01/19 73.71 mmb +1.15 WoW vs marginally revised up 01/12 of 72.56 mmb. No big upwards revisions in last seven weeks. Thx @Vortexa @business . #OOTT." (ii) As of 9am MT yesterday, Bloomberg posted Vortexa crude oil floating storage estimate for Jan 19 at 73.71 mmb, which is +1.15 mmb WoW vs marginally revised up Jan 12 of 72.56 mmb. Note Jan 12 was revised +0.72 mmb vs 71.84 mmb originally posted at 9am on Jan 13. (iii) Revisions. We expect there will be more revisions than usual, most likely between regions, given the Red Sea interruptions and continued Panama Canal lower throughput. Jan 5 was revised -4.54 mmb but most of the revisions were revisions up by ~2 mmb or less for the prior seven weeks from the estimates originally posted on Bloomberg at 9am MT on Jan 13. Jan 12 revised +0.72 mmb. Jan 5 revised -4.54 mmb. Dec 29 revised +0.67 mmb. Dec 22 revised +1.14 mmb. Dec 15 revised +1.42 mmb. Dec 8 revised -0.04 mmb. Dec 1 revised +2.09 mmb. (iv) There is a wide range of floating storage estimates for the past seven weeks, but a simple average for the past seven weeks is 81.5 mmb vs last week's then seven-week average of 80.89 mmb. (v) Also remember Vortexa revises these weekly storage estimates on a regular basis. For example, when most report on the Vortexa data on Monday morning, they will be reporting on different estimates. 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 now goes back to Jan 1, 2020 and not just three years as floating storage in Apr 2020 had started to reflect the Covid impact. (vii) Jan 19 estimate of 73.71 mmb is -23.57 mmb YoY vs Jan 20, 2023 of 97.28 mmb. (viii) Jan 19 estimate of 73.71 mmb is -146.60 mmb vs the Covid peak of 220.31 mmb on June 26, 2020. (ix) Jan 19 estimate of 73.71 mmb is +8.10 mmb vs pre-Covid Feb 28, 2020 of 65.61 mmb. (x) Below are the last several weeks of estimates posted on Bloomberg as of 9am MT Jan 20, 9am MT Jan 13 and 9am MT Jan 6.

Vortexa floating storage

Figure 56: Vortexa Floating Storage Jan 1, 2000 – Jan 19, 2024, posted Jan 20 at 9am MT



Source: Bloomberg, Vortexa

Figure 57: Vortexa Estimates Posted 9am MT on Jan 20, Jan 13 and Jan 6

Posted Jan 20, 9am MT				Jan 13, 9am MT				Jan 6, 9am MT			
FZwWFST	VTXA Inde	941 D	941 D	FZwWFST	VTXA Inde	941 D	941 D	FZwWFST	VTXA Inde	941 D	941 D
01/01/2020	01/19/2024			01/01/2020	01/12/2024			01/05/2023	01/05/2024		
1D	3D	1M	6M	YTD	1Y	5Y		1D	3D	1M	6M
FZwWFST VT...				FZwWFST VT...				FZwWFST VT...			
Date	Last Px			Date	Last Px			Date	Last Px		
Fr 01/19/2024	73708			Fr 01/12/2024	71844			Fr 01/05/2024	77393		
Fr 01/12/2024	72559			Fr 01/05/2024	87254			Fr 12/29/2023	78274		
Fr 01/05/2024	82708			Fr 12/29/2023	81292			Fr 12/22/2023	99054		
Fr 12/29/2023	81956			Fr 12/22/2023	95772			Fr 12/15/2023	76910		
Fr 12/22/2023	96907			Fr 12/15/2023	76307			Fr 12/08/2023	81661		
Fr 12/15/2023	77733			Fr 12/08/2023	85351			Fr 12/01/2023	66349		
Fr 12/08/2023	85271			Fr 12/01/2023	68416			Fr 11/24/2023	86501		
Fr 12/01/2023	70512			Fr 11/24/2023	86661			Fr 11/17/2023	87064		
Fr 11/24/2023	89399			Fr 11/17/2023	86611			Fr 11/10/2023	70935		
Fr 11/17/2023	88115			Fr 11/10/2023	74885			Fr 11/03/2023	78975		
Fr 11/10/2023	77492			Fr 11/03/2023	80652			Fr 10/27/2023	79556		

Source: Bloomberg, Vortexa

Oil: Vortexa crude oil floating storage WoW changes by regions

Bloomberg also posts the Vortexa crude oil floating storage in key regions, but not all regions of the world. The regions covered are Asia, Europe, Middle East, West Africa and US Gulf Coast. We then back into the “Other” or rest of world. (i) As noted above, Jan 12, in total, was revised +0.72 mmb. The main revisions in a region vs the originally posted (as of 9am Jan 13) floating oil storage for Jan 12 were Asia revised +4.72 mmb and Europe revised -2.88 mmb. (iii) The major WoW changes by region were Asia +4.76 mmb WoW, Other -2.55 mmb WoW and Europe -2.50 mmb WoW. (v) Jan 19 of 71.84 mmb is down a huge 61.64 mmb vs the summer June 23, 2023 peak of 133.48 mmb. Recall Saudi Arabia started its voluntary 1 mmb/d production cuts on July 1, 2023. The major changes by region vs the summer June 23 peak are Asia -37.94 mmb and Other -21.85 mmb. (iv) Below is the table we created of the WoW changes by region posted on Bloomberg at of 9am MT yesterday. Our table also includes the “Original Posted” regional data for Jan 12 that was posted on Bloomberg at 9am MT on Jan 13.

Vortexa floating storage by region

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.

