

# Energy Tidbits

Key Trump Iran Advisor, Brian Hook, Points to Trump Hitting Iran Economically i.e. Return to Restricting Iran's Oil Exports

Produced by: Dan Tsubouchi

November 10, 2024

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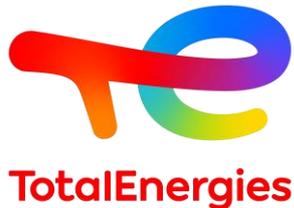
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PRESS RELEASE

## China: TotalEnergies will supply 2 million tons of LNG per year to Sinopec for 15 years

**Paris/Shanghai, November 4, 2024** – As part of its strategy to grow its Liquefied Natural Gas (LNG) business, TotalEnergies announces today the signing of a sales agreement (HoA) with Sinopec for the delivery of 2 million tons of LNG per year for 15 years, starting in 2028.

Thanks to this major agreement with one of the leading LNG players in the country, TotalEnergies strengthens its long-term position in the LNG market in China, the largest market in the world. This agreement comes within the strategic cooperation agreement signed earlier this year between TotalEnergies and Sinopec during President Xi Jinping's state visit to France. In China, natural gas is a key component of the energy transition as it mitigates the intermittency of rapidly growing renewable energies and helps reduce greenhouse gas emissions when it replaces coal in electricity production.

"We are delighted to have been chosen by Sinopec to supply 2 million tons of LNG to China, the largest LNG importing country in the world. This new agreement demonstrates the competitiveness of TotalEnergies' LNG business and allows us to continue growing our long-term sales in Asia," said **Stéphane Michel, President Gas, Renewables & Power at TotalEnergies**.

**Mr. Niu Shuanwen, Senior Vice President of Sinopec Corporation**, said "Sinopec and TotalEnergies are strategic partners. This HoA further strengthens the cooperation between the two companies in natural gas. Natural gas is an important enabler for realizing energy transition and dual carbon goals. Sinopec is committed to building the world's leading clean energy and chemical company and will continue to promote energy transition and the clean, diversified and secure supply of energy. Sinopec strives to make positive contributions to global energy governance and climate change."

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### **TotalEnergies, the world's third largest LNG player**

TotalEnergies is the world's third largest LNG player with a global portfolio of 44 Mt/y in 2023 thanks to its interests in liquefaction plants in all geographies. The Company benefits from an integrated position across the LNG value chain, including production, transportation, access to more than 20 Mt/y of regasification capacity in Europe, trading, and LNG bunkering. TotalEnergies' ambition is to increase the share of natural gas in its sales mix to close to 50% by 2030, to reduce carbon emissions and eliminate methane emissions associated with the gas value chain, and to work with local partners to promote the transition from coal to natural gas.

### **About TotalEnergies**

TotalEnergies is a global integrated energy company that produces and markets energies: oil and biofuels, natural gas and green gases, renewables and electricity. Our more than 100,000 employees are committed to provide as many people as possible with energy that is more reliable, more affordable and more sustainable. Active in about 120 countries, TotalEnergies places sustainability at the heart of its strategy, its projects and its operations.

<https://clubofmozambique.com/news/exxon-targets-first-lng-from-30-billion-mozambique-project-by-2030-270312/>

## Exxon targets first LNG from \$30 billion Mozambique project by 2030

9:12 CAT | 08 Nov 2024



Photo: @Real\_AEW/X

Exxon Mobil is expecting the first liquefied natural gas (LNG) output from its project in Mozambique in 2030, a company executive said on Thursday.

Exxon along with partners including Eni ENI.MI and China's CNPC are developing an LNG project in northern Mozambique, with the U.S. energy giant leading the construction and operation of the onshore liquefaction and related facilities.

"We will most likely next year start some early works in (the) Afungi (site) to get things going, keep it on track and allowing us to get first LNG (production) in 2030," Frank Kretschmer, general manager at the company's Mozambique unit, told delegates at an energy conference in Cape Town.

The company said on Wednesday that it now expected a final investment decision for its Rovuma LNG project in Mozambique in early 2026. The cost of the project is estimated at about \$30 billion.



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The #AfricanEnergyWeek plenary sessions began with insightful keynote addresses by Frank Kretschmer, General Manager and LCM Mozambique at @exxonmobil and Dave Campbell, SVP for @bp\_plc in Mauritania and Senegal.

A dynamic panel discussion, The Future of Gas in Africa's Energy... [Show more](#)



9:27 AM · Nov 5, 2024



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Source: Reuters

<https://www.ft.com/content/f7a34e3e-bce9-4db9-ac49-a092f382c526>

## Russia-China gas pipeline deal stalls over Beijing's price demands

Power of Siberia 2 project would offer lifeline to exporter Gazprom as Moscow's dependence on its neighbour grows



A deal on the pipeline was one of Russian President Vladimir Putin's top requests for Chinese leader Xi Jinping when they met last month, according to people familiar with the issue © Alexandr Demyanchuk/Sputnik/Pool/AP

Max Seddon in Riga, Anastasia Stognei in Tbilisi, Henry Foy in Brussels and Joe Leahy in Beijing YESTERDAY

Russia's attempts to conclude a major gas pipeline deal with China have run aground over what Moscow sees as Beijing's unreasonable demands on price and supply levels, according to three people familiar with the matter.

Beijing's tough stance on the Power of Siberia 2 pipeline underscores how Russia's invasion of Ukraine has left President Vladimir Putin increasingly dependent on Chinese leader Xi Jinping for economic support.

The people familiar with the matter said China had asked to pay close to Russia's heavily subsidised domestic prices and would only commit to buying a small fraction of the pipeline's planned annual capacity of 50bn cubic metres of gas.

Approval for the pipeline would transform the dire fortunes of Gazprom, Russia's state gas export monopoly, by linking the Chinese market to gasfields in western Russia that once supplied Europe.

Gazprom suffered a loss of Rbs629bn (\$6.9bn) last year, its biggest in at least a quarter of a century, amid plummeting gas sales to Europe, which has had greater success than expected in diversifying away from Russian energy.

While Russia has insisted it is confident of agreement on Power of Siberia 2 "in the near future", two of the people said the impasse was the reason Alexei Miller, Gazprom's chief executive, had not joined Putin on the Russian leader's state visit to Beijing last month.

Miller, who was instead on a trip to Iran, would have been essential for any serious negotiations with China and his absence was "highly symbolic", said Tatiana Mitrova, a research fellow at Columbia University's Center on Global Energy Policy.



A deal on the pipeline was one of three main requests Putin made to Xi when they met, according to the people familiar with the matter, along with more Chinese bank activity in Russia and for China to snub a peace conference being organised by Ukraine this month.

China announced on Friday it would skip Ukraine's summit in Switzerland. Two of the people said Beijing and Moscow were discussing ringfencing one or more banks that would finance trade in components for Russia's defence industry — all but certainly incurring US sanctions that would cut any such bank out of the broader global financial system.

An agreement on the pipeline, however, remains distant, while the proposed co-operation with Chinese banks remains at a far smaller scale than Russia had requested, the people added.

Dmitry Peskov, Putin's spokesman, said Russia and China were still in talks on the pipeline.

"It's totally normal for each side to defend their own interests. Negotiations will continue, because the leaders of both countries have the political will for it, and commercial issues will continue to be worked out, and we have no doubt all the necessary agreements will be made," Peskov told reporters on Monday.

"As far as aspects of ongoing commercial negotiations go, they are, of course, not public," Peskov added. Gazprom declined to comment.

Asked about the gas talks, the Chinese foreign ministry said only that "the presidents of China and Russia agreed to look for areas where our interests converge . . . and enable each other's success".

China would "work with Russia to deliver on important common understandings reached between our two leaders and deepen our all-round cooperation [for] mutual benefit", the ministry said.

Russia's failure to secure the deal underscores how the war in Ukraine has made China the senior partner in the countries' relationship, according to Alexander Gabuev, director of the Carnegie Russia Eurasia Center in Berlin.

"China could need Russian gas strategically as a secure source of supply not based on maritime routes that would be affected in case of a maritime conflict around Taiwan or the South China Sea," Gabuev said. "But to make that worthwhile, China really needs a very cheap price and flexible obligations."

China's demand for imported gas is expected to reach about 250 bcm by 2030, up from less than 170 bcm in 2023, according to a paper published by Columbia's CGEP in May.

That paper said the 2030 level of demand could still be largely or entirely met through existing contracts for pipeline supply and for liquefied natural gas. However, by 2040, the gap between China's import demand and existing commitments would reach 150 bcm, it said.

Russia's lack of an alternative overland route for its gas exports means Gazprom would probably have to accept China's conditions, Gabuev said.

"China believes time's on its side. It has room to wait to squeeze the best conditions out of the Russians and wait for attention on the China-Russia relationship to move elsewhere," he said. "The pipeline can be built rather quickly, since the gasfields are already developed. Ultimately the Russians don't have any other option to market this gas."

Before the war in Ukraine, Gazprom relied on selling gas to Europe at high prices in order to subsidise Russia's domestic market.

China already pays Russia less for gas than to its other suppliers, with an average price of \$4.4 per million British thermal units, compared with \$10 for Myanmar and \$5 for Uzbekistan, the CGEP researchers calculated from 2019-21 customs data.

During the same years Russia exported gas to Europe at about \$10 per million Btu, according to data published by the Russian central bank.

Gazprom's exports to Europe fell to 22 bcm in 2023 from an average 230 bcm a year in the decade before the full-scale invasion of Ukraine. These are likely to dwindle further once a trans-shipment agreement with Ukraine expires at the end of this year.

Failure to agree increased supplies to China would be a hefty further blow. An unreleased report by a major Russian bank, seen by the Financial Times, recently excluded Power of Siberia 2 from its baseline forecast for Gazprom. That reduced the company's expected profit for 2029 — when the bank expected the project to launch — by almost 15 per cent.

China did not immediately respond to a request for comment.

This article has been amended since initial publication to reflect that the Ukraine peace summit is taking place at the Bürgenstock resort in Switzerland, not Geneva

<https://tass.ru/politika/22349385>

November 7, 04:52 PM

## Expert Dynkin: after Putin's speech at Valdai, there was a chance to end the NWO

© Kristina Kormilitsyna/ POOL/ TASS

President of the Primakov National Research Institute of World Economy and International Relations, Academician of the Russian Academy of Sciences Alexander Dynkin also drew attention to the words of US President-elect Donald Trump that he "will keep in the focus of his attention" the issue of the Ukrainian crisis

SOCHI, November 8. /TASS/. The chance to end the conflict in Ukraine appeared after Russian President Vladimir Putin's speech at the plenary session of the annual meeting of the Valdai International Discussion Club, the United States will study the statements of the Russian president. This opinion was expressed in an interview with TASS by the President of the National Research Institute of World Economy and International Relations named after E. M. Primakov, Academician of the Russian Academy of Sciences Alexander Dynkin on the sidelines of the Valdai.

"Yes, of course, it is possible," he said, answering a question about the possibility of ending the Ukrainian conflict. - It has long been known that [the conditions for ending the conflict] are neutral Ukraine, fixing the new borders of Ukraine along the line of division, and, perhaps, even taking into account the fact that we have new regions. So there was some chance."

Dynkin drew attention to the words of US President-elect Donald Trump that he "will keep in focus" the issue of the Ukrainian crisis, unlike the 46th US President Joe Biden. "And I hope that American professionals will carefully study this speech [Putin] and see his idea," the expert stressed.

At the same time, the specialist added that when concluding this kind of agreement on the end of the conflict, "it is necessary to keep in mind some guarantees, some insurance tools" from the American side. "I think we have already been deceived so much that we will not do it again," Dynkin said.

Tags:

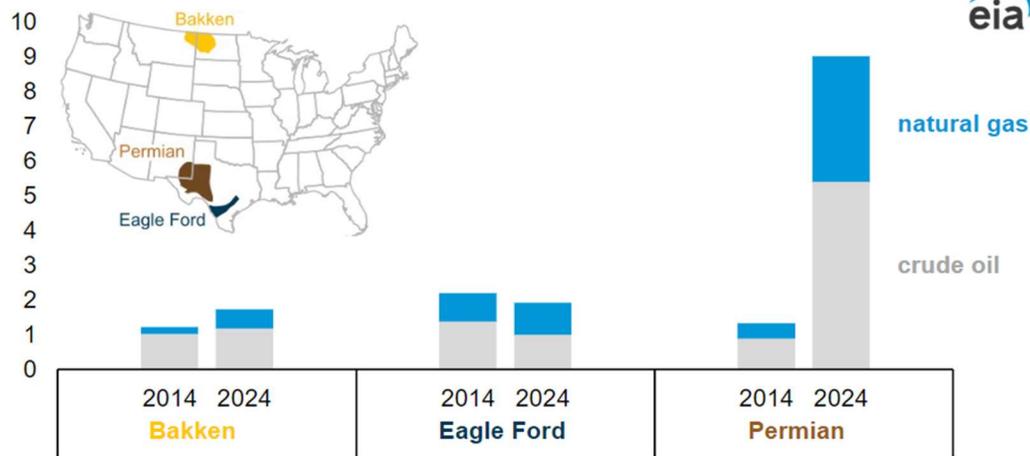
[Vladimir Vladimirovich Putin](#)[Russia](#)[Military operation in Ukraine](#)

## In-brief analysis

October 31, 2024

# Share of natural gas production in U.S. tight oil plays increased over the last decade

Average crude oil and gross natural gas production in select tight oil plays (2014, 2024)  
million barrels of oil equivalent per day



**Data source:** U.S. Energy Information Administration, *Short-Term Energy Outlook*, October 2024 (Table 10b), and Enverus DrillingInfo  
**Note:** 2024 represents year-to-date data through September. To calculate the barrel of oil equivalent, we use a conversion factor of 6,000 cubic feet of gross natural gas production per 1 barrel of oil.

Natural gas produced from the three largest tight oil-producing plays in the United States has increased in the last decade. Natural gas comprised 40% of total production from the Bakken, the Eagle Ford, and the Permian compared with 29% in 2014.

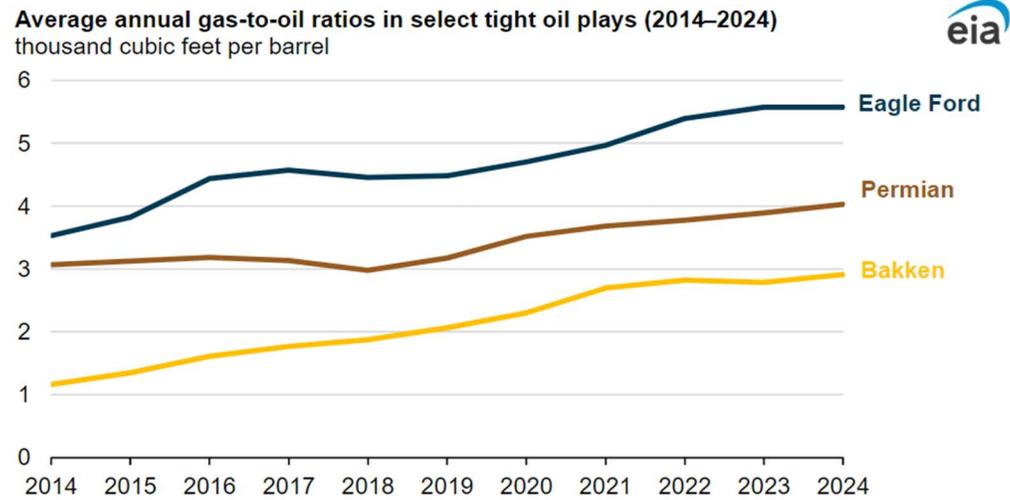
Combined crude oil and natural gas production from these plays more than doubled over this period as [hydraulic fracturing](#)—also known as fracking—and [horizontal drilling](#) have allowed producers to access and extract more crude oil and natural gas from [tight formations](#). However, production of [associated natural gas](#), which is natural gas produced from predominantly oil wells, has increased more rapidly from these tight oil plays. Natural gas production from these plays more than tripled—an increase of 22 billion cubic feet per day (Bcf/d)—over the period compared with crude oil output, which more than doubled—an increase of 4 million barrels per day (b/d).

We define [oil wells](#) as those with a [gas-to-oil ratio](#) (GOR) of less than or equal to 6.0 thousand cubic feet of natural gas per barrel of oil produced (Mcf/b). We classify wells with a GOR of more than 6.0 Mcf/b as natural gas wells. Any increase in the GOR in an oil well means more natural gas per barrel of oil is being produced. The GOR for a [play](#) represents the average share of natural gas production from its individual wells.

Historically, the Permian, Bakken, and Eagle Ford plays have predominantly consisted of oil wells, resulting in lower GORs for these plays.

As more oil and natural gas are released within a well, the GOR tends to progressively increase, increasing the volume of associated natural gas produced per every barrel of oil. Pressure within the

reservoir declines as more oil is brought to the surface, which allows more natural gas to be released from the geologic formation. The pressure will also decrease as more wells are concentrated within an area.



**Data source:** U.S. Energy Information Administration, *Short-Term Energy Outlook*, October 2024 (Table 10b), and Enverus DrillingInfo  
**Note:** 2024 represents year-to-date data through September.

In the Permian play, located in West Texas and southeastern New Mexico, the share of natural gas produced relative to crude oil has remained relatively stable, although the GOR has steadily risen from 3.1 Mcf/b (34% of total production) in 2014 to 4.0 Mcf/b (40%) in 2024. Natural gas production in the Permian, the [largest producing tight oil play](#) in the United States, increased eight-fold in 2024 through September compared with 2014, and crude oil production increased six-fold.

In the Bakken play, located in North Dakota and Montana, the share of natural gas produced relative to crude oil has historically been relatively low, averaging only 1.2 Mcf/b (16% of total production) in 2014. However, the GOR [increased](#) to 2.9 Mcf/b (33%) in 2024, with average gross natural gas production increasing 186% compared with 2014 while crude oil production increased just 14%.

In the Eagle Ford play, located in southwest Texas, the share of natural gas produced relative to crude oil has remained the highest among these plays, increasing from 3.5 Mcf/b (37% of total production) to 5.6 Mcf/b (48%). This increased GOR reflects a 14% increase in average natural gas production and a 28% decrease in average crude oil production in 2024 through September compared with 2014.

**Principal contributor:** Trinity Manning-Pickett

# WEST CANADA TRACKER: Oil Exports Rise to Record on China Exports

2024-10-31 20:05:30.646 GMT

By Robert Tuttle

(Bloomberg) -- Oil exports by tanker from Western Canada rise to an average 398k b/d in Oct. from 310k b/d in Sept. as exports to China surge, according to Vortexa ship-tracking data dating back to Nov. 2020.