Figure 58: Vortexa crude oil floating by region

Region	Original Posted			Recent Peak		
	Jan 19/24	Jan 12/24	WoW	Jan 12/24	Jun 23/23	Jan 19 vs Jun 23
Asia	35.87	31.11	4.76	26.39	73.81	-37.94
Europe	4.46	6.96	-2.50	9.84	6.44	-1.98
Middle East	9.25	9.91	-0.66	10.37	7.17	2.08
West Africa	3.70	5.52	-1.82	4.52	7.62	-3.92
US Gulf Coast	2.94	0.89	2.05	0.69	0.97	1.97
Other	15.62	18.17	-2.55	20.03	37.47	-21.85
Global Total	71.84	72.56	-0.72	71.84	133.48	-61.64

Vortexa crude oil floating storage posted on Bloomberg 9am MT on Jan 20

Source: Vortexa, Bloomberg

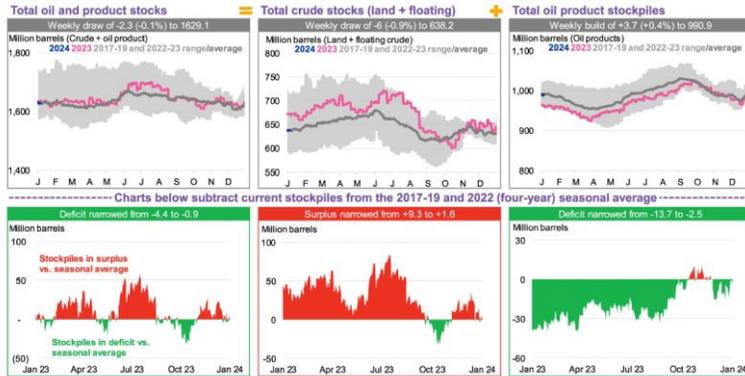
Source: Bloomberg, Vortexa

Oil: BNEF – global oil and product stocks surplus narrows WoW to 0.9 mmb

Please note that the BloombergNEF global oil and products stocks estimate are for the week ending Jan 5, which is a week earlier than the normal EIA US oil inventory data that is for the week ending Jan 12 which was a draw of 2.49 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 2017-2019 + 2022-2023, and other times using a five-year average 2016-2019 + 2022-2023. In both cases they do not include 2020 and 2021 in the averages. (ii) The global stockpile for crude oil and products surplus narrowed from +4.4 mmb to +0.9 mmb for the week ending Jan 5. (iii) Total crude inventories (incl. floating) decreased by -0.9% WoW to 638.2 mmb, while the stockpile surplus narrowed from +9.3 mmb to +1.6 mmb. (iv) Land crude oil inventories decreased by -1.1% WoW to 550.8 mmb, narrowing the deficit to -13.8 mmb against the five-year average (2016-2019 + 2022). (v) The gas, oil, and middle distillate stocks increased by +0.7% WoW to 165.4 mmb, with the deficit against the four-year average narrowing from -20.9 mmb to -18.5 mmb. Jet fuel consumption by international departures for the week of January 22 is set to decrease by -184,500 b/d WoW, while consumption by domestic passenger departures is forecast to decrease by -68,700 b/d WoW. Below is a snapshot of aggregate global stockpiles.

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 59: Aggregate Global Oil and Product Stockpiles



Source: BloombergNEF

Oil: TomTom mobility: Asia-Pacific, NA down WoW, Europe up WoW

On Thursday, BloombergNEF posted its Global Road Traffic Indicators Weekly report, which recaps traffic indicators in all the major economic regions of the world i.e. mobility indicators like TomTom. Last week, they included information from Middle East and Africa (MEA) and Latin America (LA), but for some reason MEA and LA weren't there this week. For the week ending Jan 16, Asia Pacific (ex-China) was down -13.5% WoW, Europe +8.1% WoW and NA -20.2% WoW. All regions were below the 2019 average for the Jan 16 week except Europe at +1.3% over 2019 average. Compared to the same week last year, Asia Pacific (ex-China) was down -18.2% YoY, Europe -8.1% YoY, and NA -6.6% YoY.

Global road traffic indicators

Figure 60: Mobility Indicators



Source: BloombergNEF

Oil & Natural Gas: More cold in Alberta should help extend Cdn winter drilling

It was another week of really cold weather in Alberta, which brought both bad news and good news to the oil and gas sector. On the negative side, it means that would still be some shut-in oil and natural gas from the -40C weather last week. But on the positive side, the really cold weather will help extend the winter drilling season. Every bit of frigid temperatures helps

Finally good cold weather

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.

to get a deep freeze in the ground. We have been warning that we are seeing the set up for an early and abrupt end to the Cdn winter drilling season as it's been way warmer than normal and accumulated snowfall has been much less than normal. So we have been we won't be surprised to see road bans and an early end to conventional winter drilling in late Feb/early March. Why? The ideal conditions for a long winter drilling season is good sustained cold weather in Nov/early Dec before the snow hits. Good sustained cold will then make sure there is a deep freeze in the ground. The ideal world is to get a good deep freeze first and then lots of snow over the winter. If you get lots of snow, it will act as an insulating blanket to keep the deep freeze in the ground for longer once it gets to end of Feb/early March and frozen ground allows a longer winter drilling season. Conversely, the negative is that you don't have good sustained cold and so you don't get a good deep freeze in the ground. And then you get the snow and that acts as an insulating blanket from any cold in Jan from getting deep into the ground for a deep freeze. Recall the concept of how you see documentaries on survival in Alaska and how they keep themselves warm by digging out a snow cave. So despite much warmer than normal start to winter, the last two weeks of really cold weather should help get a good deep freeze and help extend winter drilling season.