\* Total outflows at 12.33m bbl vs 9.3m bbl in Sept

\*\* US-West Coast shipments 189k b/d vs. 170k b/d

\*\* Asia shipments 207k b/d vs. 123k b/d

\* Click here for PDF of latest tankers departing from Western Canada to all destinations:

DESTINATION COUNTRY	MoM Change	Oct	Sep	Aug
Brunei	-17,245	0	17,245	0
China	84,803	207,480	122,677	89,733
Ecuador	1,455	1,455	0	0
Japan	0	0	0	16,662
South Korea	0	0	0	79,720
United States	18,863	188,828	169,965	182,665

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To view this story in Bloomberg click here:

<https://blinks.bloomberg.com/news/stories/SM8HFAT1UM0W>

## Russia Refining Runs Fell to Lowest in Almost 2.5 Years in Oct.

2024-11-04 13:17:52.300 GMT

By Bloomberg News

(Bloomberg) -- Russia's primary crude-processing rates averaged 5.11m b/d during Oct. 1-30 amid planned seasonal maintenance, according to a person with knowledge of the matter.

\* That's down by around 162k b/d compared with the average processing rates for most of September and is the lowest monthly average since May 2022, according to data compiled by Bloomberg

\*\* Refining runs may also have been affected by lower margins, making crude processing at some facilities in southern Russia less attractive

\* Processing rates during Oct. 24-30 jumped to 5.31m b/d, up by almost 224k b/d from the previous seven days as the maintenance peak ended

\* NOTE: Refinery runs remain one of the key indicators — alongside seaborne export flows — for market watchers to follow trends in Russia's oil industry after the government classified official output data amid sanctions

\* READ, Oct. 31: Rosneft's Tuapse Oil Refinery Set to Come Online Around Nov. 7

\* READ, Oct. 29: Russia's Crude Shipments Advance for Second Consecutive Week

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11/05/2024 05:24:27 [BN] Bloomberg News

## Russia's Crude Shipments Slump on Lower Arctic, Black Sea Flows

Drop comes as India says it could take more, if the price is right

By Julian Lee

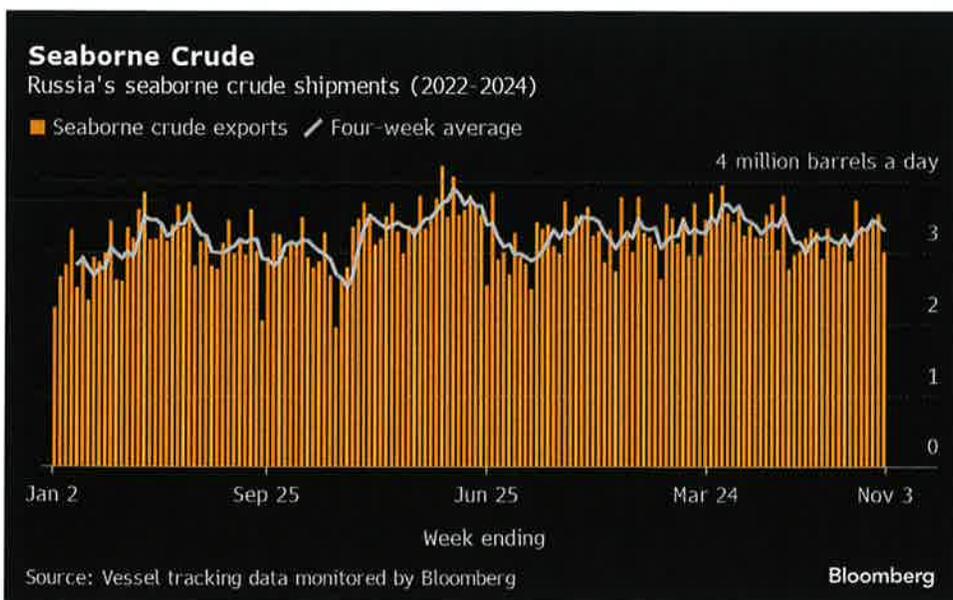
(Bloomberg) -- Russia's seaborne crude exports plunged in the latest week, with the biggest decline since early July dragging down the four-week average.

Weekly flows dropped by about 530,000 barrels a day in the period to Nov. 3, as Russia made no shipments from the Arctic port of Murmansk and just one from Novorossiysk on the Black Sea. Four-week exports fell by 90,000 barrels a day, extending their decline for a second week, despite major ports on the Baltic and Pacific coasts operating near peak levels.

The drop in cargoes from Novorossiysk mirrors a four-day gap in the loading program; such periods often indicate maintenance at a port or on the pipelines serving it. The slump in Arctic shipments may simply be a reflection of scheduling, with three tankers loading the previous week and four more at, or very close to, Murmansk fjord by the end of the most recent period.

Russia's primary refining rate rose sharply in the final week of October, as seasonal maintenance passed its peak. That likely reduced the volume of crude available for export.

India's Petroleum Minister Hardeep Puri says his country, already the largest market for Moscow's seaborne crude, can further boost oil imports from Russia if prices are right, adding that there had recently been a small decline, with other sources becoming more competitive. Russia now provides 38% of India's crude imports, he added.



The drop in shipments came as the OPEC+ group of oil producers, which Russia leads alongside Saudi Arabia, delayed for the second time a plan to start adding back some of the supply it has cut in recent years. Moscow will have to wait until at least the start of next year to enjoy a rising production target, though that could be postponed again.

## Crude Shipments

A total of 29 tankers loaded 21.11 million barrels of Russian crude in the week to Nov. 3, vessel-tracking data and port-agent reports show. The volume was down from 24.97 million barrels on 32 ships the previous week.

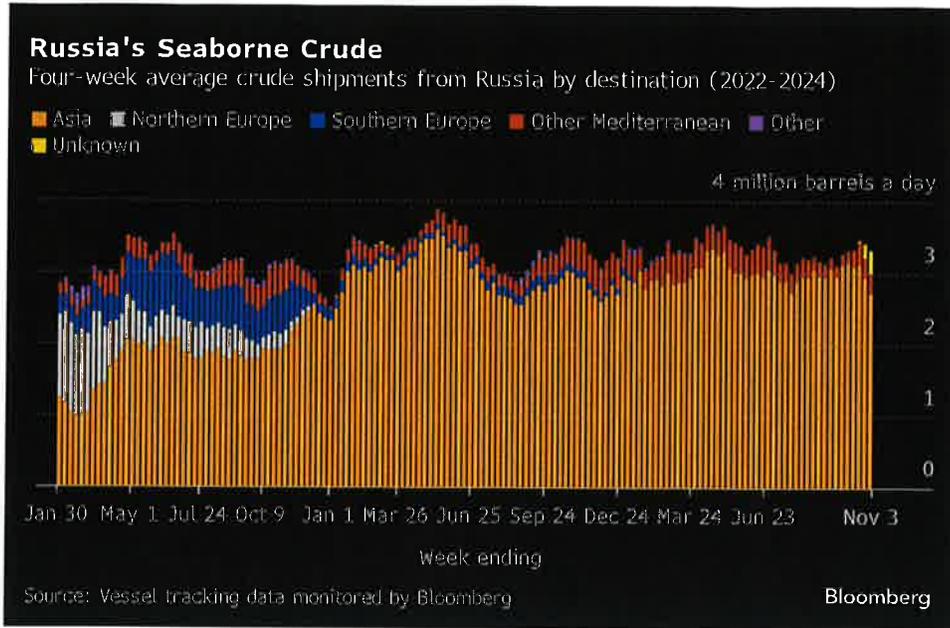


Daily crude flows in the week to Nov. 3 slumped by about 530,000 barrels to 3.02 million, the lowest in six weeks. The drop was driven by lower flows from the country's Black Sea and Arctic ports, which more than offset higher shipments from the Pacific.

Less volatile four-week average flows also fell, dropping for a second week to average 3.32 million barrels a day, down by 90,000 from the period to Oct. 27.

Crude shipments so far this year are about 50,000 barrels a day, or 1.4%, below the average for the whole of 2023.

One cargo of Kazakhstan's KEBCO crude was loaded at Ust-Luga on the Baltic Sea and one at Novorossiysk on the Black Sea during the week.



Russia terminated its export targets at the end of May, opting instead to restrict production, in line with its partners in the OPEC+ oil producers' group. The country's output target is set at 8.978 million barrels a day until the end of December, after a planned easing of some output cuts was delayed for a second time.

Moscow also pledged to make deeper output cuts in October and November this year, then between March and September of 2025, to compensate for pumping above its OPEC+ quota earlier this year.



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## Export Value

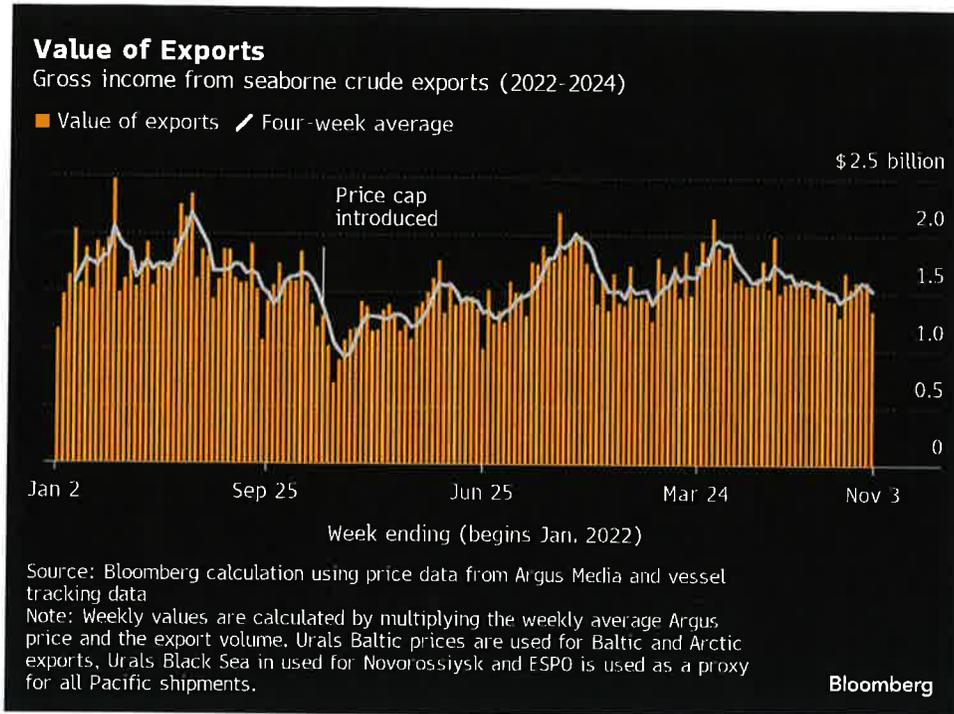
The effect on the Kremlin's oil income from the drop in flows was boosted by declines in the price of Russian crude, which together pushed the gross value of Moscow's exports down by about \$250 million to \$1.35 billion in the week to Nov. 3.

Income fell with a slump in weekly-average prices for Russia's major crude streams adding to the effect of the lower export volume. The price drop was in line with broader declines for oil after Iran's energy infrastructure was spared in Jerusalem's retaliation for the missile barrage that the Persian Gulf nation launched against Israel at the start of last month.

Export values at Baltic ports were down week-on-week by about \$2.30 a barrel. Prices for Black Sea loading Urals and key Pacific grade ESPO fell by about \$1.90 compared with the previous week. Delivered prices in India were down by a similar amount, all according to numbers from Argus Media.

Four-week average income slipped to about \$1.53 billion a week, from \$1.57 billion in the period to Oct. 27.

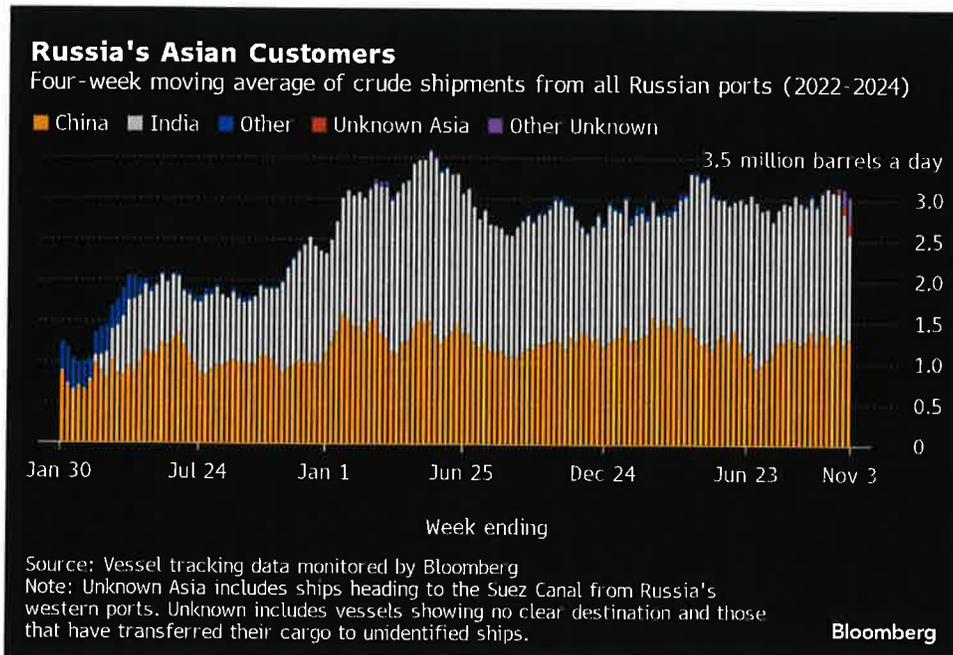
On this basis, the price of Russia's shipments from the Baltic and Black Sea in the four weeks to Nov. 3 was down by about \$0.80 a barrel from the period to Oct. 27. Prices for key Pacific grade ESPO were lower by about \$0.30 a barrel.



## Flows by Destination

- **Asia**

Observed shipments to Russia’s Asian customers, including those showing no final destination, edged lower to 3.03 million barrels a day in the four weeks to Nov. 3. That’s about 6% below the average level seen during the recent peak in April.



About 1.3 million barrels a day of crude were loaded onto tankers heading to China. The Asian nation’s seaborne imports are boosted by about 800,000 barrels a day of crude delivered from Russia by pipeline, either directly, or via Kazakhstan.

Flows on ships signaling destinations in India averaged 1.27 million barrels a day, down from a revised 1.58 million for the period to Oct. 27.

The Indian figures, in particular, are likely to rise as the discharge ports become clear for vessels that are not currently showing final destinations. Most of those heading from Russia’s western ports through the Suez Canal end up in the south Asian nation.

The equivalent of about 140,000 barrels a day was on vessels signaling Port Said or Suez in Egypt. Those show up as “Unknown Asia” until a final destination becomes apparent.

The “Other Unknown” volumes, running at about 320,000 barrels a day in the four weeks to Nov. 3, are those on tankers showing no clear destination. Most originate from Russia’s western ports and go on to transit the Suez Canal, but some could end up in Turkey. Others may be moved from one vessel to another.

Two Aframax tankers, Cankiri and Sakarya, are signaling their destinations as OPL Morocco, suggesting they may transfer their loads into a VLCC when they arrive there in the coming days.

At least nine tankers that have loaded cargoes at Russia’s Baltic ports since Oct. 22 remain anchored off Ust-Luga showing no destination. Similar delays have been seen from time-to-time in the past.

Separately, Greek naval exercises that have been running since May, forcing most ship-to-ship cargo transfers out of the Laconian Gulf and nearby waters, are due to end this month, unless they are extended again.

<b>Crude Shipments to Asia</b>						
Shipments of Russian crude to Asian buyers in million barrels a day						
4 weeks ending	China	India	Other	Unknown Asia	Other Unknown	Total
September 29, 2024	1.40	1.67	0.04	0.00	0.00	3.11
October 6, 2024	1.34	1.80	0.00	0.00	0.00	3.14
October 13, 2024	1.24	1.85	0.00	0.00	0.00	3.09
October 20, 2024	1.36	1.71	0.00	0.05	0.03	3.15
October 27, 2024	1.24	1.58	0.00	0.11	0.19	3.12
November 3, 2024	1.30	1.27	0.00	0.14	0.32	3.03

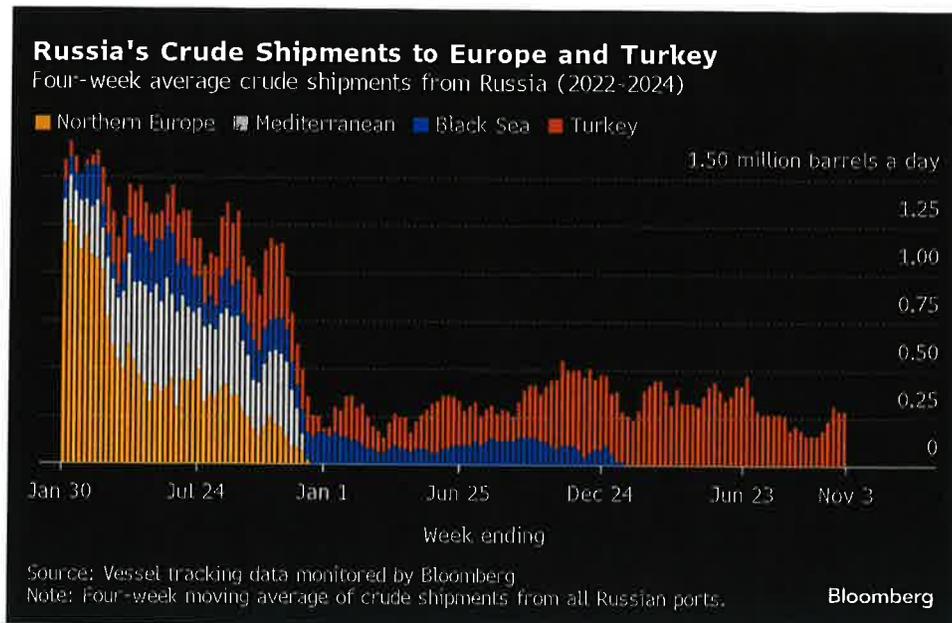
Source: Vessel tracking data compiled by Bloomberg

**Bloomberg**

• **Europe and Turkey**

Russia’s seaborne crude exports to European countries have ceased, with flows to Bulgaria halted at the end of last year. Moscow also lost about 500,000 barrels a day of pipeline exports to Poland and Germany at the start of 2023, when those countries stopped purchases.

Turkey is now the only short-haul market for shipments from Russia’s western ports, with flows in the 28 days to Nov. 3 unchanged at about 290,000 barrels a day.



## NOTES

This story forms part of a weekly series tracking shipments of crude from Russian export terminals and the gross value of those flows. The next update will be on **Tuesday, Nov. 12**.

All figures exclude cargoes identified as Kazakhstan's KEBCO grade. Those are shipments made by KazTransoil JSC that transit Russia for export through Novorossiysk and Ust-Luga and are not subject to European Union sanctions or a price cap. The Kazakh barrels are blended with crude of Russian origin to create a uniform export stream. Since Russia's invasion of Ukraine, Kazakhstan has rebranded its cargoes to distinguish them from those shipped by Russian companies.

Vessel-tracking data are cross-checked against port agent reports as well as flows and ship movements reported by other information providers including Kpler and Vortexa Ltd.

TK TK If you are reading this story on the Bloomberg terminal, click for [alink](#) to a PDF file of four-week average flows from Russia to key destinations.

--With assistance from [Sherry Su](#).

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Organization of the  
Petroleum Exporting Countries

[https://www.opec.org/opec\\_web/en/press\\_room/7409.htm](https://www.opec.org/opec_web/en/press_room/7409.htm)

## **Saudi Arabia, Russia, Iraq, the United Arab Emirates, Kuwait, Kazakhstan, Algeria, and Oman extend the 2.2 mbd voluntary adjustments for one month until end of December 2024**

No 18/2024

Vienna, Austria

03 Nov 2024

**The OPEC Secretariat noted that the eight OPEC+ countries Saudi Arabia, Russia, Iraq, the United Arab Emirates, Kuwait, Kazakhstan, Algeria, and Oman, which previously announced additional voluntary adjustments in April and November 2023, have agreed to extend the November 2023 voluntary production adjustments of 2.2 million barrels per day for one month until the end of December 2024.**

In addition, the eight countries reiterated their collective commitment to achieve full conformity with the Declaration of Cooperation, including the additional voluntary production adjustments that were agreed to be monitored by the JMMC during its 53rd meeting held on April 3rd 2024, and to fully compensate by September 2025 for the overproduced volumes since January 2024 in accordance with the compensation plans submitted to the OPEC Secretariat.

The countries also noted the recent announcement made by Iraq and the joint statement made by Russia and Kazakhstan, in which they strongly reaffirmed their commitment to the agreement including the additional voluntary production adjustments and to their compensation schedules for the overproduced volumes since January 2024.

***“what President Trump did say in Riyadh was that he would isolate Iran diplomatically and weaken them economically so they can’t fund all of the violence that is going with the Houthis in Yemen, Hamas, Hezbollah, PIJ and these proxies that around Iraq and Syria today. All of whom destabilize Israel and our Gulf Partners” Brian Hook.***



SAF Group created transcript of comments by Brian Hook (former US envoy on Iran under Trump) with CNN’s Becky Anderson on Nov 7, 2024. <https://www.youtube.com/watch?v=aKsxggdQX0k>

Items in *“italics”* are SAF Group created transcript

At 0:00 min mark, Anderson asks on the reports Hook is going to lead the transition team at the State Dept *“.. will you be leading the transition team at the State Dept?”* Hook *“I don’t have any comment on that.”*

At 3:15 min mark, Hook *“... President Trump came to Riyadh at that Arab Muslim summit, 55 nations were there, and he laid out a very coherent strategy for how we are going to focus on shared interests. We’re going to combat ideologies that are killing not only American troops in the region but also citizens of Arab and Muslim nations. And we’re going to do that in a spirit of friendship and partnership. So over the course of those four years, he executed against that strategy. Defeated ISIS. Put Iran in a political and financial crisis. Deepened his ties with Israel. Deepened his ties with our Gulf partners. Got out of the Iran nuclear deal. And did four peace treaties in five months. I would be very happy to put President Trump’s record in the Middle East against any other President.”*

At 6:15 min mark, Hook *“well look Becky, President Trump’s foreign policy is hiding in plain sight. I’m not swerving any of your answers. I just think it’s fairly obvious what he did in the first term. It’s obvious that he isolated Iran and he weakened Iran economically. And you talked about a regional balance of power shifting. Israel has had enormous success against Hamas and Hezbollah, which are two terrorist proxies of Iran, Muslim brotherhood offshoots, and part of this extremist ideology that President Trump worked with leaders in Saudi Arabia, UAE and Egypt to combat. I have no reason to think he won’t do that again. And he was very successful at it. The leaders in the region that I described enjoyed working with President Trump. And I think that they are looking forward to him coming back into office. In fact, I’m sure of it.”*

[Note earlier in the interview, Hook highlighted it was significant that Trump’s Day 1 calls included leaders of Saudi Arabia, UAE, Egypt and Israel”

At 7:10 min mark, Anderson “Do you expect the Gulf countries to support a further policy of maximum pressure, for example? Further escalation between Israel and Iran if that is what Donald Trump is supporting?” Hook ““*President Trump understands that the chief driver of instability in today’s Middle East is the Iranian regime. And the Gulf is I think the most sort of economically dynamic and culturally vibrant region in the world today. And this sort of extremism and revolutionary ideology that the Iranian regime exports is one of the obstacles. Right, to continuing on this good path. And when the US decides to seek accommodation with Iran, it then creates the space for other countries to do the same. But in my personal experience, I know that when we deter the Iranian regime, you have the countries that you described, who are on the frontlines of Iranian aggression, doing everything they can to be a part of that deterring Iran. President Trump has no interest in regime change. The future of Iran will be decided by the Iranian people. We’ve said that repeatedly over four years. But what President Trump did say in Riyadh was that he would isolate Iran diplomatically and weaken them economically so they can’t fund all of the violence that is going with the Houthis in Yemen, Hamas, Hezbollah, PIJ and these proxies that around Iraq and Syria today. All of whom destabilize Israel and our Gulf Partners.*”

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

# Malaysia rebuffs US on Iran oil sales, says it recognises only UN sanctions

[Zunaira Saieed](#) Malaysia Correspondent

UPDATED MAY 09, 2024, 11:51 PM

KUALA LUMPUR – Malaysia will recognise sanctions imposed by the United Nations only and not by individual countries, said **Home Minister Saifuddin Nasution Ismail on May 9**, following claims by a top US official that Iran has relied on Malaysian service providers to sell US-sanctioned oil in the region.

**"I emphasised that we will only recognise sanctions if they are imposed by the United Nations Security Council.**

**"The delegation from the US respected our stance," Datuk Seri Saifuddin told reporters following a meeting with the US Treasury Department's top sanctions official Brian Nelson, who was visiting Kuala Lumpur.**

Washington [has imposed sanctions on Iran and its proxies](#), including on the sale of Iranian oil, aimed at choking money flows that it claimed were being used to foment instability in the Middle East.

Mr Nelson, speaking to the local media after the meeting, said of the Washington claims against Malaysian service providers: "I would only say we have seen and we've promulgated some sort of guidance to the (Malaysian) marine sector about the type of services that they are engaging in.

"These are ship-to-ship transfers, particularly at night, which we see from time to time.

"They are really designed to obfuscate the origin of the commodity, in this case, Iranian oil," he told Malaysiakini.

Mr Nelson had said that the capacity of Iran to move its oil depended on parties such as port administrators and tugboat operators.

"Typical markers that we see are like when they turn off their location device and when they're trying to obscure the name of the ship, or they falsify or forge critical documents about the commodities that were issued," he added.

A recent Reuters report cited an unnamed senior US Treasury official as saying that there has been an uptick in money moving to Iran and its proxies, including Hamas, through the Malaysian financial system.

In the meeting with Mr Nelson, Mr Saifuddin said he underlined Malaysia's commitment to combating terrorism financing, with a clear strategic plan to tackle illicit financing activities and money laundering.

The minister also acknowledged concerns raised by US officials over possible money laundering activities involving certain individuals and organisations in Malaysia with purported ties to Iran and its proxies like Hamas, and said these needed verification.

**Malaysian government spokesman Fahmi Fadzil, speaking to reporters on May 8, said the country would comply with UN sanctions, but not necessarily with those imposed by individual countries.**

**"We want to assert that Malaysia, as a sovereign nation, we comply with UN sanctions," Mr Fahmi told reporters.**

**"But when it comes to unilaterally applied sanctions, then I think we have to assess this situation."**

Commenting on the issue, economics professor Geoffrey Williams at the Malaysia University of Science and Technology said: “Malaysian businesses can do business with anyone unless there are UN sanctions regulations to stop it, but the US cannot stop Malaysian companies doing business with others.

“However, if Malaysian companies are involved in activities that the US does not like, then the Americans can stop doing business with them,” he said.

Malaysian Prime Minister Anwar Ibrahim has been vocal in his support for Hamas amid the ongoing war in Gaza, even at the risk of US sanctions against those who support the group that Washington has deemed a terrorist organisation.

Meanwhile, Mr Nelson, who earlier visited Singapore, had said that sanctions imposed in 2023 against four Malaysian firms accused of helping Iran’s drone production have been impactful, while also highlighting the issue of the illicit sale of Iranian oil in the region.

“Malaysia clearly doesn’t want its financial institutions and its shipping industry to be abused by rogue nations and outside actors. We don’t want that because of the central importance of Malaysia, both as a trading nation and as a financial centre, and given America’s significant business presence here,” Mr Nelson, who is the US Treasury Department’s undersecretary for terrorism and financial intelligence, told reporters on May 9.

Mr Halmie Azrie Abdul Halim, a senior analyst at political risk consultancy Vriens and Partners, said the US delegation trip to Malaysia is an “intimidation tactic” because of Datuk Seri Anwar’s pro-Palestine stance.

Still, the “US would also not want to lose the support of Malaysia, which is one of its key Asean partners, as the country will assume the role of Asean chair next year”, he said.

Malaysia is among the US’ top 20 trading partners, with bilateral trade between the two nations amounting to US\$78.3 billion (S\$106 billion) in 2022.

<https://www.thenationalnews.com/business/energy/2024/11/05/adipec-2024-peak-oil-demand-is-10-years-away-vitol-ceo-says/>

## Adipec 2024: Peak oil demand is 10 years away, Vitol CEO says

China's peak oil demand will be 'significant' inflection point globally, Energy Institute head says



/vitol chief executive Russell Hardy. Victor Besa/The National.

[John Benny](#)

November 05, 2024

Global [oil demand](#) may peak within the next 10 years, driven by [increased consumption](#) in developing nations offsetting declines in [advanced economies](#), the chief executive of Vitol, the world's largest energy trader, has said. Speaking during a panel session at the Abu Dhabi International Petroleum Exhibition and Conference (Adipec) on Tuesday, Russell Hardy highlighted the difficulty in accurately predicting peak oil demand, particularly due to uncertainties surrounding consumption growth rates in developing countries.

**“What we're saying today is that peak oil demand is about 10 years away. The unfortunate thing is, we said five years ago that peak oil demand is 10 years away,” Mr Hardy said.**

The pace of the shift from the combustion engine to other forms of transport in Organisation for Economic Co-operation and Development (OECD) countries will be the “most important driver of all of this”, he said. **“We're reasonably confident demand growth in the non-OECD area is going to outstrip the demand shrinkage in the OECD,” Mr Hardy added.**

Torbjorn Tornqvist, chief of commodities trading firm Gunvor, said demand for transportation fuels, such as diesel and gasoline, is plateauing in some markets, particularly China. But, it doesn't mean oil demand is changing because we see more demand for chemical feed stocks,” he said during the same panel.

The International Energy Agency has predicted that demand for oil, coal and gas will peak by 2030 amid growing adoption of EVs and renewable energy. The debate surrounding the future of oil demand has heated up in recent years, with Opec, the oil producers' group, taking an opposing view.

On Monday, Opec's secretary general Haitham Al Ghais said he was confident about crude demand in the long term. "Economic growth [is] doing well despite all the talk about negative economic growth. Yes, there are some challenges, but the picture is not as negative as some make it sound," Mr Al Ghais said.

"Peak demand is not going to happen, we're not going to have that because the world keeps growing," he added.

### **Chinese demand**

After importing record amounts of crude in 2023, China's oil demand has significantly slowed this year amid an economic slowdown and rapid adoption of EVs. The IEA expects global oil demand to expand by roughly 900,000 barrels per day this year and close to one million bpd in 2025, marking a sharp slowdown on the two million bpd growth observed in the post-pandemic period.

China "underpins" the deceleration in growth, representing around 20 per cent of global gains both this year and next year, compared to almost 70 per cent in 2023, the agency said in its monthly oil market report. "The reality is [that] Europe has certainly peaked on oil. The US probably has peaked or is peaking," said Nick Wayth, chief executive of the Energy Institute, which publishes the Statistical Review of World Energy report every year.

"The one to watch is China. China is right to peak on oil demand this decade, and that becomes a really significant inflection point globally. India will continue to grow," he told *The National* on the sidelines of Adipeec. "We will reach peak oil, and I think it will be sooner than later."

Updated: November 06, 2024, 2:41 AM

***“I mean the UK has no chance of growing if this idiot Chancellor thinks that the way forward is going to be increasing tax on air travel. You want to grow, scrap air travel taxes..... these guys haven’t been in power for about 15 years, and I think they are going to learn some very harsh lessons in the next year or two.”*** Ryanair CEO O’Leary.



**Bloomberg Surveillance** O'LEARY: HAVE FLEXIBILITY TO MOVE PRICING AROUND

SAF Group created transcript of comments by Ryanair CEO Michael O’Leary with Bloomberg’s AnneMarie Horden, Jonathan Ferro and Lisa Abramowicz on Bloomberg Surveillance on Nov 4, 2014. [\[LINK\]](#)

Items in “italics” are SAF Group created transcript.

**Horden:** At 5:20 min mark. *“I want to ask you about the competition in the UK. I used to live in the UK, I used to fly on Ryanair; now you’re reviewing your schedule out of the UK because the government is charging 2 pounds more a person.”*

**Michael O’Leary:** *“You have this bonkers labor government. You know, they got elected on this kind of pro- we’re going to be pro-growth, we’re going to grow-whatever it is, we are going to grow- and the first thing they do on an island on the peripheral of Europe is “we’re going to put up travel taxes. You can’t grow putting up travel taxes.”*

**AnnMarie Horden:** *“So, will you cut capacity?”*

**Michael O’Leary:** *“We are going to switch, we do about 55 million passengers a year to the UK. We are going switch about 5 million of that capacity, which maybe takes place on aircrafts that are based in Europe to fly into the UK. We are going to move that now next year into Italy, Sweden, Hungary, where they are abolishing travel taxes, so we have that flexibility to move that capacity around, and again I think it will be good for my pricing in the UK next year, bad for growth, I mean the UK has no chance of growing if this idiot Chancellor thinks that the way forward is going to be increasing tax on air travel. You want to grow, scrap air travel taxes. The Italians get it, the Swedes get it, the Irish got it- the Brits will eventually work it out, um, but you know, these guys haven’t been in power for about 15 years, and I think they are going to learn some very harsh lessons in the next year or two.”*

**Jonathan Ferro:** *“I asked if you have spoken to Kelly Ortberg, have you spoken to Chancellor Reeves”*

**Michael O’Leary:** *“Uh no, uh, and I suspect the chances of me having a conversation with her in the next couple of weeks will be... are diminishing rapidly. You know like, I mean this is a girl that you know, I mean her background is in the treasury, she should understand that the way to you know- you really want to deliver growth in the UK, particularly the regions, tourism is the one industry that you can turn on and turn off at the drop of a hat. And her first measure is to increase travel taxes, you got to be insane to do that,”*

**Jonathan Ferro:** *“When you do that Michael, two pound on short-haul travel per passenger. Grand scheme of things, you step back and say two pound might not sound like a lot. From your perspective, you’re fantastic with the numbers walk us through how two pounds changes the game for you, how does that ripple through the system.”*

**Michael O’Leary:** *“See the point is that it is two pounds up in the UK but in Italy at the moment they are reducing the municipal tax, they’re scrapping the municipal tax which is a reduction of 6.50, so on all. The move now is 10 euros, so now do I put another flight into Italy next year or do I put another flight into the UK? I move capacity out of the UK into Italy, Sweden they have a - Sweden, the home, the home of flight-shaming Greta Thunberg, where she got her limited education up there, have now scrapped aviation taxes, there’s a new right-wing transport minister, who gets it. Greta was*

*wrong, she should go back to bloody school and stop boycotting school. They are scrapping the tax, - so if I move an aircraft from the UK next year, it's not a 2 quid differential, but if I move that up to Sweden it is a 10 euro differential and that's transformative; If I can lower my fares next year to Sweden by 10 euros I will carry many more passengers to Sweden, I will carry fewer in the UK, airfares in the UK will rise, regional traffic and tourism in the UK will fall, Sweden will boom, Italy will boom, until Rachel Reeves works it out that this is not the way forward."*

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

Sent: October 24, 2024 12:39 PM

To: xxx

Subject: Woodmac Curated Research: Oil and gas in a delayed energy transition

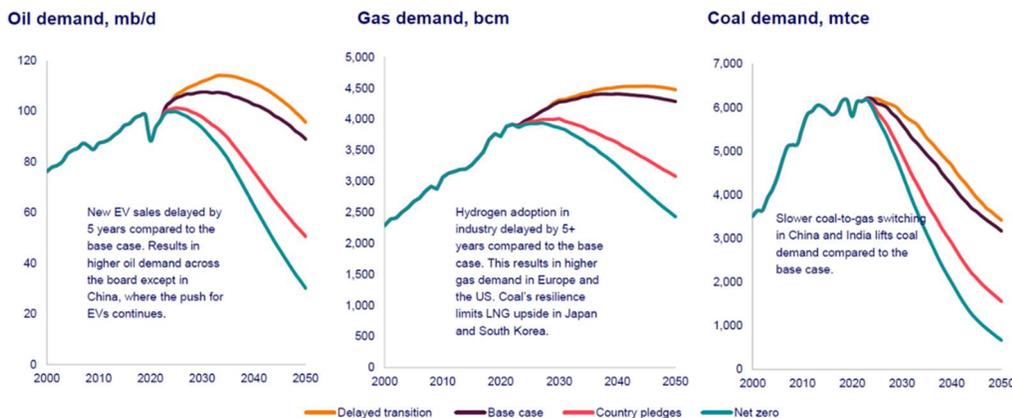


Hello,

The energy transition isn't moving anything like fast enough. Achieving global net zero by 2050 looks increasingly in doubt. To reflect the uncertainty, we added a Delayed Energy Transition Scenario to our existing range of potential outcomes which is quite positive for fossil fuels. With slower displacement by EVs, oil demand continues to increase year-on-year, reaching a peak of 114 million b/d in 2033 (compared with a 108-million b/d peak in 2030 in the base case). Gas demand carries on growing until 2045. There are significant implications for the development of new supply, price and the strategic positioning of the industry at large. On the other hand, it'll take longer for low-carbon technologies to be scaled. The penetration rate of nascent technologies that require government support, such as EVs, green hydrogen and CCUS, lag the base case by five years. Renewables, already competitive with alternative sources of power generation, will continue to grow, albeit at a slower pace. All links below provide complementary access to high level research. Contact us, with no obligation, to discuss these topics in more detail. If you do not wish to receive any future messaging from us, [please click here to unsubscribe](#).