Energy Transition: Kerry “policy necessity” for more oil supply to avoid revolutions

US Climate Envoy John Kerry may not have said it directly, but answers certainly fit the thesis that the energy transition is behind plan, and that more oil has been and is needed if the world is to avoid high energy costs and avoid revolutions around the world i.e. he recognizes high energy costs will cause citizens to revolt. We don't think Kerry, was expecting the quality of the questions from his interview with Bloomberg at Davos on Jan 17. On Wednesday, we tweeted [\[LINK\]](#) “#OPEC must love it. Biden 1st 4 days went after GoM drilling & Fed lands fracking as policies to hit demand meant didn't need #Oil supply. Today, Kerry “policy necessity” for oil growth to keep prices low so don't have “revolutions” around the world. Thx @lisaabramowicz1 #OOTT.” Bloomberg asked if it was a policy failure or success that the US is at record oil production. Kerry said it was a “policy necessity” to have more oil growth. Our tweet included the transcript we made of Kerry's comments. SAF Group created transcript of comments by John Kerry (US climate envoy) with Lisa Abramowicz, Jonathan Ferro and Annmarie Hordern from Davos on Jan 17, 2024. [\[LINK\]](#) Items in “italics” are SAF Group created transcript At 4:25 min mark, Abramowicz “at the same time, the US is pumping more than 13 million barrels of oil per day. It is a record amount. It has been credited for offsetting some of the geopolitical risk. Do you think that's a policy failure or policy success?” Kerry “It's a policy necessity. Because you obviously can't shut down the economies of the world and be ridiculous and sort of say oh okay, you're going to affect demand without affecting supply at the same time. You've got to have a broad approach. That's what the Administration is trying to do. For the moment, you have to try to keep the economies stable and keep the price low enough that you don't have revolutions in countries all around the world because the gas price is at 10 bucks a gallon, whatever it's going to be. So you've got to have some reasonableness. BUT, that has to be accompanied by a very clear set of policies that are moving in the direction of this transition away from fossil fuels that are therefore deploying renewables faster. That are putting new technologies out there in order to mitigate. If we don't do that, then it is a mistake and it contributes to the problem. I think we're going to do that and I think we're doing that already right now in many parts of the world.”

**Kerrys says
policy necessity
for more oil**

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Energy Transition: Kerry blames EV misinformation & community holding up wind

The other noteworthy part of the Bloomberg John Kerry interview was how Kerry blamed misinformation for why EVs aren't as strong as expected and communities holding up wind projects for why wind capacity additions are delayed. Oil/gasoline will be needed for longer if EV sales are less than expected and natural gas power generation will be needed for longer if wind projects keep getting delayed. EVs and wind are two of the critical success factors for the Energy Transition. So if they are late, it means the Energy Transition is taking longer than expected. (i) On Wednesday, we tweeted [\[LINK\]](#) "#Oil #NatGas is needed for longer!

👉 Kerry blames communities for wind delays & misinformation for lower EV sales.

@FerroTV didn't buy EV misinfo. BUT the unsaid message is #EnergyTransition is taking longer, costing more and & is bumpy road. @lisaabramowicz1 @annmarie #OOTT." On EVs, Kerry blamed misinformation as to why EV sales are less than expected. Bloomberg did not buy into Kerry's misinformation. On wind and renewable generation, Kerry blamed communities for holding up approvals of these projects. Below is the transcript we made of his comments.

Kerry on EVs
and wind delays

SAF transcript of John Kerry comments on Bloomberg on Jan 17

SAF Group created transcript of comments by John Kerry (US climate envoy) with Lisa Abramowicz, Jonathan Ferro and Annmarie Hordern from Davos on Jan 17, 2024. [\[LINK\]](#) Items in *"italics"* are SAF Group created transcript. At 5:41 min mark, Abramowicz *"Joe Biden has talked a lot about electric vehicles but we've seen a lot of companies pull back from electric vehicle production because there isn't demand, do you get the sense there is a successful coherent policy that is being prescribed by Joe Biden to achieve what you are talking about while also pumping record amounts of oil?"* Kerry *"Yes. There has been a very very clear policy, which regrettably has been attacked by people who are engaged in high levels of disinformation. They have been trying to scare people about the range of vehicles. So there's range anxiety out there. But in addition to that, you've had some pull back because communities aren't moving fast enough to give permitting to deploy some of the renewables that we need. So you've had wind farms that were going to be built that have now taken years longer than that was calculated in making the deals. And people have had to recalculate now how that deal is going to work. So the answer is we have to all of us have to embrace this transition. If we're going to take five and ten years and have years of litigation over whether or not you're going to have a renewable plant somewhere nearby, we're in trouble. We're not going to get there. And we have to accelerate that and that's a lot of the message right here in Davos."* Ferro *"Just to jump in, it's difficult for me to believe that the poor EV sales are a consequence of a misinformation campaign about range anxiety. Let's take Hertz. Not my view, view of the car rental company. They come out and they're going to dump 20,000 EV cars. They just don't talk about rebalancing supply with demand, they talk about the cost of carry. It's really expensive to keep these vehicles."* Kerry *"Sure."* Ferro *"It's really expensive to go and buy one. I think what we're seeing is a reality check, not just about the ultimate destination, but the pace at which we get there. Reality check because for most every day Americans, they can't afford this."* Kerry *"Let me tell you what's happening. The price is going down as the price of renewables has gone down. The price of renewable, solar, has gone down 83% in the last years. The price of wind has gone down 50% in the last years. The price of*

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Lithium has gone down something like 97% in the last years. And we do need to send stronger demand signals to the market place. Now we have an entity here that we've created a number of years ago called the first movers coalition. We have 100 of the top corporations of the world in this first movers coalition. That includes Apple, Microsoft, Salesforce, Boeing, FedEx, Ford, General Motors. A whole bunch of major American and other international companies. And they have agreed they're going to pay a Green Premium, voluntarily, in order to send a market signal to have green steel created now. Volvo has said we'll buy 10% of our steel is going to be green. So they're making green steel. Cement is now on sale, Lafarge Holcim, largest cement dealer in the world, they're making green cement. And it's better cement, people are buying it not because it's green, because it is better. So we're seeing a movement towards a rational transition with those biggest companies. And I'll tell you if the CEOs of those companies can persuade their boards and their shareholders that this is a valuable enterprise, then more people are going to buy into this over a period of time. This is a transition, it doesn't have to happen overnight. There will be ups and downs. There will be bumps in the road but I'm telling you, EVs now, there is sufficient level of penetration, about 92% in Norway. Major levels in China. The front page of the Economist has a big picture, you know, electric vehicles from China coming in towards the United States. And those are selling for something like \$22,500. And it's going to become the bone of contention. You watch. We'll have some discussions about that. But the point I make is this will even out over time. General Motors and Ford and Mercedes and Volkswagen and Hyundai and Toyota, these companies have all spent billions of dollars retooling their plants. I'm telling you, I don't care it doesn't matter who comes in, whoever the President of the United States is or public official is, those CEOs are not going to suddenly go back and say Oh lets' go back and we will make."