### The impact on global oil and gas demand

In our delayed transition scenario, power demand growth dwindles due to lower electrolytic hydrogen production and reduced transport electrification. In its place, a larger percentage of ongoing energy demand growth, especially in developing countries, is met by oil and gas. As a result, demand for oil peaks in 2033 at 114 million b/d (compared with a 108-million b/d peak in 2030 in the base case) after which it plateaus. Gas demand carries on growing until 2045, when it reaches 4,536 billion cm – nearly 100 bcm higher than our base case – before also plateauing.



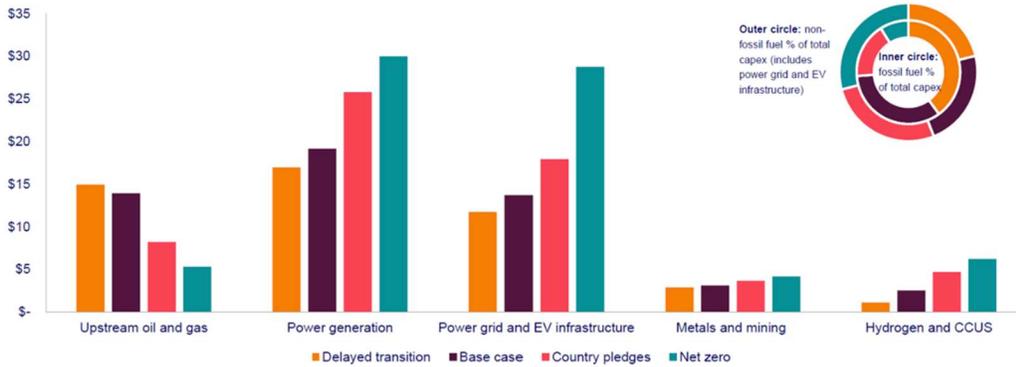
### Implications for global oil and gas sector investment

The world doesn't yet seem to have found the right balance to tackle the energy trilemma of ensuring sustainability, security and affordability. Renewable energy scores strongly for

sustainability, and in the long-term could prove. However, in the short term, renewables face challenges relating to scaling up supply and infrastructure, as well as financing difficulties. This represents an opportunity for oil and gas.

In a delayed transition scenario, total capex for the energy sector between 2023 and 2050 reduces from US\$52 trillion in our base case to US\$48 trillion (in our net zero scenario it would hit US\$75 trillion). That equates to average annual spending of US\$1.7 trillion. The oil and gas' share of total energy sector spending would rise from the 25% it currently receives to 31%. As a result, investment in oil and gas would increase by nearly US\$2 trillion over the period to 2050.

Cumulative capex by segment and by scenario (2023-2050), US\$ trillion (real terms)



### A different course for the US energy sector

The results of the November 2024 election, US tensions with China and US rising budget deficits could significantly alter the path of US energy policy and favour a delayed energy transition.

Under this scenario, Wood Mackenzie projects about US\$6.5 trillion in investment for the US energy sector over 2023-2050. Oil and gas account for more than half of this investment allowing for [new energy projects to be built](#).

The pace of electrification would ease in the near term. However, electrification is a structural trend. Amid continued load growth & less policy support for renewables the biggest states for **coal**-fired power generation – including Indiana, Michigan, Texas and Tennessee – would slow down coal retirements.

Natural **gas** will step in to meet power demand and replace coal plants that are shutting down. Henry Hub prices will strengthen throughout the forecast. Stronger gas demand and the need for more non-associated supply could send Henry Hub prices higher by an average of US\$0.40/mmbtu between 2026 and 2040 and more than US\$1/mmbtu beyond 2045. A stronger Henry Hub price forecast is beneficial to gas producers, but LNG export economics will take a hit, limiting the potential for incremental project development beyond 2043 and redefining its position in the [global LNG markets](#).

### Henry Hub forecast strengthens by around US\$0.40/mmbtu between 2026 and 2040

Gas price outlook



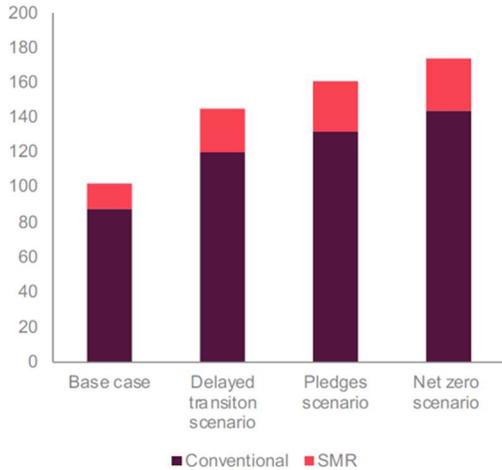
- 1 (2025-2033)**  
Stronger demand growth in the DET mostly relies on supply growth in non-associated basins – mainly the Haynesville. Higher Henry Hub price forecast mainly reflects the supply elasticity of the gas producers.
- 2 (2033-2042)**  
Stronger associated gas supply is most evident in this period as reduced EV penetration supports higher oil prices in the DET. While incremental demand continues to grow in the DET, changes in the Henry Hub price forecast are tempered by additional associated gas production.
- 3 (2043-2050)**  
Demand changes in the DET are most pronounced in this period as the power sector adds more than 10 bcf of additional demand compared to the base case. Henry Hub prices see an upside with a stronger call for non-associated supply to meet higher demand.

Delayed transition Base case

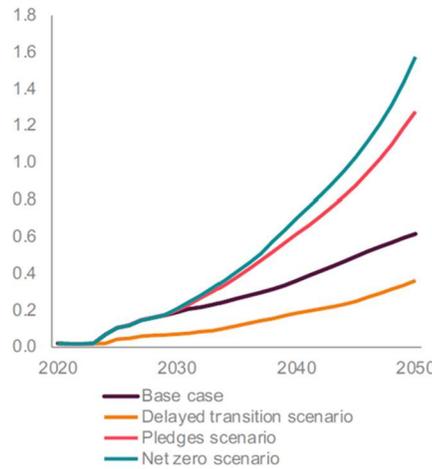
New **nuclear** capacity will be needed to meet power demand post-2040. In our delayed transition scenario, we would expect advanced nuclear power generation capacity driven by both large scale and small modular reactors (SMRs) to expand by about 40 GW. US needs to focus on four critical enablers for nuclear investment, with decisions needed within 3 to 5 years for projects to materialise by 2040.

**CCUS** will also be impacted. But carbon markets and CCUS costs - not policy - constrain CCUS in our delayed transition scenario. Due to wide bipartisan support within Congress, 45Q will remain as legislated through 2032. But flat carbon pricing, uncertainty around the 45Q extension post 2032 and cost staying high for longer will take a toll on CCUS and DAC deployment.

**Nuclear capacity by outlook, GW**

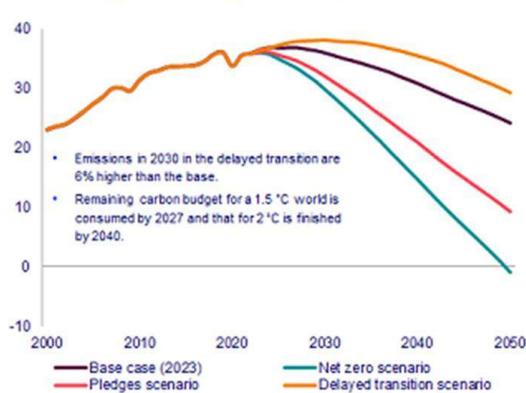


**CCUS and DAC capacity forecast by scenario, Bt**



Our base case outlook broadly aligns with a 2.5°C warming scenario and a delayed transition scenario, resulting in an average temperature rise of 3 °C and emissions peaking in 2032, looks gradually more likely.

**Global energy-related CO<sub>2</sub> emissions, billion tonnes**



- Emissions in 2030 in the delayed transition are 6% higher than the base.
- Remaining carbon budget for a 1.5 °C world is consumed by 2027 and that for 2 °C is finished by 2040.

Outlook	Trajectory	Policy	Enablers
Delayed Transition scenario	Consistent with ~3 °C global warming	Target rollbacks and reduced policy support	Economic and technical challenges slow the uptake of low-carbon technologies
Base case	Consistent with 2.5 °C global warming	Evolution of current policies and alignment with SPOs released in H1 2023	Steady advancement of current and nascent technologies
Country pledges scenario	Consistent with below 2 °C warming (Global net zero by 2070)	Aligned with net zero pledges announced in the run-up to COP26	Incorporates policy response to the current energy crisis, and geopolitical challenges facing the global economy
Net zero 2050 scenario	Consistent with 1.5 °C warming (Global net zero by 2050)	Aligned with most ambitious goal of Paris Agreement	Immediate peak energy; rapid hydrogen and carbon removal deployment; consumer shift

For further discussion on oil and gas matters, please contact us.

Kind regards,

**Dimitra Vlachou** Oil and Gas Sector Lead, Curated Services

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## BYD New Energy Vehicle October Sales

	Oct-24	Oct-23	Volume change	% change	YTD Oct-24	YTD Oct-23	Volume change	% change
BEV	189,614	165,505	24,109	14.6%	1,359,193	1,213,918	145,275	12.0%
PHEV	310,912	135,590	175,322	129.3%	1,877,734	1,157,432	720,302	62.2%
Commercial Vehicle - Bus	438	701	(263)	(37.5%)	3,756	3,509	247	7.0%
Commercial Vehicle - Others	1,693	37	1,656	4,475.7%	9,849	6,612	3,237	49.0%
<b>Total</b>	<b>502,657</b>	<b>301,833</b>	<b>200,824</b>	<b>66.5%</b>	<b>3,250,532</b>	<b>2,381,471</b>	<b>869,061</b>	<b>36.5%</b>

Source: BYD Production and Sales Volumes for October 2024, posted Nov 1, 2024

Prepared by SAF Group

<https://www.bydglobal.com/sitesresources/common/tools/generic/web/viewer.html?file=%2Fsites%2Fsatellite%2FBYD%20PDF%20Viewer%3Fblobcol%3Durldata%26blobheader%3Dapplication%252Fpdf%26blobkey%3Did%26blobtable%3DMungoBlobs%26blobwhere%3D1638928480148%26ssbinary%3Dtrue>



### 比亞迪股份有限公司 BYD COMPANY LIMITED

(A joint stock company incorporated in the People's Republic of China with limited liability)  
(Stock Code: 01211 (HKD Counter) and 81211 (RMB Counter))  
Website: www.bydglobal.com

#### VOLUNTARY ANNOUNCEMENT PRODUCTION AND SALES VOLUME FOR OCTOBER 2024

This announcement is made voluntarily by BYD Company Limited (the "Company").

The Board of the Company is pleased to announce that the total production and sales volume of the Company for the month of October 2024 (Units):

Items	Production Volume					Sales Volume				
	October 2024	October 2023	Year-to-date October 2024	Year-to-date October 2023	Percentage Year on Year	October 2024	October 2023	Year-to-date October 2024	Year-to-date October 2023	Percentage Year on Year
New energy vehicle	536,134	307,014	3,297,044	2,419,749	36.26%	502,657	301,833	3,250,532	2,381,471	36.49%
- Passenger vehicle	534,003	306,276	3,283,439	2,409,570	36.27%	500,526	301,095	3,236,927	2,371,350	36.50%
<span style="color:red">• BEV</span> - Battery electric vehicle	206,499	169,855	1,379,347	1,240,452	11.20%	189,614	165,505	1,359,193	1,213,918	11.97%
<span style="color:red">PHEV</span> - Plug-in hybrid electric vehicle	327,504	136,421	1,904,092	1,169,118	62.87%	310,912	135,590	1,877,734	1,157,432	62.23%

1

Items	Production Volume					Sales Volume				
	October 2024	October 2023	Year-to-date October 2024	Year-to-date October 2023	Percentage Year on Year	October 2024	October 2023	Year-to-date October 2024	Year-to-date October 2023	Percentage Year on Year
- Commercial vehicle	2,131	738	13,605	10,179	33.66%	2,131	738	13,605	10,121	34.42%
- Bus	438	701	3,756	3,509	7.04%	438	701	3,756	3,509	7.04%
- Others	1,693	37	9,849	6,670	47.66%	1,693	37	9,849	6,612	48.96%
<b>Total</b>	<b>536,134</b>	<b>307,014</b>	<b>3,297,044</b>	<b>2,419,749</b>	<b>36.26%</b>	<b>502,657</b>	<b>301,833</b>	<b>3,250,532</b>	<b>2,381,471</b>	<b>36.49%</b>

Note:

The overseas sales volume of New Energy Passenger Vehicle achieved 31,192 units of the Company for the month of October 2024, of which 28,012 units were exported.

The installed capacity of NEV power battery and energy storage battery of the Company for the month of October 2024 was approximately 21.018 GWh. The cumulative installed capacity for the year 2024 was approximately 148.738 GWh.

Please note that the production and sales volumes above are unaudited figures and have not been confirmed by the Company's auditors and may be subject to adjustment and final confirmation. Shareholders and potential investors are advised to read the financial results of the Company carefully when it is published.

<https://rbnenergy.com/hard-to-handle-hydrogens-unique-properties-make-using-natural-gas-infrastructure-a-difficult-task>

## Hard to Handle - Hydrogen's Unique Properties Make Using Natural Gas Infrastructure a Difficult Task

Thursday, 11/07/2024

Published by: [Jason Lindquist](#)

One of the biggest challenges to a significant expansion of the commercial hydrogen market in the U.S. is the lack of a comprehensive transportation network. That has spurred interest from utilities, government agencies and others interested in utilizing or repurposing parts of the existing (and extensive) natural gas infrastructure to ship hydrogen. But that approach comes with some challenges, starting with the significant differences in the physical and chemical properties of hydrogen and methane, the main component of natural gas. In today's RBN blog, **we'll explain why moving hydrogen on the existing natural gas network — then storing and utilizing it — is no easy feat.**

We've written extensively about hydrogen in the RBN blogosphere over the last couple of years as support **for hydrogen as a potentially low-carbon alternative to fossil fuels** across multiple sectors, including transportation fuel, power generation and energy storage, has waxed and waned. Our recent coverage has focused on the Biden administration's efforts to build a market for clean hydrogen through the creation of several regional hubs (see [The Contenders](#)) and the potentially game-changing 45V tax credit (see [The Name Game](#)) as well as hydrogen's use in the production of "electrofuels" (see [Just A Little Bit Better](#)) and the often-confusing hydrogen color scheme (see [Don't Let Me Be Misunderstood](#)). Even more recently, it was the focus of an 800-page report published by the National Petroleum Council (NPC) in April 2024 — "Harnessing Hydrogen: A Key Element of the U.S. Energy Future" — which included analysis from RBN on existing domestic hydrogen transmission and storage infrastructure (see our [Harness Your Hopes](#) series).

**Natural gas is the largest source of energy** used to generate electricity in the U.S., fueling 43% of power generation in 2023. When it comes to hydrogen, one of the areas proposed to have significant long-term potential is its use in gas-fired power plants, a process known as co-firing. As the percentage of hydrogen by volume in the blend increases, the carbon dioxide (CO<sub>2</sub>) emissions decrease, **although at a slower rate because hydrogen has a lower energy density than natural gas.** (In general, a 20% hydrogen blend yields about a 7% reduction in emissions compared with 100% natural gas.) But hydrogen use is not widespread or used regularly in the gas-fired plants where it has been tested, the Energy Information Administration (EIA) said in a recent report. **And while the primary reason for this is economic — natural gas is far cheaper to produce, per Btu, than hydrogen (despite substantial subsidies enacted during the Biden administration) — as we'll get to, there are significant physical challenges as well.**

## Hydrogen plans or tests at U.S. power plants (2024)



Figure 1. Hydrogen Plans or Tests at U.S. Power Plants. Source: EIA

As shown in Figure 1 above, some gas-plant operators have taken or announced plans to increase their use of hydrogen via one of three steps:

- **Co-firing hydrogen at existing facilities (blue dots in Figure 1):** Some operators of gas-fired plants have successfully tested the use of gas/hydrogen blends. In September 2022, the New York Power Authority's (NYPA) Brentwood power plant on Long Island co-fired a blend starting at 5% hydrogen and reaching 44% by volume in its 47-MW peaking unit. According to the NYPA, the cofiring process showed a CO<sub>2</sub> reduction of about 4% when hydrogen made up 35% of the natural gas stream.
- **Upgrading existing turbines (brown dots):** Some gas-plant operators have announced plans to add the capability to co-fire hydrogen and natural gas by upgrading existing turbines. Duke Energy plans to upgrade its 74-MW DeBary simple-cycle peaking power plant in Florida to generate electricity solely from hydrogen.
- **Co-firing capabilities in new plants (green dots):** The operators of three combined-cycle generating plants under construction said they expect to have the capability to co-fire hydrogen. These include Entergy's 1,158-MW Orange County Advance Power Station in Texas, which the utility expects to begin operating by mid-2026. (For more, see [Something to Believe In.](#))

But while a lot has been said about the many potential uses of hydrogen, including co-firing it with natural gas in power generation or even as a 100% replacement, those discussions sometimes overlook a fundamental hurdle: hydrogen is notoriously combustibile and a challenge to move and store safely.

As we wrote in the first blog of our [Harness Your Hopes](#) series, hydrogen production can be broadly classified into three categories: "Merchant" hydrogen generated on-site or in a central production facility and sold to consumers; "Captive" hydrogen produced by consumers (e.g., refiners) for internal use; and "Byproduct" hydrogen recovered from process streams (e.g., ethylene crackers). Merchant producers use one of three transportation modes to reach industrial end users — compressed gas through pipelines, truck deliveries of compressed hydrogen gas in canisters, and truck deliveries of liquified hydrogen in cryogenic canisters or tanks — all complicated by hydrogen's unique properties.