Energy Transition: Ford cuts F-150 Lightning production due to less demand

Ford is the latest to come out with changes to reflect significantly less customer EV buying. Early Friday morning, we tweeted [\[LINK\]](#) "Breaking. Ford cuts F-150 Lightning production to "achieve optimal balance of production, sales growth & profitability" Did customers speak or will Kerry 🙄 blame this on EV misinformation? #EnergyTransition will take longer and #Oil #Gasoline needed for much longer. OOTT." Ford didn't say how much lower Ford F-150 Lightning sales were projected. Rather they said on their overall EVs that they "expect continued growth in global EV sales in 2024, though less than anticipated". But it looks like they cut their Ford F-150 Lightning production capacity by ½ at their big Rouge Electric Vehicle Center that "transitions to one shift effective April 1". That sounds like a cut in half to Lightning production. Ford wrote that the reduction in production was to "achieve the optimal balance of production, sales growth and profitability." Our Supplemental Documents package includes the Ford release.

**Ford cuts F-150
Lightning
production**

12/12/23: Bloomberg Ford cutting F150 Lightning production ½ due to demand

The Ford Friday release is basically what Bloomberg reported a month ago. Here is what we wrote in our Dec 17, 2023 Energy Tidbits memo. "No one can deny that EVs sales continue to grow at strong rates but it is also turning out that the growth rates are less than expected/planned. A good example is Ford who is cutting their planned 2024 F150 Lightning by half to match demand. On Tuesday, Bloomberg reported that

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Ford will cut its planned F-150 Lightning production in 2024 by about half of its planned production levels due to reduced demand. Bloomberg noted the comments from Ford CFO Lawler in Nov that Ford would be adjusting capacity to match market demand. Bloomberg wrote *“Ford and other automakers have had to readjust their electric vehicle production plans because sales have been weaker than they had expected. Slower-than-expected growth in sales of electric vehicles has forced several automakers to scale back once-ambitious production plans. Ford Motor has become the latest company to join that pullback. In a memo sent to suppliers, the company said that it now expected to produce an average of 1,600 electric F-150 Lightning pickup trucks per week in 2024, about half of the level it had previously hoped to achieve. The reduced target reflects the substantial dimming of expectations for sales of battery-powered cars and trucks that automakers are now coming to grips with. Ford and its main rival, General Motors, had been racing to increase production of a variety of electric vehicles, but consumer enthusiasm has not kept pace with those plans over the last six months. Some would-be buyers have been put off by the high prices of many electric vehicles, including the F-150 Lightning, as well as the availability and reliability of charging stations. G.M. once expected to produce 400,000 electric vehicles by the middle of 2024, but withdrew that goal in November, and is delaying some new electric models. Rivian, a younger automaker, has said it aims to make 52,000 electric vehicles by the end of this year, a third of the 150,000 a year it is hoping its Illinois factory will eventually produce.”* Our Supplemental Documents package includes the Bloomberg report. “

Sounds like customers want more gas powered and hybrid Ford F-150s

On Friday, Ford didn't say it specifically but seemed to infer that the other customer feedback is that the customers want more gas powered and hybrid F-150s. It was interesting to see in the release on cutting Ford F-150 Lightning production, Ford also said *“The company also has capacity available to scale production of gas-powered and hybrid F-150 trucks based on customer demand.”*

Ford F-150 Lightning isn't a pickup for working pickup drivers

We have to believe that one of the big factors for the less than expected Ford F-150 Lightning sales is that the Lightning isn't going to work for working pickup drivers ie. contractors, drivers, ranchers, who tow, etc. Here is one reason from our Oct 8, 2023 Energy Tidbits memo. *"Recirculated Ford F-150 Lightning failed Motor Trend's towing test. We wouldn't have included this item on a recirculated Motor Trend report if the report wasn't getting renewed interest this week and if Ford CEO Jim Farley hadn't warned people on the shortfalls of the F-150 Lightning. The Ford F-150 Lightning had a lot of headlines in the last week with the reports from dealers in Canada and US on how they weren't getting planned deliveries of the Lightning. So, inevitably, a range of stories come out on the Lightning from both car and EV news sites. And in many cases, these are not new news such as one that got circulated this week – the Motor Trend July 31, 2022 report [LINK] "Tow No! The Ford F-150 Lightning Struggled in Our Towing Test". Motor Trend reported "We towed 3100-, 5300-, and 7200-pound travel trailers with Ford's electric truck and didn't get very far from home. Before you hitch an Airstream to your electric truck and set out to circumnavigate the country, you need to understand this: With the largest available battery pack, a fully charged 2022 Ford F-150 Lightning electric truck has less energy onboard than a regular F-150 with four gallons of gas in its tank. Consider how far a combustion-powered F-150 would tow at max capacity on four gallons of regular unleaded. Thirty five miles? Maybe 40 if you drive slowly? Now that you understand where we're starting from, you won't be as surprised to learn that the towing range of the electric F-150 is dismal. In Motor Trend testing, an F-150 Lightning Platinum saddled with a camper that nearly maxed out its 8,500-pound towing capacity couldn't even cover 100 miles. Range improved when we hooked up a significantly lighter trailer, but not by as much as you might expect." Our Supplemental Documents package includes the Motor Trend report."*

04/26/22: Ford CEO warned EV trucks aren't for working pickup truck drivers

Here is what we wrote in our May 1, 2022 Energy Tidbits memo on Ford CEO Jim Farley warning that the F-150 Lightning is really for normal pickup truck uses. *"We thought there was a throwing water on the fire reality check on EV trucks from Ford CEO Jim Farley on Tuesday. We had missed his comments but one of our Twitter followers flagged it for us after seeing our Wednesday morning tweet [LINK] "GM #SilveradoEV truck will have 400 miles of range & that is only a year away, @mtbarra just said to @tomkeene on @bsurveillance. #EV range is no longer a reason not to buy. Can they get the prices down?? #OOTT." We thought 400 miles of range was a pretty good number, even if it gets hammered down in cold Cdn winters. But then we went to search out the Ford CEO interview on the Ford F150 Lightning EV. As everyone knows, Ford dominates the pickup truck market with the F150. But clearly Farley threw some cold water on the fire. We were surprised at the bluntness of his warning on EV pickup truck uses. We tweeted [LINK] "#EV trucks #F150Lightning are not good for heavy users ie. ranchers, contactors. But perfect for urban cowboy & commuting to work, so will need mix of #ICE & #BEV says #Ford CEO to @sonalibasak..So why feature towing so prominently in commercials? Thx @kropija for flagging. #OOTT. Farley is basically saying the F150 Lightning is best suited for commuters and what Texans call "all hat, no cattle" pickup*

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

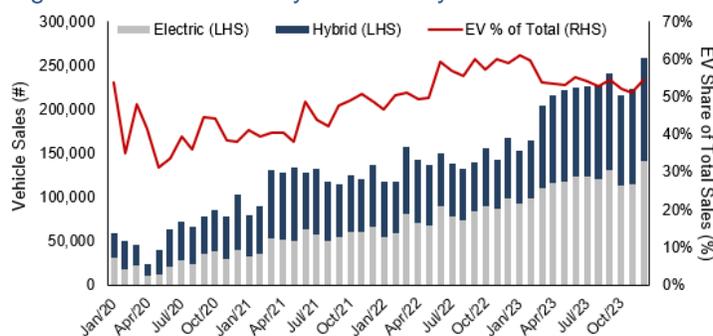
truck drivers. We created a transcript of Farley's comments [LINK](#). Bloomberg's Sonali Basak. "Jim, look out into the future for a second here, can you see all the F150's going electric? And what would it take for that to happen?" Farley "No way. I don't see that happening. If you're towing a fifth wheel in Wyoming, or you know with a horse trailer, there is no way. An electric vehicle is not a good solution for super duty customers. We're 50% of all commercial light duty vehicles in the US so we know. And the technology is not right for that. For retail customer who is doing some light towing or commuting to work, it's perfect. But for heavy duty usage, it's not the right solution. So you're going to see a mix of ICE and BEV." After listening to Farley, we looked at the Ford F150 Lightning promotion video [LINK](#) and couldn't help notice how prominently Ford featured towing in its commercials." [Note, we checked the link to the promotion video from 2022 and it is no longer available].

Energy Transition: EV share of sales up MoM ahead of reduced tax credits

Dec was a good month for EV sales with higher MoM sales and a MoM gain in market share vs hybrids. We suspect the MoM spike is due to the US reducing the list of EV models eligible for the \$7,500 tax credit down almost in half on January 1st, as well as dealers discounting hard-to-move EV inventory through lower prices and reducing financing rates in Dec after disappointing fall sales. Below is a graph we made of the ANL data. EVs as a % of EVs + Hybrids sales reached its peak of 60.8% in Jan 2023, and since we first created the graph in October, we saw this month's data bring the EV share of total down -170bps from 52.9% in October to 51.2% in November. December had a bump up to 54.5% of total, which is up MoM but still down 440 bps from 58.9% in December 2022. It's hard for even the climate change side to deny EVs are not being adopted anywhere near as fast as assumed in the Energy Transition plans and aspirations. But one other item that looks like a trend that isn't getting as much attention is that hybrids look to be taking market share from EVs at least in certain key markets like the US. We look at the Argonne National Laboratory monthly light duty electric drive vehicles monthly data [LINK](#). The headlines on the monthly data have been on how EV sales have leveled off over the past few months. We agree, but we thought the more significant trend is how hybrids looks to be taking market share from EVs.

Dec rush on EVs

Figure 61: US EV and Hybrid monthly sales



Source: Argonne National Library

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Capital Markets: Comments from Davos

The World Economic Forum was held in Davos this week and there were many great Bloomberg and CNBC interviews with various world leaders with comments on politics, economies and the environment. Here are a few that we noted Davos.

Davos WEF

BNY CEO deploying AI for some basic research associate jobs

One of our big worries on AI is for young people who are just entering or soon to enter the work force in the coming years is how AI will increasingly hit jobs that would typically be the post college entry level professional white collar jobs. On Tuesday, we tweeted [\[LINK\]](#) *“we’ve had AI draft writing of some of our research reports. And it’s not to replace the person who’s writing it...” BNY Mellon CEO. That may be true but what about the young research associate who updates the model and often does the 1st draft for the publishing analyst? #OOTT.* As a former sellside publishing research analyst. It’s hard to disagree with the CEO’s view that the publishing analyst is likely safe, at least for now, from AI taking their jobs as we believe the clients (investors) want to at least have some comfort that a person has signed off on the research report. However, it is also clear that the CEO’s description of what AI is doing for them really describes is the roll of the research associate’s job who does the model updating and does a first draft for the publishing analyst. Our tweet included the transcript we made of BNY CEO Vince saying *“... we’ve been deploying AI into our workforce and into our products. I will give you two quick examples..... And an example of improving quality of life exactly to your question, we’ve had AI draft writing of some of our research reports. And it’s not to replace the person who’s writing it, they used to have to get up at 4am in order to write the report, now they can get up at 5 because they’ve got a first draft courtesy of AI. That’s an improvement”.*

BofA CEO Moynihan sees less interest rate cuts than the market

It was a week that saw many market watchers come out with a changed view for the number of rate cuts in the US calling for less rate cuts. Early Tuesday morning we tweeted *“BofA CEO Moynihan on rate cuts. “we have 4 rate cuts, not the 6 or 7 in the market for this year 24 & 25, which leaves you at 3% plus Fed Funds rate, probably have a 4 and handle on the 10-yr... it’s going to take awhile for the system to adjust to that.” Thx @SquawkCNBC #OOTT.* Our tweet included a clip of Moynihan’s interest rate comments and the transcript we made of Moynihan saying *“... we have 4 rate cuts, not the 6 or 7 in the market, for this year 2024 and 25, which leaves you at 3% plus Fed Funds rate, probably have 4 and handle on the 10-yr. That would be a normal rate curve for those of have that have been around for a long time. It’s just for the 15 years or so since the Financial Crisis, nobody has seen a normal rate curve. It’s going to take awhile for the system to adjust to that ”.*