These challenges were outlined in a study recently published by the journal *Energy Science and Engineering*, "A Review of Challenges With Using the Natural Gas System for Hydrogen." The study

focused on four areas: (1) the different physical and chemical properties of hydrogen and methane; (2) the differences in how each affects the existing natural gas system; (3) potential strategies to mitigate the known issues in transporting and storing hydrogen; and (4) the financial, logistical and technological challenges associated with implementing those potential solutions. We'll focus on the difficulties around transportation, distribution and storage of hydrogen — specifically in its gaseous state — in today's blog.

Let's start at square one, the key physical differences between hydrogen and methane. As we noted in our first blog on the subject a few years ago — [Help!](#) — hydrogen is the smallest and lightest element on the periodic table. As shown in the top section of Figure 2 below, hydrogen's weight and density is one-eighth that of methane and its diffusivity in air — the rate at which it can spread — is around three times higher. This means hydrogen can more rapidly leak from infrastructure like a pipeline or storage facility and more easily permeate other materials. (We should also note that the temperature needed to convert hydrogen into a liquid — a requirement for some of the approaches to storage and transportation noted above — is lower than methane, which means more energy is needed to convert hydrogen into a liquid and losses through evaporation are more likely.)

Hydrogen-Natural Gas Comparisons		
	Hydrogen Compared to Natural Gas (Mostly Methane)	Implications of Hydrogen Compared to Natural Gas
<b>Physical Differences</b>		
Size	~8x lighter	Permeates faster from gaskets, seals, plastic pipes, and other "soft" materials
Density	~8x lower density	Rises and accumulates in enclosed spaces
Diffusion	Higher diffusivity	Overall tendency to leak at a greater extent through intact materials of construction, seals, and piping joints
Liquid phase	~100°C colder	Requires much more energy to convert to liquid state; more rapid boil-off
<b>Chemical Differences</b>		
Chemistry	Formation of partial bonds which lower activation energy	Accelerates fatigue cracking and reduces fracture toughness of steels May be depleted in underground storage
Ignition	Higher explosive limit Lower ignition energy	Higher fire risk
Flame	~8x faster flame speed	Lower flame stability in burners, risk of flash-back
	Lower visibility	Harder to detect
	Higher temperature	More NOx produced
Calorific value	1/3 of natural gas by volume	3x gas velocity needed to deliver the same amount of heat
		3x energy needed to compress gas
		3x volumetric gas flow measurements needed
		3x less line pack storage

Figure 2. Hydrogen-Natural Gas Comparisons. Source: Energy Science and Engineering

There are also some key chemical differences (see bottom half of Figure 2) between hydrogen and methane that relate to their reactivity, flammability and flame properties. Hydrogen can more easily react with other materials, which can accelerate fatigue cracking in steel pipelines when moved or stored

as a gas. Hydrogen is also more flammable than methane, which makes a hydrogen leak near a potential source of ignition more dangerous. Hydrogen also has a higher flame speed (the rate at which a flame expands during combustion) and burns with a very pale blue flame that emits minimal visible light (making it harder to detect), which adds to the risk compared to natural gas.

Natural gas, once treated at a processing plant, is shipped via pipeline to a temporary storage site or directly to an end user, either for residential/commercial/industrial use, for power generation, or for export as LNG. U.S. infrastructure is designed to handle huge quantities of gas and Lower 48 production now regularly tops 100 Bcf/d (see our weekly [NATGAS Billboard](#) report), all of it moved by pipeline, at least initially. But there are several issues with trying to use that system to move hydrogen:

**Line Capacity:** Since hydrogen has one-third the energy content as natural gas, three times more hydrogen would need to be delivered to produce the same amount of energy. And anybody familiar with the domestic natural gas system knows that, as natural gas production has grown tremendously in the last decade, many key routes have limited capacity already.

**Compressors and Valves:** Pipeline compressors and valves are not designed to handle hydrogen, making them susceptible to leaks, which means the compressors and valves on a pipeline converted to handle hydrogen would need to be replaced or retrofitted. To move more hydrogen (and account for its lower energy content), a pipeline would also have to increase pressure by adding compression capacity.

**Pipeline Material:** Because of hydrogen's smaller size and higher level of diffusion, it can lead to cracking, leakage and potential mechanical failure, known as hydrogen-accelerated fatigue cracking (HAFC), particularly where there are manufacturing or welding flaws or corrosion points. One possible way to reduce or eliminate HAFC is to include lower blends of hydrogen and natural gas to reduce pipeline pressure. (The Hawaii Gas Network has been using a blend of about 12% hydrogen sourced from a synthetic natural gas production plant since the 1970s.) Other potential methods include the addition of a pipeline coating or liner for protection, and operating pipelines at constant pressure, although there are drawbacks and practical limits to all three approaches. The study notes that safe materials have long been available for dedicated hydrogen pipelines, but they operate differently than natural gas pipelines at low, near-constant pressures.

**Safety:** Because natural gas pipelines are usually buried, external inspections are difficult, which increases the risk of premature failure if repurposed for hydrogen service, the study said.

	COMPONENT	ISSUES	IMPACTS & RISKS	SOLUTIONS & CHALLENGES					
LOCAL DISTRIBUTION	Pipeline material	H <sub>2</sub> can permeate faster than natural gas (depending on flow regime) through plastic and other "soft" materials that pipelines, gaskets, seals are often made of	This can lead to both small and bulk leaks due to reduction in tensile strength, and sometimes even material changes in pipes which can reduce its lifetime	<ol style="list-style-type: none"> <li>1. Limit amount of H<sub>2</sub> and de-blend if needed at point of use but limited decarbonization potential and energy intensive</li> <li>2. Liners to reduce permeability but more research required</li> </ol>					
	Gas meters	Some can underreport flowrate when H <sub>2</sub> present and if flowrate increased there are technical challenges	Potential inaccurate measurements, incompatible design, hydrogen leakage	<ol style="list-style-type: none"> <li>1. Limit amount of H<sub>2</sub> but limited decarbonization potential</li> <li>2. Adjustments of gas metering and quality control systems but more research is needed</li> <li>3. Replacement but costly</li> </ol>					
<table border="0"> <tr> <td> <b>SAFETY</b> Flammability hazards; worsened air quality</td> <td> <b>ENERGY SUPPLY</b> Reduced reliability; service interruption</td> <td> <b>CLIMATE</b> Climate-warming gas emissions</td> <td> <b>COST</b> Lost product; and/or added expense</td> <td> <b>UNUSABLE</b> New equipment needed; stranded assets</td> </tr> </table>					<b>SAFETY</b> Flammability hazards; worsened air quality	<b>ENERGY SUPPLY</b> Reduced reliability; service interruption	<b>CLIMATE</b> Climate-warming gas emissions	<b>COST</b> Lost product; and/or added expense	<b>UNUSABLE</b> New equipment needed; stranded assets
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Figure 3. Local Distribution Issues With Hydrogen. Source: Energy Science and Engineering

Once delivered from a transmission pipeline to a city-gate for local distribution, natural gas is moved through an extensive pipeline network operating at medium to low pressures, composed of

materials ranging from steel to cast iron to high-density polyethylene (HDPE). As shown in Figure 3 above, hydrogen can permeate plastics like HDPE and other soft materials used in pipelines, gaskets and seals quicker than natural gas, which can lead to leaks and significant changes in pipeline materials. (Due to its small size, hydrogen can enter and diffuse through metal surfaces, increasing the odds of embrittlement and HAFB. Hydrogen can also permeate HDPE and other polymers, changing their physical properties and increasing the chances of failure.)

Hydrogen can also pose issues for traditional gas meters, which are not designed to measure hydrogen and would likely need to be replaced/upgraded.

Given the challenges of moving hydrogen via pipeline, let's look at the main implications for storage, where there are several known issues, as shown in Figure 4 below. The biggest complication might be line pack, or the volumes stored within a gas storage or distribution system, again because of hydrogen's lower energy content. Switching the gas system to pure hydrogen, with its lower energy density, would result in a reduction in line pack storage to one-third of its present value. That also assumes that storage pressure and volume are kept constant but if pipeline pressures were adjusted lower to account for the added risks associated with hydrogen, a further reduction in line pack would be expected, the study said. That could result in a reduction in system reliability and increase the need for storage. One possible solution for a power plant intending to run on a gas/hydrogen mix would be to get each from their own dedicated pipeline, then blend the two at the site. Of course, that would necessitate a lot more infrastructure development, which would be challenging, to say the least (see [Easier Said Than Done](#)).

	COMPONENT	ISSUES	IMPACTS & RISKS	SOLUTIONS & CHALLENGES
STORAGE	Line pack	H <sub>2</sub> has 1/3 energy content as natural gas per volume; if pressure de-rated, reduced more	At least 3x less energy stored	1. Limit amount of H <sub>2</sub> but limited decarbonization potential 2. Augment with new storage
	Subsurface – Depleted natural gas reservoirs	H <sub>2</sub> reacts with minerals and can be consumed by organisms	H <sub>2</sub> amount depleted leading to lost product	Impractical; new options needed
			H <sub>2</sub> purity compromised; incompatibility with fuel cells	Post-storage purification
	Subsurface – Salt caverns	Requires suitable geology	May not be available leading to limited storage options or distant locations	Build new pipes to caverns in suitable geology but leads to energy losses; emissions; costs
			New construction is intensive	Limit construction to seawater accessibility but restricts location
Liquified gas	Requires extremely low temperatures	Energy intensive and leakage 	Impractical; new options needed	

**SAFETY** Flammability hazards; worsened air quality

**ENERGY SUPPLY** Reduced reliability; service interruption

**CLIMATE** Climate-warming gas emissions

**COST** Lost product, and/or added expense

**UNUSABLE** New equipment needed; stranded assets

Figure 4. Storage Issues With Hydrogen. Source: Energy Science and Engineering

Once hydrogen makes it to the end user, the challenges continue. Equipment design is a significant issue, with most existing appliances and other devices optimized to handle traditional natural gas. Columbia Gas of Pennsylvania has tested blends of between 2% and 20% hydrogen, with no significant difference for most end users, although 20% appears to be a practical limit for blending. Safety is a primary concern. As we noted earlier, hydrogen is more likely to leak and is easier to ignite, and its flame is harder to detect, which means new burner-management systems (and certifications) would be needed for appliances running on higher percentages of hydrogen along with other safety measures, like increased venting.

The bottom line is that while there is significant potential for hydrogen to play a role in decarbonization efforts in the coming years, its physical and chemical differences with methane make widespread use of the existing natural gas infrastructure difficult, expensive and risky. That could mean the establishment of more hydrogen-specific pipelines and/or limited repurposing of existing pipelines and storage facilities. Alternatively, one popular solution to hydrogen's challenging characteristics is to package it as ammonia — but that comes with its own challenges and will necessitate a separate blog (or series) altogether. As the low-carbon hydrogen industry looks to expand, we'll be watching to see how things develop, especially in the U.S. now that Republicans have regained control of the White House and Senate.

“Hard to Handle” was written by Otis Redding, Al Bell, and Allen Jones. The song was recorded at Stax Studios in Memphis shortly before Redding's untimely demise at the age of 26 in a December 1967 plane crash en route to a show in Madison, WI. It was released as the B side to the “Amen” single released in June 1968 and would go to #38 on the U.S. Billboard R&B chart and #51 on the pop chart. The song also appears on the posthumous Redding album, *The Immortal Otis Redding*. “Hard to Handle” has been covered by many artists including Tom Jones, Grateful Dead, Gov't Mule, Etta James, and most successfully by The Black Crowes, who released their version as the first single from their debut album, *Shake Your Money Maker*, in 1990. The band's version went to #1 on the Billboard Mainstream Rock chart, and #26 on the Billboard Hot 100. *Shake Your Maker* went on to sell over 5 million copies.

Otis Redding was an American singer, songwriter, record producer, and talent scout from Macon, GA. He released six studio albums during his lifetime — his single “(Sittin' on) The Dock of the Bay,” recorded shortly before his death, was the first-ever posthumous #1 record on Billboard's Hot 100. Redding is a member of the Rock and Roll Hall of Fame, the Georgia Music Hall of Fame, and the Songwriters Hall of Fame; he also won a Grammy Lifetime Achievement Award. There is a statue of Redding in Gateway Park in his hometown of Macon. He is considered by many to be the greatest singer of Southern soul music.

## Alternative Fuels Data Center

<https://afdc.energy.gov/fuels/hydrogen-basics>

### Hydrogen Basics

Hydrogen (H<sub>2</sub>) is an alternative fuel that can be produced from diverse domestic resources. Although the market for hydrogen as a transportation fuel is in its infancy, government and industry are working toward clean, economical, and safe hydrogen production and distribution for widespread use in fuel cell electric vehicles (FCEVs). Light-duty FCEVs are now available in limited quantities to the consumer market in localized regions domestically and around the world. The market is also emerging for buses, material handling equipment (such as forklifts), ground support equipment, medium- and heavy-duty trucks, marine vessels, and stationary applications. For more information, see [fuel properties](#) and the [Hydrogen Analysis Resource Center](#).

Hydrogen is abundant in our environment. It's stored in water (H<sub>2</sub>O), hydrocarbons (such as methane, CH<sub>4</sub>), and other organic matter. **One challenge of using hydrogen as a fuel is efficiently extracting it from these compounds.**

**Currently, steam reforming—combining high-temperature steam with natural gas to extract hydrogen—accounts for the majority of the [hydrogen produced in the United States](#). Hydrogen can also be produced from water through [electrolysis](#). This is more energy intensive but can be done using renewable energy, such as wind or solar, and avoiding the harmful emissions associated with other kinds of energy production.**

Almost all the hydrogen produced in the United States each year is used for refining petroleum, treating metals, producing fertilizer, and processing foods.

**Although the production of hydrogen may generate emissions affecting air quality, depending on the source, an FCEV running on hydrogen emits only water vapor and warm air as exhaust and is considered a zero-emission vehicle.** Major [research and development](#) efforts are aimed at making these vehicles and their infrastructure practical for widespread use. This has led to the rollout of light-duty vehicles to retail consumers, as well as the initial implementation of medium- and heavy-duty buses and trucks in California and fleet availability in northeastern states.

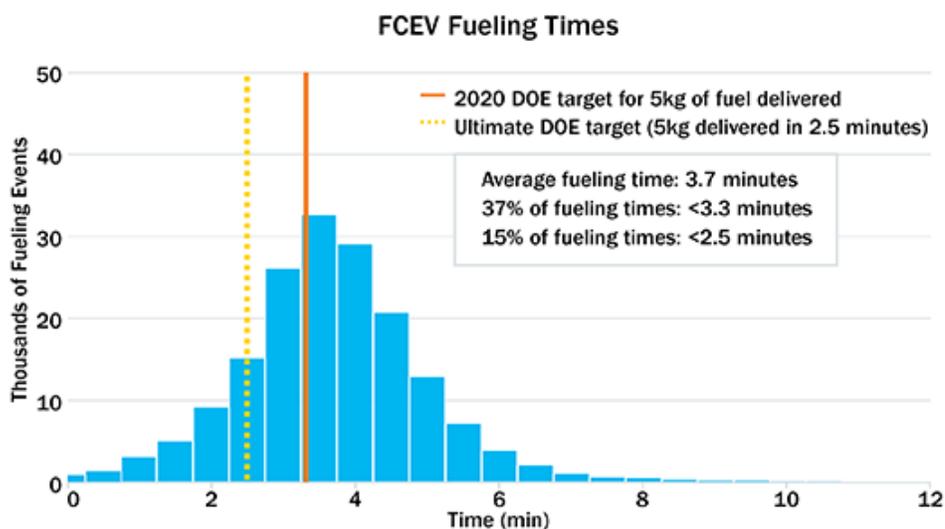
Learn more about hydrogen and fuel cells from the [Hydrogen and Fuel Cell Technologies Office](#).

### Hydrogen as an Alternative Fuel

Hydrogen is considered an alternative fuel under the [Energy Policy Act of 1992](#). The interest in hydrogen as an alternative transportation fuel stems from its ability to power fuel cells in zero-emission vehicles, its potential for domestic production, and the [fuel cell electric vehicle's](#) fast filling time and high efficiency. In fact, a fuel cell coupled with an electric motor is two to three times more efficient than an internal combustion engine running on gasoline. Hydrogen can also serve as fuel for

internal combustion engines. However, unlike FCEVs, these produce tailpipe emissions and are less efficient. Learn more about [fuel cells](#).

The energy in 2.2 pounds (1 kilogram) of hydrogen gas is about the same as the energy in 1 gallon (6.2 pounds, 2.8 kilograms) of gasoline. Because hydrogen has a low volumetric energy density, it is stored onboard a vehicle as a compressed gas to achieve the driving range of conventional vehicles. Most current applications use high-pressure tanks capable of storing hydrogen at either 5,000 or 10,000 pounds per square inch (psi). For example, the FCEVs in production by automotive manufacturers and available at dealerships have 10,000 psi tanks. Retail dispensers, which are mostly co-located at gasoline stations, can fill these tanks in 3-5 minutes. Fuel cell electric buses currently use 5,000 psi tanks that take 10–15 minutes to fill. Other ways of storing hydrogen are under development, including bonding hydrogen chemically with a material such as metal hydride or low-temperature sorbent materials. Learn more about [hydrogen storage](#).



Data from retail hydrogen fueling stations, collected and analyzed by the National Renewable Energy Laboratory, show the average time spent fueling an FCEV is less than 4 minutes.

California is leading the nation in building hydrogen [fueling stations](#) for FCEVs. As of 2023, 52 retail hydrogen stations were open to the public in California, as well as one in Hawaii, and 45 more were in various stages of construction or planning in California. These stations are serving over 8,000 FCEVs. California continues to provide funding toward building hydrogen infrastructure through its [Clean Transportation Program](#). The California Energy Commission is authorized to allocate up to \$20 million per year through 2023 and is investing in an initial 100 public stations to support and encourage these zero-emission vehicles. In addition, retail stations are planned for some midwestern and northeastern states, with some of those already serving fleet customers.

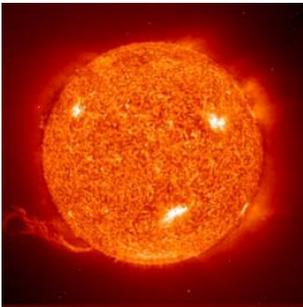
Vehicle manufacturers are only offering FCEVs to consumers who live in regions where hydrogen stations exist. Non-retail stations in California and throughout the country also continue serving FCEV fleets, including buses. Multiple distribution centers are using hydrogen to fuel material-handling vehicles in their normal operations. In addition, several announcements have been made regarding the production of heavy-duty vehicles, such as line-haul trucks, that will require fueling stations with much higher capacities than existing light-duty stations. Find [hydrogen fueling stations across the United States](#).

## Hydrogen explained

### What is hydrogen?

Hydrogen is the simplest element. Each atom of hydrogen has only one proton. Hydrogen is also the most abundant element in the universe. Stars such as the sun consist mostly of hydrogen. The sun is essentially a giant ball of hydrogen and helium gases.

Hydrogen occurs naturally on earth only in compound form with other elements in liquids, gases, or solids. Hydrogen combined with oxygen is water (H<sub>2</sub>O). Hydrogen combined with carbon forms different compounds—or hydrocarbons—found in natural gas, coal, and petroleum.



The sun is essentially a giant ball of hydrogen gas undergoing fusion into helium gas. This process causes the sun to produce vast amounts of energy.

Source: [NASA](#) (public domain)

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Hydrogen is the lightest element. Hydrogen is a gas at normal temperature and pressure, but hydrogen condenses to a liquid at minus 423 degrees Fahrenheit (minus 253 degrees Celsius).

### Hydrogen is an energy carrier

Energy carriers allow the transport of energy in a usable form from one place to another. Hydrogen, like electricity, is an energy carrier that must be produced from another substance. Hydrogen can be produced—separated—from a variety of sources including water, fossil fuels, or biomass and used as a source of energy or fuel. Hydrogen has the highest energy content of any common fuel by weight (about three times more than gasoline), but it has the lowest energy content by volume (about four times less than gasoline).

It takes more energy to produce hydrogen (by separating it from other elements in molecules) than hydrogen provides when it is converted to useful energy. However, hydrogen is useful as an energy source/fuel because it has a high energy content per unit of weight, which is why it is used as a rocket fuel and in [fuel cells](#) to produce electricity on some spacecraft. Hydrogen is not widely used as a fuel now, but it has the potential for greater use in the future.

*Last updated: January 20, 2022*

NEWS RELEASE

MARKET SENSITIVE INFORMATION

Embargoed until 0955 CET (0855 UTC) 4 November 2024

# HCOB Germany Manufacturing PMI<sup>®</sup>

## PMI ticks up in October as declines in output and new orders ease

### Key findings:

HCOB Germany Manufacturing PMI at 43.0 (Sep: 40.6). 3-month high.

HCOB Germany Manufacturing PMI Output Index at 42.8 (Sep: 41.3). 2-month high.

Deeper cuts to output prices signalled amid strong competition

Data were collected 10-24 October 2024.

The German manufacturing sector remained firmly in contraction as the final quarter of 2024 got underway, the latest HCOB PMI<sup>®</sup> survey showed, although rates of decline eased across several key metrics. Output, new orders, employment and stocks all fell more slowly than in September, while business expectations were slightly less pessimistic.

On the other hand, however, October saw an accelerated decline in output prices across the goods-producing sector, as firms commented on strong competition for new work and came under pressure to pass on the cost savings from lower input prices.

The headline **HCOB Germany Manufacturing PMI<sup>®</sup>** is a gauge of overall business conditions derived from measures of new orders, output, employment, supplier delivery times and stocks of purchases. It recorded a reading of 43.0 in October, up from September's 12-month low of 40.6 and the highest since July. **Registering well below the neutral 50.0 mark, however, it signalled an ongoing rapid contraction in the sector.**

**Production volumes were scaled back during October, in a continuation of the trend seen throughout the past one-and-a-half years. The rate of decline eased from that seen in September, when output had fallen to the greatest extent for nearly a year, although it was still marked overall.**

The latest decrease in new orders was notably slower than that recorded the month before. This partly reflected international sales, which posted the smallest decline for five months in October. Still, the respective rates of contraction remained sharp by historical standards, amid reports from panellists of headwinds to demand from economic and political uncertainty, high interest rates and troubles in the automotive sector.

Backlogs of work continued to be depleted rapidly during October, although they too exhibited a softer rate of decrease than the month before. **With fewer staff needed to manage workloads, manufacturers cut employment levels again in October, the sixteenth month in a row in which this has been the case. The pace of staff shedding moderated, but it was still the second-quickest seen since August 2020.**

**Both pre- and post-production inventories were also scaled back further at the start of the fourth quarter. Although the respective rates of depletion eased, the latest decline in stocks of inputs was still sharp overall as manufacturers continued to slash their purchasing activity. Part of the reason for this was better material availability. October saw lead times on inputs shorten once again, albeit only modestly as firms cited delays to shipments from Asia and the impact of short-time work schemes among some suppliers.**

Turning to prices, latest data showed a further decrease in purchasing costs faced by German manufacturers. **Alongside lower prices paid for commodities such as steel, panellists highlighted the influence of reduced freight rates and supplier discounts.** The overall rate of decline in input cost eased slightly since September, but this was not the case for average factory gate charges, which fell to the greatest extent for five months amid reports of fierce competition for new work.

Looking ahead, German manufacturers remained downbeat about the prospects for output in the next 12 months, albeit with

expectations improving slightly from September's recent low. Economic and political uncertainty weighed on confidence, as did concerns for the automotive and construction sectors.

## Comment

Commenting on the PMI data, Jonas Feldhusen, Junior Economist at Hamburg Commercial Bank, said:

*"The mood in German industry remained glum in October. However, there are signs that an economic trough may have been reached. Although the headline PMI remained deep in recessionary territory in October, it showed a slight improvement from a very low level. However, caution is required when interpreting the values, as this is just a one-month improvement after all. The coming months may shed light on a sustainable trend reversal. There is a glimmer of hope in the order situation. Although new work is still shrinking, the rate of contraction has slowed considerably, indicating a possible stabilisation in the coming months."*

*"All sub-sectors are stuck in a downturn. In the consumer goods sector, the performance of companies continued to deteriorate in October. Yet the declines in production and orders were not as severe as in previous months. Things are looking even worse in the capital goods and intermediate goods sectors. Of particular concern is that the issue of job cuts is becoming an increasingly acute one, not only at Volkswagen, where three plant closures and extensive layoffs are up for discussion, but across the entire labour market."*

*"The monetary policy environment could be a small ray of hope for the manufacturing industry. The ECB cut interest rates again in October and is planning a further reduction in December. The Fed opted for a reduction of 50 basis points in September. HCOB Economics expects one further interest rate cut in the eurozone and two in the US in 2024. These measures could ease financing pressure and support demand in the export-oriented German industrial sector. However, as long as structural problems persist in Germany, the outlook remains bleak. This is because companies continue to contend with the lack of certainty for investment, high energy costs as well as strong competition and weak demand from China."*

-Ends-

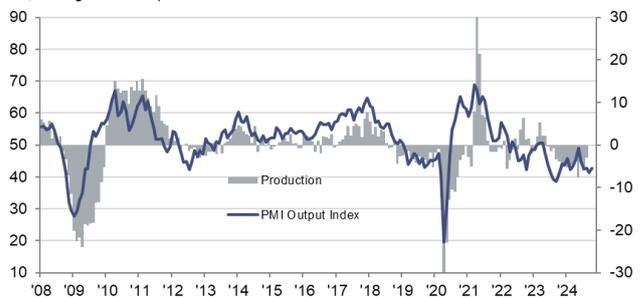
**HCOB Germany Manufacturing PMI**  
sa, >50 = improvement since previous month



Sources: HCOB, S&P Global PMI.

**PMI Output Index**

sa, >50 = growth since previous month



Sources: HCOB, S&P Global PMI, Destatis via S&P Global Market Intelligence.

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## Note to Editors

The HCOB Germany Manufacturing PMI<sup>®</sup> is compiled by S&P Global from responses to questionnaires sent to purchasing managers in a panel of around 420 manufacturers. The panel is stratified by detailed sector and company workforce size, based on contributions to GDP. Data collection began in April 1996.

Survey responses are collected in the second half of each month and indicate the direction of change compared to the previous month. A diffusion index is calculated for each survey variable. The index is the sum of the percentage of 'higher' responses and half the percentage of 'unchanged' responses. The indices vary between 0 and 100, with a reading above 50 indicating an overall increase compared to the previous month, and below 50 an overall decrease. The indices are then seasonally adjusted.

The headline figure is the Purchasing Managers' Index<sup>™</sup> (PMI). The PMI is a weighted average of the following five indices: New Orders (30%), Output (25%), Employment (20%), Suppliers' Delivery Times (15%) and Stocks of Purchases (10%). For the PMI calculation the Suppliers' Delivery Times Index is inverted so that it moves in a comparable direction to the other indices.

Underlying survey data are not revised after publication, but seasonal adjustment factors may be revised from time to time as appropriate which will affect the seasonally adjusted data series.

Flash data were calculated from 89% of final responses. Since January 2006 the average difference between final and flash Manufacturing PMI values is 0.0 (0.3 in absolute terms).

For further information on the PMI survey methodology, please contact [economics@spglobal.com](mailto:economics@spglobal.com).

## Hamburg Commercial Bank AG

Hamburg Commercial Bank (HCOB) is a private commercial bank and specialist financier headquartered in Hamburg, Germany. The bank offers its clients a high level of structuring expertise in the financing of commercial real estate projects with a focus on Germany as well as neighboring European countries. It also has a strong market position in international shipping. The bank is one of the pioneers in European-wide project financing for renewable energies and is also involved in the expansion of digital and other areas of important infrastructure. HCOB offers individual financing solutions for international corporate clients as well as a focused corporate client business in Germany. The bank's portfolio is completed by digital products and services facilitating reliable, timely domestic and international payment transactions as well as for trade finance.

Hamburg Commercial Bank aligns its activities with established ESG (Environment, Social, and Governance) criteria and has anchored sustainability aspects in its business model. It supports its clients in their transition to a more sustainable future.

The bank's specialists are as experienced as they are pragmatic. They act in a reliable manner and at eye level with their customers. They provide in-depth advice in order to jointly find efficient solutions that are a perfect fit – for complex projects in particular. Tailor-made financing, a high level of structuring and syndication expertise and many years of experience are just as much a hallmark of the bank as are our profound market and sector expertise.

## S&P Global (NYSE: SPGI)

S&P Global provides essential intelligence. We enable governments, businesses and individuals with the right data, expertise and connected technology so that they can make decisions with conviction. From helping our customers assess new investments to guiding them through ESG and energy transition across supply chains, we unlock new opportunities, solve challenges and accelerate progress for the world.

We are widely sought after by many of the world's leading organizations to provide credit ratings, benchmarks, analytics and workflow solutions in the global capital, commodity and automotive markets. With every one of our offerings, we help the world's leading organizations plan for tomorrow, today.

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#### **About BME**

The BME is the German Association for Supply Chain Management, Procurement and Logistics. Founded in 1954 it provides services for around 9750 individual and corporate members, including small and medium-sized businesses as well as Germany's top 200 companies. The BME liaises between businesses and academia, both on the demand and the supply side, by providing the necessary networks for communication and knowledge exchange. The association is open to all company types from any sector (industry, trade, banking/insurance, public sector, service providers, etc.).

Bundesverband Materialwirtschaft, Einkauf und Logistik e.V. (BME), Frankfurter Str. 27, 65760 Eschborn, GERMANY

Contact: Frank Rösch, Head of Press and Communications

E-mail: [frank.roesch@bme.de](mailto:frank.roesch@bme.de) Internet: [www.bme.de](http://www.bme.de)

#### **About PMI**

Purchasing Managers' Index™ (PMI®) surveys are now available for over 40 countries and also for key regions including the eurozone. They are the most closely-watched business surveys in the world, favoured by central banks, financial markets and business decision makers for their ability to provide up-to-date, accurate and often unique monthly indicators of economic trends. [www.spglobal.com/marketintelligence/en/mi/products/pmi.html](http://www.spglobal.com/marketintelligence/en/mi/products/pmi.html)

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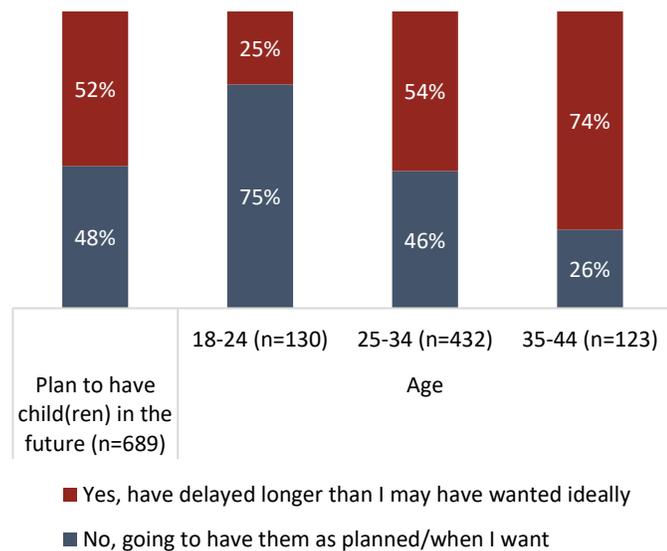
## Birth rate crisis? Half of those who want children have waited longer than they'd like, due largely to cost

*Among those seeking childcare just half say they were successful, and experience was satisfactory*

**October 8, 2024** – Canada's fertility rate hit its lowest rate in recorded history for a [second consecutive year](#) in 2023. The spinoff impacts of this are already being felt – with Canada's [aging workforce joining a swelling retirement-age population](#) and increasing economic pressure to meet this groups' needs and entitlements.

New data from the non-profit Angus Reid Institute finds insight into the reasons behind lagging birth rates. ARI asked 1,300 Canadian adults younger than 50 if they plan to have children, and if not, why? Among this group, one-in-five are definitely (21%) going to have at least one child, while one-in-three (32%) say they may still do so. Within these two groups of potential parents, fully half say that they have delayed having kids longer than they ideally would have wanted. This rises to three-quarters (74%) among 35- to 44-year-olds. The top reasons driving delays are both societal and personal. For many, the search for the right partner has just not borne fruit (40%). For others, however, uncertainty surrounding their finances and the job market (41%) the cost of childcare (33%) and the housing affordability crisis (31%) are all drivers of the decision to wait.

### Have you delayed having children longer than you may have wanted ideally because of other aspects of life?



#### **METHODOLOGY:**

The Angus Reid Institute conducted an online survey Sept. 12 - 18 2024 among a representative randomized sample of 4,063 Canadian adults who are members of [Angus Reid Forum](#). For comparison purposes only, a probability sample of this size would carry a margin of error of +/- 2 percentage points, 19 times out of 20. The number of parents with children aged 0 to 6 has been boosted to 474, to ensure more relevant responses regarding childcare. Discrepancies in or between totals are due to rounding. The survey was self-commissioned and paid for by ARI. Detailed tables are found at the end of this release.

Even among those who are definitely not going to have children (37% of the 1,300 adults surveyed) these worries about childcare and cost are a factor. One-quarter among this group say they decided not to have kids because the spectre of childcare costs was too daunting (25%), while one-in-five (18%) said it was too hard to foresee having proper housing to start a family.

With immigration playing a larger role year over year in [sustaining the population](#) – and criticism of immigration policy [evidently growing](#) – the historically low birth rate trend divides Canadians. They're equally likely to feel that the birth rate is (43%) and isn't (42%) a crisis.

One of the core aspects of Canadian life that would evidently improve the situation for parents, current and prospective, is quality, available childcare. The good news is that parents who have access to it offer

#### **CONTACT:**

**Dave Korzinski, Research Director: 250.899.0821 [dave.korzinski@angusreid.org](mailto:dave.korzinski@angusreid.org)**  
**Jon Roe, Research Associate: 825.437.1147 [jon.roe@angusreid.org](mailto:jon.roe@angusreid.org) @thejonroe**

high levels of commendation. The bad news is that among more than 300 parents with recent experience just half (50%) of those who have sought childcare in Canada have attained it and had a good experience. Others have either had a poor experience including long waits and high costs but managed to get a space (30%), are still trying (13%) or say they have given up outright (7%).

### **More Key Findings:**

- Half of Canadians (51%) say it is “not their responsibility” to fund other people’s childcare. Notably, the most likely group to say this are those who have raised children to the age of 18 or older, where the proportion rises to three-in-five (59%)
- The population is divided over whether or not governments will truly ever be able to provide affordable childcare for all. Two-in-five agree that this will not happen (44%) while nearly the same number disagree, and say it’s possible (41%)
- One-in-three parents with children in childcare say they are paying about \$10 a day (33%). One-quarter say it costs about \$20 a day (25%) while one-in-10 (10%) are paying \$40 a day

### **About ARI**

*The **Angus Reid Institute (ARI)** was founded in October 2014 by pollster and sociologist, Dr. Angus Reid. ARI is a national, not-for-profit, non-partisan public opinion research foundation established to advance education by commissioning, conducting and disseminating to the public accessible and impartial statistical data, research and policy analysis on economics, political science, philanthropy, public administration, domestic and international affairs and other socio-economic issues of importance to Canada and its world.*

### **INDEX:**

#### **Part One: Factors delaying Canadians from having children**

- **Half of adults (18-54) who haven’t had children still want them**
- **Half who plan to have kids have delayed longer than they wanted**
  - **Top reasons for delay?**

#### **Part Two: Great if you can get it: Experiences with childcare in Canada**

- **Half were successful and pleased with experience finding care**
- **Availability by far the biggest challenge**
- **How much are parents paying?**
- **Those who found care are happy with quality**

#### **Part Three: Canada’s birth rate and how to handle childcare**

- **Canada’s low birth rate crisis**
- **Is national childcare the answer?**
- **Uncertainty about government’s role and potential**

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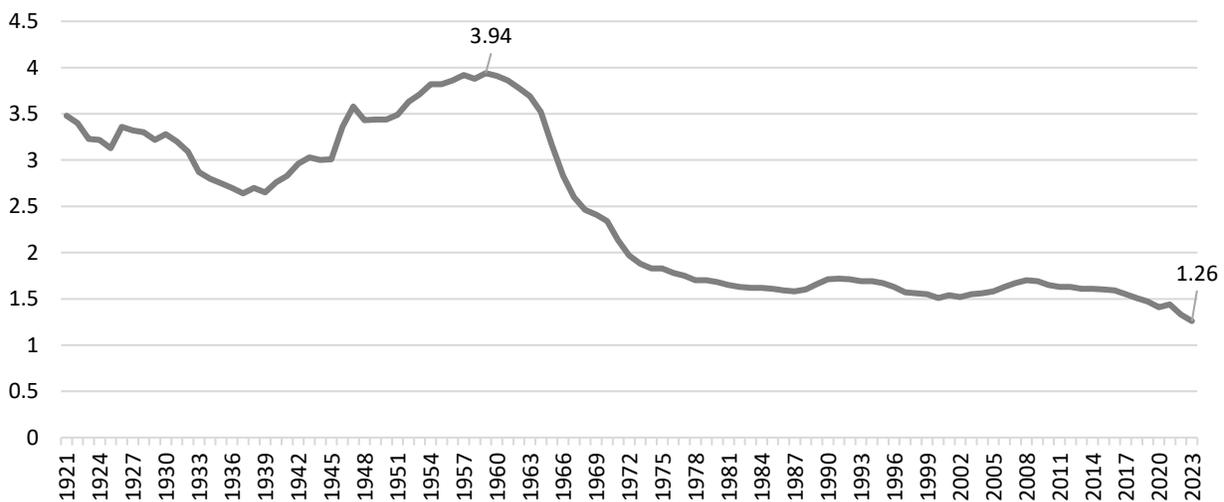
### **CONTACT:**

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**Part One: Factors delaying Canadians from having children**

Canada's population is aging. The number of Canadians joining the 65 club, for example, is growing at six times the rate of the zero to 14 population. This spells significant levels of economic challenges in sustaining the quality or retirement and old age benefits for seniors, and maintaining a productive economy, producing the goods and services Canadians rely on. In 2023, Canada set a record in its recorded history for lowest number of children per woman in the country, dropping to 1.26 from the previous record a year before, 1.33.