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Norway not very optimistic on returns this year and the next few years

We were a little surprised by what looked like a blunt admission by Norway Wealth Fund CEO Nicolai Tangen that their portfolio isn't well positioned for the next few years for returns. Tangen is worried about inflation, interest rates and the cost of capital. Early Tuesday morning, we tweeted [\[LINK\]](#) "*Ouch! "not very optimistic when it comes to returns this yr & the next few yrs" "i do not see them [rates] coming down as fast as many other people" "there is more underlying inflationary pressure" Norway wealth fund CEO. Thx @flacqua #OOTT [\[LINK\]](#).*" Our tweet included the transcript we made of Tangen saying "At 0.05 min mark, Tangen "No, I agree it doesn't look very good out there actually and we are not very optimistic when it comes to returns this year and the next few years, actually. And if we start with rates internationally, I do not see them coming down as fast as many other people. I think we have some underlying inflationary pressures. We've got wages now, wage demand really high in a lot of countries and so that could lead to some spiraling of inflation going forward. Then we have some climate effects which are negative on pricing. You have geopolitics, trade routes, you still have a lot of things. It's just not a very happy cocktail." At 1:40 min mark, Tangen "Money is not free anymore and I don't think it will be for a longer period of time..... But probably, we've seen the big jump in cost of capital so, from here, it's probably going to normalize a bit going forward". At 4:55 min mark, Tangen. "I just think there is more underlying inflationary pressure. You know and I think it's going to stay there for longer. And I do think the international central banks will be very, very careful in cutting rates too quickly because they were too slow in putting them up."

Saudi Finance Minister reminds 600 million Africans don't have electricity

One of the biggest assumptions from the Energy Transition that has never made sense to us was how the western developed countries expected and assume the poor African countries can/should skip over fossil fuels and still advance their economies. We couldn't find the actual quote but UBS analysts Giovanni Staunovo retweeted an Al Arabiya news tweet of a video clip of Saudi Finance Minister Mohammed Al-Jadaan. He spoke in English but, unfortunately, Al Arabiya had a louder Arabic translation making it difficult to hear all the words but we could hear enough to confirm the Al Arabiya tweet [\[LINK\]](#) "*This is just hypocrisy." Saudi Finance Minister Mohammed Al-Jadaan responds from #دافوس : You are here in a heated hall, but 600 million people in Africa do not have electricity.. You cannot tell them to eat cake instead of bread!"*

Capital Markets: Great 9 months for Japanese stocks following Buffett interview

One of the big global capital markets stories in 2023 was the outperformance of Japanese stocks. On Wednesday night, we tweeted [\[LINK\]](#) "*Great nine months for Japanese stocks post #WarrenBuffet @BeckyQuick Apr 12 interview.*" There was the big Warren Buffett interview on CNBC that changed foreign buyers being net sellers of Japanese stocks to becoming big net buyers of Japanese stocks. Buffett was bullish on the big Japanese stocks, On Wednesday night, Bloomberg showed the below chart with the caption "*Japan's Foreign Flows: Foreign buying of Japanese stocks at 3-month high.*" We added the marker for Buffett CNBC interview on April 12 and we also included a graph showing the Nikkei and Topix

Foreign buying of Japanese stocks

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

exchanges and it clearly shows how Japanese stocks took off after the Buffett April 12 interview.

Figure 62: Nikkei/Topix Performance and Foreign buying of Japanese stocks

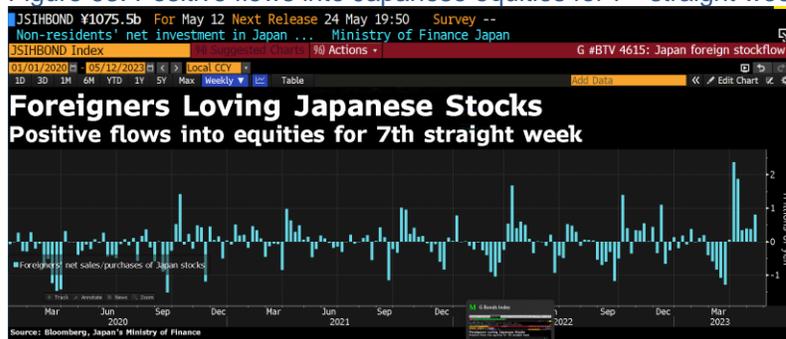


Source: Bloomberg

05/18/23: It was clear that foreign investors were following Buffett into Japan

Here is what we wrote in our May 21, 2023 Enregy Tidbits memo. “We aren’t in the category of the Warren Buffett fanatics who think everything he says is gospel and he touches turns to gold. But we really respect what he has accomplished and continues to accomplish over the decades. It’s amazing when someone can be considered to be on the top of his game over many decades. So we couldn’t help tweet a Warren Buffett shout-out on Thursday, when we saw the below Bloomberg TV chart on how foreigners are loving Japanese stocks. We tweeted [\[LINK\]](#) “The #WarrenBuffett effect is still working. @business “foreigners loving Japanese stocks. positive flows into equities for 7th straight week”. Last 5 weeks were since #WarrenBuffett made his positive comments on Japanese trading houses in his @BeckyQuick Apr 12 interview in Japan. #OOTT.” Buffett was in Japan in early April and there was big investor attention to the CNBC Becky Quick interview with Buffett and Greg Abel on April 12, where he made positive comments about the Japanese trading houses. We have to believe this got a lot of attention from investors around the world. Was it coincidental or did people follow? Given his following, we suspect a good portion of this was people following Warren Buffett into Japanese stocks.”

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.

Figure 63: Positive flows into Japanese equities for 7th straight week

Source: Bloomberg

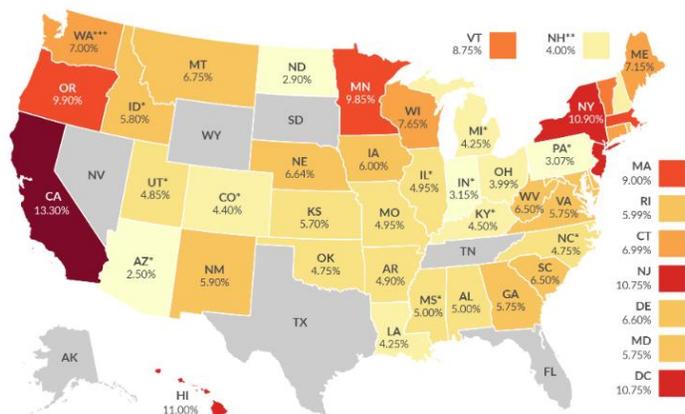
Capital Markets: Americans moved to low-tax states in 2023

There is no doubt weather is a huge factor, but it is also lower taxes are another key factor driving Americans, especially high income, moves within the US. On Jan 9, the Tax Foundation released a report of where Americans moved over 2023 [\[LINK\]](#). States that saw the greatest outflows of residents also tended to have higher tax rates: New York lost -1.1% of its population, California -0.9%, and Hawaii -0.8%. States that saw the biggest growth in domestic inbound migration were low-tax states like South Carolina at +1.6%, Delaware at +1.0% and North Carolina, Tennessee, and Florida who each were +0.9%. The Tax Foundation wrote “*This population shift paints a clear picture: Americans are leaving high-tax, high-cost-of-living states in favor of lower-tax, lower-cost alternatives. Of the 32 states whose overall state and local tax burdens per capita were below the national average in 2022, 24 experienced net inbound migration in FY 2023. Meanwhile, of the 18 states and D.C. with tax burdens per capita at or above the national average, 14 of those jurisdictions experienced net outbound migration.*” Below is a map of the US with income tax rates by state..

US Domestic Migration to low tax states

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 64: State Individual Income Tax Rates 2023



Note: Map shows top marginal rates; the maximum statutory rate in each state. This map does not show effective marginal tax rates, which would include the effects of phase-outs of various tax preferences. Local income taxes are not included.
 (*) State has a flat income tax.
 (**) State only taxes interest and dividends income.
 (***) State only taxes capital gains income.
 Sources: Tax Foundation; state tax statutes, forms, and instructions; Bloomberg Tax.

Top State Marginal Individual Income Tax Rates
 Lower Higher

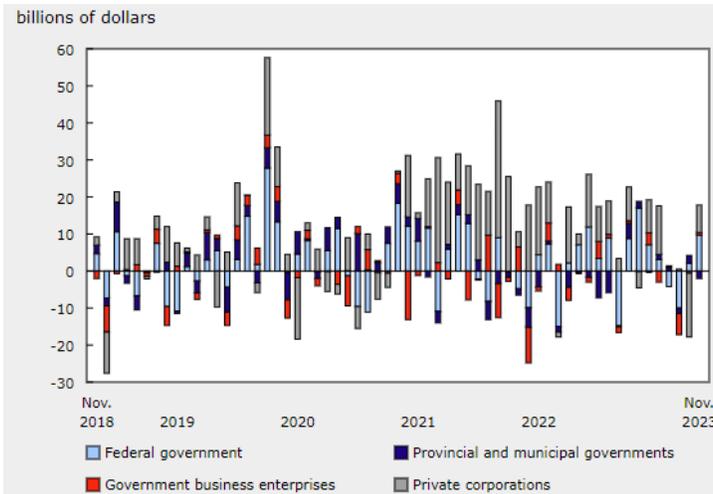
Source: Tax Foundation

Capital Markets: Foreign investors buy \$11.4bn in Canadian securities, mainly debt
 Statistics Canada released Canada’s international transactions in securities for November 2023 on Wednesday [\[LINK\]](#). While Canadian investors purchased +\$12.5bn of foreign securities in November, mainly US government bonds (a record \$10.1bn), foreign investors acquired +\$11.4bn of Canadian securities in November with the largest buying occurring in debt. Note this is after 3 consecutive months of foreign divestitures, mainly in equities. Non-residents invested a net total of +\$15.9bn from Canadian bonds in November, led by the investment into federal government bonds totalling +\$9.7bn. Investments of corporate debt totalling +\$7.7bn came mainly from the financial and transportation industries. Non-resident investors also divested -\$4.5bn of Canadian equity securities from their portfolios, the 10th consecutive monthly divestment in 2023. The report stated “Foreign acquisitions of Canadian securities totalled \$11.4 billion in November, led by investments in both government and corporate debt securities. A foreign divestment in equity securities moderated the overall investment activity in the month. In November, foreign investors added \$15.9 billion of Canadian debt securities to their portfolios, after three consecutive months of divestment totalling \$33.2 billion. The activity was led by a \$9.7 billion investment in federal government debt securities. In addition, non-resident investors acquired \$7.7 billion of Canadian corporate bonds, mainly new bonds denominated in US dollars and issued by firms in the financial and the transportation industries. In November, Canadian long-term interest rates fell by 60 basis points, the largest decrease since December 2008”. Below is a graph illustrating foreign investment in Canadian debt securities.