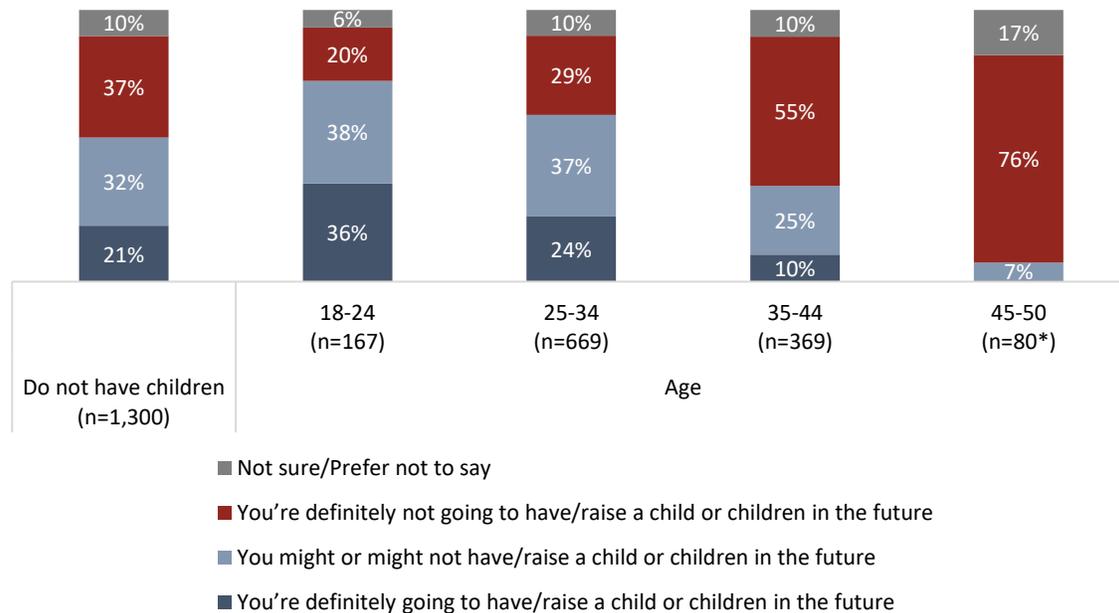
**Number of children per woman in Canada  
(Source, StatsCan)**



**Half of adults (18-54) who haven't had children still want them**

Beginning to understand the context of the situation is key in overcoming the evident challenges. Consider that fully half of 18- to 50-year-olds in the country say they are either definitely (21%) or maybe (32%) going to have children. These responses are expectedly higher among 18- to 34-year-olds:

**And thinking about the future, which of the following would you say is most accurate:**



*\*Smaller sample size, interpret with caution*

**Half who plan to have kids have delayed longer than they wanted**

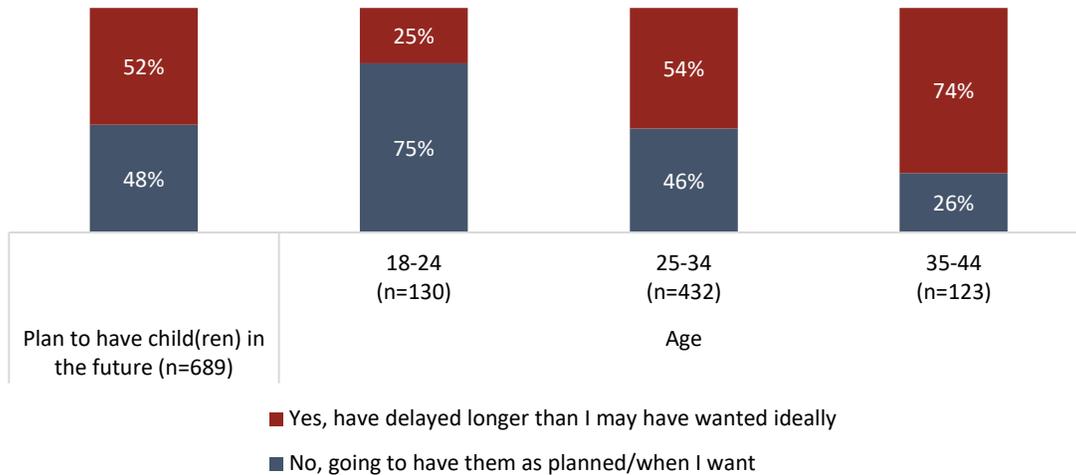
Among those who say that this is something they're considering, the number who have delayed longer than they would have wanted is considerable. Fully half (52%) say they would rather have had children already, including three-quarters in the 35 to 44 group. Another risk this delay carries has already been suggested in the data, as Canada has [noted a rise in premature births](#), which are associated with a higher number of [geriatric pregnancies](#). The number of new mothers older than 34 has [more than doubled](#) compared to 1993, from 10.7 per cent to 26.5 per cent.

:

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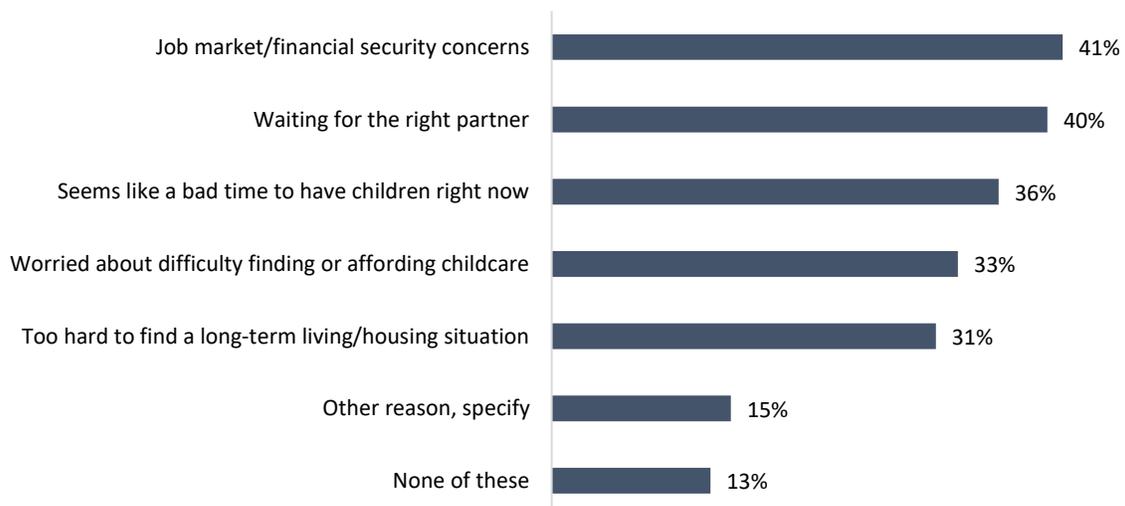
**Have you delayed having children longer than you may have wanted ideally because of other aspects of life?**



**Top reasons for delay?**

With the cost of living the top issue facing the country consistently in the post COVID-19 environment, it is important but perhaps unsurprising that the top issue, alongside the practicality of finding a partner, is job market and financial concerns. Two-in-five (41%) say their financial security is one of the reasons they're waiting. This, alongside additional worries like the cost and availability of childcare (33%) and the challenges in the housing market (31%) paint a picture of a population lacking the stability of previous generations and delaying having families as a result:

**Have any of the following played a role in delaying having children?  
(Plan to have child(ren) in the future, n=689)**

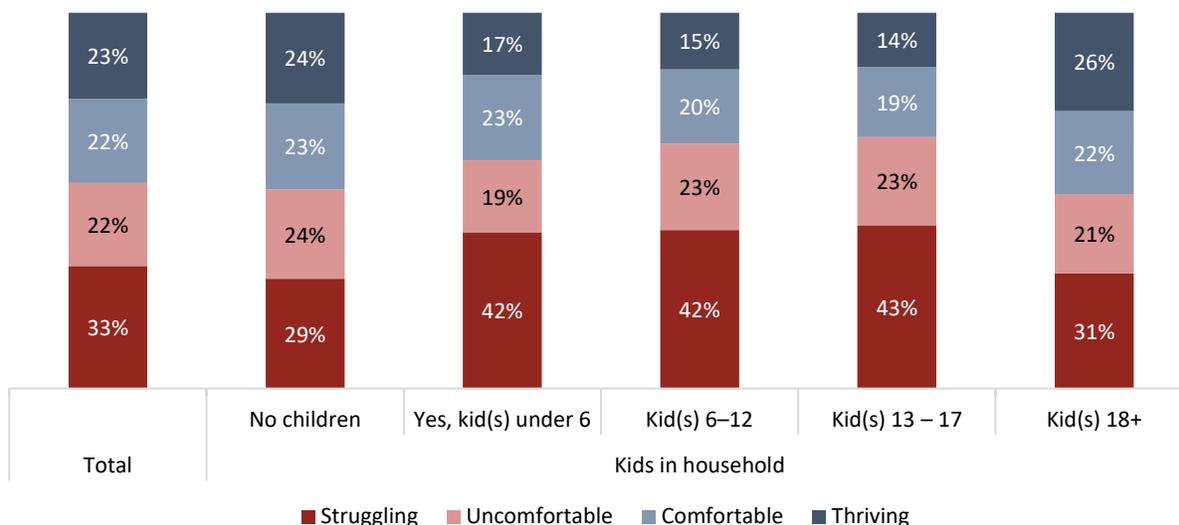


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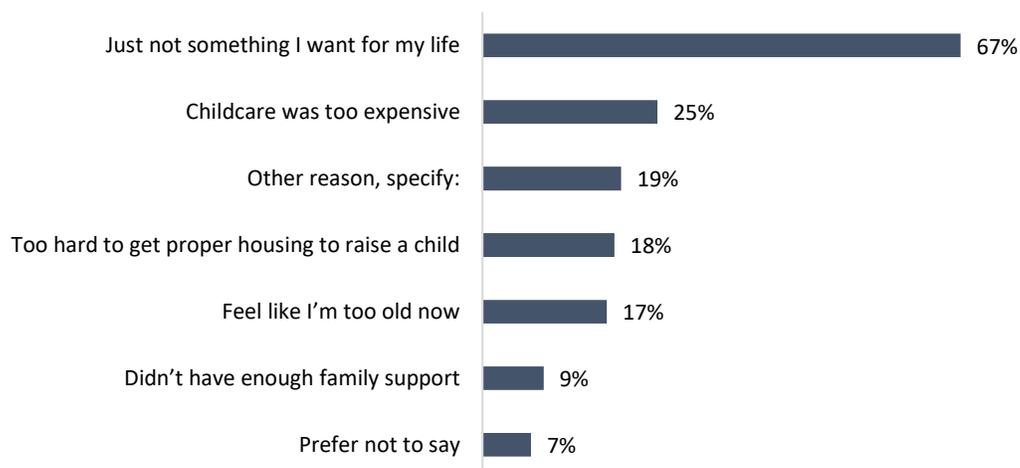
The financial challenges of having children that many of these individuals expect are borne out in the data for those who have kids. The proportion who are Struggling financially on ARI's Economic Stress Index rises significantly for those who have children younger than 18. For those who do not have kids or whose children are of legal age, economic well-being appears more achievable:

**Economic Stress Index by kids in household**



These reasons are evident among those who have decided not to have children as well, though they're dwarfed by personal choice as the top cause. Two-thirds who say they're definitely not having children say that this is just not something they're interested in.

**And what are your main reasons for not having children?  
Definitely not having children (n=487)**



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## Division I

# Amateurism Certification

## Men's and Women's Ice Hockey

This resource contains general rules education regarding ice hockey activities occurring *prior to* initial **full-time collegiate enrollment**.

### WHAT DOES THE ELIGIBILITY CENTER REVIEW?

- » Timeline of all team and club participation.
- » Signed agreements with agents, recruiting services and professional teams.
- » Expenses received during tryouts with professional teams.
- » All compensation received from your hockey team(s).
- » Date of birth and expected date of high school graduation.

### RULES YOU NEED TO KNOW

- » Generally, you are not allowed to reach an agreement (written, verbal or for future representation) with or receive benefits or services from an agent.
- » A men's ice hockey prospect who is drafted by a professional team before enrolling full time at any college or university may be represented by an agent or attorney during contract negotiations. The prospect must pay the going rate for the agent's services, but if the prospect does not sign a contract with a professional team, the agreement for representation must be terminated before enrolling full time at any college or university.
- » Before enrolling full time at any college or university, it is permissible for men's and women's ice hockey prospects to:
  - Receive up to actual and necessary expenses to compete, practice and/or try out with a professional team.
  - Sign a contract to participate on a professional team provided the contract does not promise current or future payment above actual and necessary expenses.
  - Receive up to actual and necessary expenses from an amateur team for competition and/or practice directly preceding competition.

### ACTUAL & NECESSARY EXPENSES

Actual and necessary expenses are any expenses necessary or required for your participation in practice or competition, including but not limited to:

- » Meals.
- » Lodging.
- » Transportation.
- » Apparel, equipment and supplies.
- » Coaching and instruction.
- » Medical treatment and benefits (e.g., insurance).
- » Facility usage.
- » Entry fees.



## WHAT IS “DELAYED ENROLLMENT”?

### Division I Men’s Ice Hockey

- » Your delay period ends on your 21st birthday. Participation in **organized competition** after your 21st birthday and before enrolling full time at a college or university could jeopardize your eligibility.

### Division I Women’s Ice Hockey

- » If you do not enroll full time at the first opportunity after your 12-month grace period following your expected date of high school graduation and continue to participate in organized competition, you will lose one season of NCAA eligibility for each calendar year during which you continue to compete.
- » If you continue to compete on or after Oct. 1 or March 1 (whichever occurs first after the end of your grace period), you risk losing up to one season of NCAA eligibility for each consecutive 12-month period you continue to compete. You may also be required to serve an academic year in residence at your NCAA school before you can compete.

### MEN’S ICE HOCKEY

DI  
Up to  
**21<sup>ST</sup>**  
Birthday

### WOMEN’S ICE HOCKEY

DI  
Grace Period  
**12**  
Months

## THE REVIEW PROCESS

1

Register with the **right Eligibility Center certification account** before the ninth grade (year nine of secondary school) at [eligibilitycenter.org](http://eligibilitycenter.org).



2

Select each sport you plan to play at an **NCAA Division I school**.



3

Complete and update the **sports participation** section annually within your Eligibility Center account.



4

Before starting at an NCAA Division I school, **request final amateurism certification** and confirm you have provided complete and accurate information to the Eligibility Center.  
» Fall enrollees can request starting April 1 before their Division I enrollment.  
» Winter/spring enrollees can request starting Oct. 1 before their Division I enrollment.



5

Monitor your **task list** and **sign up** for text alerts in your Eligibility Center account for next steps. You may complete tasks in any order.



6

If additional information is requested regarding your amateurism certification through a task in your account, copy and paste the request into an email and reply to [acp-processing@ncaa.org](mailto:acp-processing@ncaa.org).



### FOR MORE INFORMATION

Amateurism certification:

[ncaa.org/prospects/future/amateurism](http://ncaa.org/prospects/future/amateurism)

International prospects: [on.ncaa.com/intlStudents](http://on.ncaa.com/intlStudents)

Division III amateurism flyer: [on.ncaa.com/DIIIAmat](http://on.ncaa.com/DIIIAmat)

### CONTACT THE NCAA LEGISLATIVE LINE

317-917-6008, Monday-Friday

10 a.m. to 5 p.m. Eastern time

International (including Quebec):

[on.ncaa.com/intlcontact](http://on.ncaa.com/intlcontact)



SAF Dan Tsubouchi @Energy\_Tidbits

OPEC: Saudi et al extend voluntary cuts 1 month to Dec 31.

See my 10/30 tweet. Hard to see add back of voluntary barrels in Q1/25 given #Oil demand in Q1/25 seasonally declines ~1.2 mmb/d QoQ vs Q4/24.

1 mth only is probably to keep other producers from taking more advantage of their market support.

#OOTT



https://www.opec.org/opec\_web/en/press\_room/7409.htm

**Saudi Arabia, Russia, Iraq, the United Arab Emirates, Kuwait, Kazakhstan, Algeria, and Oman extend the 2.2 mbd voluntary adjustments for one month until end of December 2024**

No 18/2024

Vienna, Austria

03 Nov 2024

The OPEC Secretariat noted that the eight OPEC+ countries Saudi Arabia, Russia, Iraq, the United Arab Emirates, Kuwait, Kazakhstan, Algeria, and Oman, which previously announced additional voluntary adjustments in April and November 2023, have agreed to extend the November 2023 voluntary production adjustments of 2.2 million barrels per day for one month until the end of December 2024.

In addition, the eight countries reiterated their collective commitment to achieve full conformity with the Declaration of Cooperation, including the additional voluntary production adjustments that were agreed to be monitored by the JMMC during its 53rd meeting held on April 3rd 2024, and to fully compensate by September 2025 for the overproduced volumes since January 2024 in accordance with the compensation plans submitted to the OPEC Secretariat.