International transactions in Cdn securities

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

Figure 65: Foreign Investment in Canadian debt securities



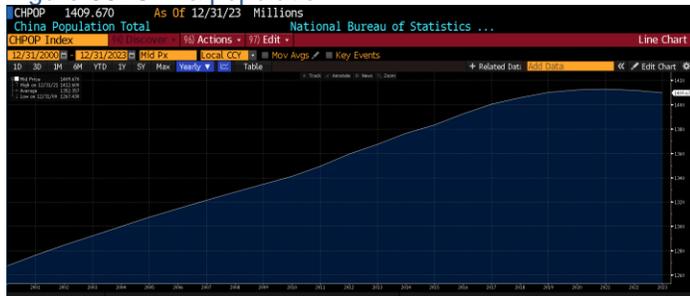
Source: Statistics Canada

Demographics: China’s population shrinks for the 2nd year in a row

On Tuesday night, we tweeted [\[LINK\]](#) on the breaking news “China population down 2.08 million YoY to 1.40967b at 12/31/23. Population declined for 2nd consecutive year. In 2022, was down 0.85 million YoY to 1.41175b at 12/31/22. Peak population was 12/31/21 at 1.41260b. National Bureau of Statistics data courtesy of @business. #OOTT.” Bloomberg TV put on the screen the just released China National Bureau of Statistics data for population as of the end of 2022. And it was the second consecutive year of declining China population. China population peaked in 2021 at 1.4126 billion, declined by 0.85 million in 2022 to 1.41175 billion and declined a further 2.08 million in 2022 to 1.40967 billion.

China’s shrinking population

Figure 66: China population



Source: Bloomberg, China National Bureau of Statistics

Global Times provided more color on the 2022 population detail

Shortly after the numbers were released, Global Times (China state media) posted its report “China’s population decreases by 2.08 million in 2023 to 1.40967 billion” [\[LINK\]](#) that included more detail on the population changes. “In 2023, 9.02 million

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

babies were born, resulting in a birth rate of 6.39 per thousand people. Meanwhile, 11.1 million people died in 2023, equal to a death rate of 7.87 per thousand people, the data showed.” Aging population: *“In terms of age, the working-age population (aged 16-59) stood at 864.81 million, making up 61.3 percent of the total population. The population aged 60 and above was 296.97 million, accounting for 21.1 percent of the total population, with population aged 65 and above being 216.76 million, making up 15.4 percent of the total.”* Continued shift of people from rural to urban areas: *“Regarding urban-rural composition, the urban population was 932.67 million in 2023, an increase of 11.96 million compared to the previous year, while the rural population was 477.00 million, a decrease of 14.04 million. The urban population accounted for 66.16 percent of the total population, which increased by 0.94 percentage points compared to the previous year, according to the data”.* There is more insights in the Global Times report. Our Supplemental Documents package includes the Global Times report.

Twitter: Thank you for getting me to 10,000 followers

It may not last as followers can drop off but, last Sunday, we went over 10,000 followers on Twitter/X. I really appreciate the support and, more importantly, some excellent insights and items to look at from Twitter followers. It helps me do a better job. For new followers to our Twitter, we are trying to tweet on breaking news or early views on energy items, most of which are followed up in detail in the Energy Tidbits memo or in separate blogs. Our Twitter handle is @Energy_Tidbits and can be followed at [\[LINK\]](#). We wanted to use Energy Tidbits in our name since I have been writing Energy Tidbits memos for over 20 consecutive years. Please take a look thru our tweets and you can see we aren't just retweeting other tweets. Rather we are trying to use Twitter for early views on energy items. Our Supplemental Documents package includes our tweets this week.

**@Energy_Tidbits
on Twitter**

LinkedIn: Look for quick energy items from me on LinkedIn

I can also be reached on LinkedIn and plan to use it as another forum to pass on energy items in addition to our weekly Energy Tidbits memo and our blogs that are posted on the SAF Energy website [\[LINK\]](#).

**Look for energy
items on LinkedIn**

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.

Doing/experiencing something is better than reading about it

Bloomberg interviewed Trip.com CEO Jane Sun at Davos on Thursday. The priority of the interview was on what she is seeing on travel. But what she also reminded of a classic Chinese proverb about how people learn more when they experience something rather than reading about it. Sun said a variation of the Chinese proverb *“reading ten thousand books is not as good as walking ten thousand miles”*. The walking ten thousand miles doesn't refer to just going on a distance walk. Rather, it's the concept of traveling, seeing and experiencing things and you learn more by that than by reading about it in a book.

The Disclaimer: Energy Tidbits is intended to provide general information only and is written for an institutional or sophisticated investor audience. It is not a recommendation of, or solicitation for the purchase of securities, an offer of securities, or intended as investment research or advice. The information presented, while obtained from sources we believe reliable as of the publishing date, is not guaranteed against errors or omissions and no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This publication is proprietary and intended for the sole use of direct recipients from Dan Tsubouchi and SAF Group. Energy Tidbits are not to be copied, transmitted, or forwarded without the prior written permission Dan Tsubouchi and SAF Group. **Please advise if you have received Energy Tidbits from a source other than Dan Tsubouchi and SAF Group.**

WestJet cancelled 464 flights over the four-day Alberta extreme cold spell

Last week's (Jan 14, 2024) Energy Tidbits memo highlighted the air travel chaos in Alberta from the bitter cold and how WestJet canceled 122 flights on Sat Jan 13, including 75 out of Calgary, with part of the reason was that it was too cold to de-ice airplanes. It turns out WestJet ended up cancelling 464 flights over the four-day stretch of cold.

Liverpool FC's Jurgen Klopp great invitation to Sven-Goran Eriksson

There was a great Sky News story yesterday that reminds of the respect that top sportspeople have for each other. Sky reported [\[LINK\]](#) "*Jurgen Klopp offers with 'open arms' to make Sven-Goran Eriksson's dying Liverpool wish come true. In a poignant interview with Sky News, the 75-year-old Reds fan, who has inoperable pancreatic cancer, expressed his footballing regret of never taking the helm at Anfield. Jurgen Klopp has invited with "open arms" Sven-Goran Eriksson to realise his dream of managing Liverpool following his terminal cancer diagnosis. The Reds boss made the offer "from the bottom of all our hearts" after the former England manager, who has pancreatic cancer with about a year left to live at the "best case", told Sky News' Niall Paterson of his footballing regret at never having taken the helm at Anfield.*" "Speaking to Sky Sports, he said: "Sven, you are invited from the bottom of all our hearts to come here and you can have my office, you can lead a session if you want. That's all no problem. "Open arms. Come over here and let's have a few great hours together."