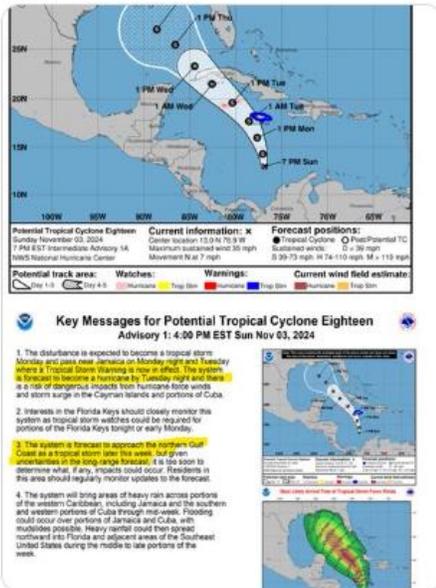
The countries also noted the recent announcement made by Iraq and the joint statement made by Russia and Kazakhstan, in which they strongly reaffirmed their commitment to the agreement including the additional voluntary production adjustments and to their compensation schedules for the overproduced volumes since January 2024.

SAF Dan Tsubouchi @Energy\_Tidbits · Nov 3

18 expected to be hurricane when it hits Cuba & then re-emerge into GoM at tropical storm strength.

Its projected path should cause some offshore platforms to shut-down for safety. And it's early but patch projects into major #Oil refinery & infra around New Orleans

#OOTT



7 11 2.7K

PHEVs keep taking market share from BEVs.

China NEVs New Energy Vehicles incl BEV and PHEV.

PHEV are 60% of BYD NEV sales.

Oct/YTD Oct 31:

BEV: 189,614 + 14.6% YoY. 1,359,193, +12.0% YoY

PHEV: 310,912, +129.3% YoY. 1,877,734, +62.2% YoY

PHEVs are really just more fuel efficient ICE vehicles. See 09/04 tweet. Volvo says its PHEVs kms driven are 50/50 ICE vs electric mode.

#OOTT

PHEV ARE ≈60% OF BYD SALES

**BYD New Energy Vehicle October Sales**

	Oct 26	Oct 23	Volume change	% change	YTD Oct 26	YTD Oct 23	Volume change	% change
BEV	189,614	165,525	24,089	14.6%	1,359,193	1,213,918	145,275	12.0%
PHEV	310,912	138,390	172,522	128.3%	1,877,734	1,107,432	770,302	69.5%
Commercial Vehicle - Bus	430	701	(271)	(37.2%)	3,788	3,508	280	8.0%
Commercial Vehicle - Others	1,993	37	1,956	4,812.7%	9,649	6,212	3,437	55.3%
<b>Total</b>	<b>502,957</b>	<b>304,653</b>	<b>198,304</b>	<b>65.1%</b>	<b>3,256,524</b>	<b>2,330,671</b>	<b>925,853</b>	<b>39.7%</b>

Source: BYD Production and Sales Volumes for October 2024, posted Nov 1, 2024  
Prepared by SAF Group

PHEV SHARE 62% 58%

<https://www.bydglobal.com/sites/resources/common/tools/generic/web/viewer.html?file=%2Fsites%2Fstatic%2Fbyd%20PDF%20Viewer%3Fblobcol%3Durldata%26blobheader%3Dapplication%2Fpdf%26blobkey%3Durl%26blobtable%3Dungroupblob%26blobwhere%3D1638928460148%26asbinary%3Dtrue>

**BYD**  
比亞迪股份有限公司  
BYD COMPANY LIMITED  
BYD COMPANY LIMITED  
BYD COMPANY LIMITED  
BYD COMPANY LIMITED

**VOLUNTARY ANNOUNCEMENT  
PRODUCTION AND SALES VOLUME FOR OCTOBER 2024**

The announcement is made voluntarily by BYD Company Limited (the "Company") for the month of October 2024 (the "Month").

The Board of the Company is pleased to announce that the total production and sales volume of the Company for the month of October 2024 (the "Month") is as follows:

Name	Production Volume				Sales Volume			
	October 2024	October 2023	Year-to-date 2024	Year-to-date 2023	October 2024	October 2023	Year-to-date 2024	Year-to-date 2023
New energy vehicle	189,614	165,525	1,359,193	1,213,918	310,912	138,390	1,877,734	1,107,432
Commercial vehicle	2,423	778	19,437	18,720	3,879	1,000	17,897	13,729
<b>Total</b>	<b>192,037</b>	<b>166,303</b>	<b>1,378,630</b>	<b>1,232,638</b>	<b>314,791</b>	<b>139,390</b>	<b>1,895,631</b>	<b>1,121,161</b>

*Note: The production and sales volume of New Energy Vehicle (NEV) is approximately 62% of the total production and sales volume of the Company for the month of October 2024.*

*Note: The production and sales volume of Commercial Vehicle (CV) is approximately 16% of the total production and sales volume of the Company for the month of October 2024.*

*Please note that the production and sales volume shown are rounded figures and have not been audited by the Company's auditors and may be subject to adjustment and final confirmation. Shareholders and potential investors are advised to read the financial results of the Company carefully when in doubt.*

SAF Dan Tsubouchi  
@Energy\_Tidbits

...

Data center #1 need is 24/7 power and the ideal is the 24/7 is nuclear.

"our customers are looking for clean emission-free energy that **they can rely on in every hour of every day**" Constellation CEO ie. can't be wind/solar for baseload.

#NatGas #Coal are needed for data center growth  
#OTT

Exhibit 99.1  
News Release



**Contact:** Paul Adams  
Corporate Communications  
667-218-7700

Emily Duncan  
Investor Relations  
833-447-2783

**CONSTELLATION REPORTS THIRD QUARTER 2024 RESULTS**

**Earnings Release Highlights**

- GAAP Net Income of \$3.82 per share and Adjusted (non-GAAP) Operating Earnings of \$2.74 per share for the third quarter of 2024
- Raising midpoint and narrowing full-year 2024 Adjusted (non-GAAP) Operating Earnings guidance range to \$8.00 – \$8.40 per share
- Announced the signing of a 20-year power purchase agreement with Microsoft that will support the launch of the Crane Clean Energy Center

**Baltimore (Nov. 4, 2024)** — Constellation Energy Corporation (Nasdaq: CEG) today reported its financial results for the third quarter of 2024.

"The importance of AI and the data economy to America's economic competitiveness and national security can't be overstated, and Constellation will do our part to meet the moment. **Our customers are looking for clean, emissions-free energy that they can rely on in every hour of every day**, and nothing exemplifies that imperative more than our 20-year agreement with Microsoft to restart the Crane Clean Energy Center," said Joe Dominguez, president and CEO, Constellation. **"There is no more important commodity in the world today than clean energy that is there when you need it.**" We continue to see opportunities to add clean energy to the grid by extending the life and increasing the output of our nuclear fleet to meet the nation's growing needs in a way that creates jobs, benefits grid reliability and protects the environment."

"Our generation fleet performed exceptionally well during the quarter, and we are on track to beat our average refueling outage duration by more than 2 days which is more than 50% below the industry average," said Dan Eggers, chief financial officer, Constellation. "Our commercial team continued to create exceptional value through optimizing both our generation and load businesses. As a result, we are raising Adjusted (non-GAAP) Operating Earnings guidance range for the full year to \$8.00 – \$8.40 per share, up from \$7.60 – \$8.40 per share. This guidance is built upon a strong financial foundation in the third quarter, including Adjusted (non-GAAP) Operating Earnings of \$2.74 per share, up from \$2.13 per share in the same quarter last year."

1

Last edited 5:49 PM · Nov 4, 2024 · 4,107 Views

SAF Dan Tsubouchi  
@Energy\_Tidbits

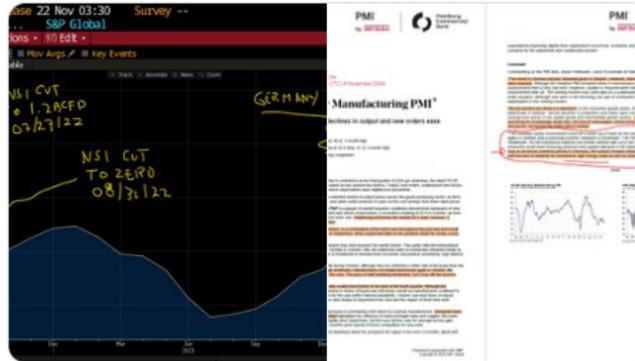
"Outlook remains bleak" for German industry.

Manufacturing PMI:  
Oct 43.0  
Sept 40.6  
Aug 42.4  
July 43.2

"However, as long as structural problems persist in Germany, the outlook remains bleak. This is because companies continue to contend with the lack of certainty for investment, high energy costs as well as strong competition and weak demand from China." @HCOB\_Economics

Give Germany credit, cutting off cheap RUS pipeline #NatGas to support UKR has been a big negative to industry and economy.

#OOTT @SPGlobal



SAF Dan Tsubouchi  
@Energy\_Tidbits

Taxation 101 from @Ryanair CEO O'Leary to UK Chancellor.

"I mean the UK has no chance of growing if this idiot Chancellor thinks that the way forward is going to be increasing tax on air travel. You want to grow, scrap air travel taxes..."

"the first thing they do on an island on the peripheral of Europe is "we're going to put up travel taxes. You can't grow putting up travel taxes"

See 5:20 min mark, his delivery is even better.

[bloomberg.com/news/videos/20...](https://www.bloomberg.com/news/videos/20...)

#OTT @FerroTV @annmarie @lisaabramowicz1

**"I mean the UK has no chance of growing if this idiot Chancellor thinks that the way forward is going to be increasing tax on air travel. You want to grow, scrap air travel taxes... these guys haven't been in power for about 15 years, and I think they are going to learn some very harsh lessons in the next year or two." Ryanair CEO O'Leary.**



**SAF Group created transcript of comments by Ryanair CEO Michael O'Leary with Bloomberg's AnnMarie Horden, Jonathan Ferro and Lisa Abramowicz on Bloomberg Surveillance on Nov 4, 2014. [LINK](#)**

Items in "Italics" are SAF Group created transcript

**Horden:** At 5:20 min mark: "I want to ask you about the competition in the UK. I used to live in the UK, I used to fly on Ryanair, now you're reviewing your schedule out of the UK because the government is charging 2 pounds more a person."

**Michael O'Leary:** "You have this bankers labor government. You know, they got elected on this kind of pro- we're going to be pro-growth, we're going to grow-whatever it is, we are going to grow- and the first thing they do on an island on the peripheral of Europe is "we're going to put up travel taxes. You can't grow putting up travel taxes."

**AnnMarie Horden:** "So, will you cut capacity?"

**Michael O'Leary:** "We are going to switch, we do about 55 million passengers a year to the UK. We are going to switch about 5 million of that capacity, which maybe takes place on aircrafts that are based in Europe to fly into the UK. We are going to move that now next year into Italy, Sweden, Hungary, where they are abolishing travel taxes, so we have that flexibility to move that capacity around, and again I think it will be good for my pricing in the UK next year, bad for growth. I mean the UK has no chance of growing if this idiot Chancellor thinks that the way forward is going to be increasing tax on air travel. You want to grow, scrap air travel taxes. The Italians get it, the Swedes get it, the Irish got it- the Brits will eventually work it out, um, but you know, these guys haven't been in power for about 15 years, and I think they are going to learn some very harsh lessons in the next year or two."

**Jonathan Ferro:** "I asked if you have spoken to Kelly Orfberg, have you spoken to Chancellor Reeves?"

**Michael O'Leary:** "Uh no, uh, and I suspect the chances of me having a conversation with her in the next couple of weeks will be... are diminishing rapidly. You know like, I mean this is a girl that you know, I mean her background is in the treasury, she should understand that the way to you know- you really want to deliver growth in the UK, particularly the regions, tourism is the one industry that you can turn on and turn off at the drop of a hat. And her first measure is to increase travel taxes, you got to be insane to do that."

**Jonathan Ferro:** "When you do that Michael, two pound on short-haul travel per passenger. Grand scheme of things, you step back and say two pound might not sound like a lot. From your perspective, you're fantastic with the numbers walk us through how two pounds changes the game for you, how does that ripple through the system?"

**Michael O'Leary:** "See the point is that it is two pounds up in the UK but in Italy at the moment they are reducing the municipal tax, they're scrapping the municipal tax which is a reduction of 6.50, so on all. The move now is 10 euros, so now do I put another flight into Italy next year or do I put another flight into the UK? I move capacity out of the UK into Italy, Sweden they have a - Sweden, the home of flight-shaming Greta Thunberg, where she got her limited education up there, have now scrapped aviation taxes, there's a new right-wing transport minister, who pats it. Greta was

SAF Dan Tsubouchi  
@Energy\_Tidbits

WTI in high \$60s **should be** a price that makes Permian plays cautious as opposed to drill baby drill.

But Diamondback warns not all US players get this concept.

*"macro environment for oil prices and near-term global oil supply and demand dynamics remains volatile at best and tenuous at worst"*

*"Should oil prices weaken from current levels, we will make the correct capital allocation decision and focus on Free Cash Flow generation and capital efficiency over oil volumes."*

*"I think being cautious when things are -- when oil is in the high 60s and you have pockets of geopolitical premium coming in and out is a prudent thing to do. So at the end of the day, the lowest-cost operators should be producing the last barrel in the basin. But I think that spreadsheet math is what's gotten this industry in trouble in the past and feels like we're getting ourselves in trouble again. So I think again, I can't hammer enough that free cash flow trumps CapEx at Diamondback these days."*

#OOTT

**DIAMONDBACK Q3 CALL Q+A**

**A - Travis Stice** (BIO 16670330 <GO>)

Yeah, Bob. I think we got a lot of flexibility. I don't think it's the tool, the tool man [ph], right? So we can dial things up and back very, very, easily. I think just generally, if other companies are seeing what we're seeing, this is not a strong macro environment. So I don't know why the discussion of growth or multi-year growth needs to be in the equation. I think Diamondback has

Page 7 of 23

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FINAL TRANSCRIPT  
Diamondback Energy Inc (FANG US Equit) 2024.10.05

learned that our growth profile impacts the macro and we're very focused on the macro here where almost universally the street is calling for oversupply in 2025. So I think we're building in flexibility to spend less should that come to fruition, but it's not hard to grow volumes in the Permian Basin with the assets that we have. So I think what you would expect is, what looks easy on the outside is hard on the inside, but we make it happen.

**DIAMONDBACK Q3 CALL Q+A**

**Operator**

Thank you. Our next question comes from the line of Scott Gruber of Citigroup. Your line is now open.

**Q - Scott Gruber** (BIO 6761975 <GO>)

Yes, good morning. I wanted to come back to being flexible with the '25 plan. A lot of questions on the how, but I didn't hear about when unless I missed it. But just given your low breakeven, at what oil price do you think about shifting out of maintenance mode? When do you start turning the dial?

**A - Kaes Van't Hof**

SAF Dan Tsubouchi  
@Energy\_Tidbits

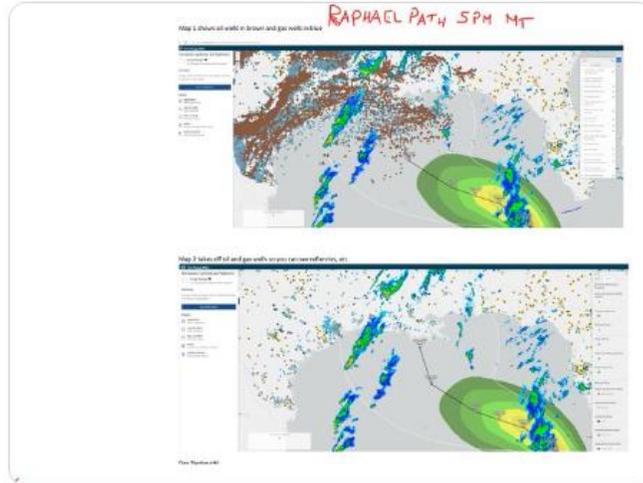
...

Expect to see offshore GoM well platforms increasingly shut down for safety from Raphael.

Raphael still expected to be tropical storm strength with current landfall right around New Orleans on Sunday.

Lots of refineries & LNG terminals in Louisiana.

#OOTT #NatGas



6:08 PM · Nov 5, 2024 · 4,672 Views

SAP Dan Tsubouchi  
@Energy\_Tidbits

...

Markets just before 4am MT

US equity futures up strong.

Note some equity are being hit like solar.

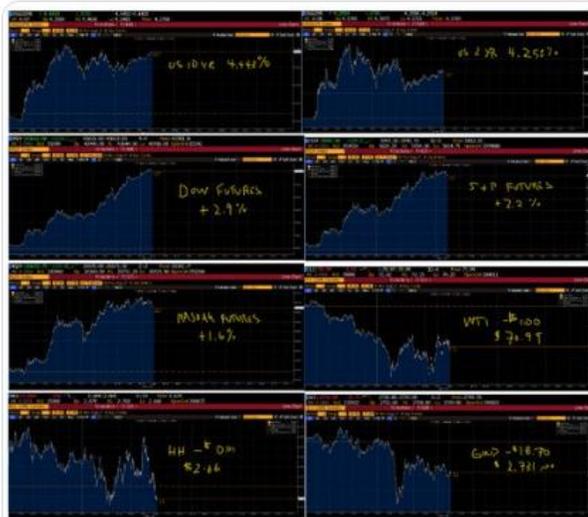
Interest rates up strong.

Oil down.

Gold down.

Bitcoin up strong.

#OOTT



SAF Dan Tsubouchi  
@Energy\_Tidbits

It's still early but Raphael's projected path has shifted a little to west more toward Houston than at New Orleans.

Still expected to be tropical storm strength.

Look for big offshore GOM platforms being shut down.

#OOTT



SAF Dan Tsubouchi  
@Energy\_Tidbits

...

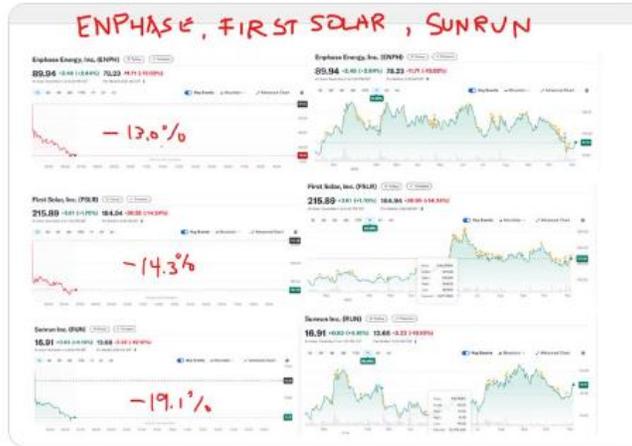
More #NatGas generation will be needed for 2020s.

Any wobble/delays for US solar deployment ramp will create a need for more #NatGas generation to fill the gap.

Solar stocks hit hard in pre market.

Enphase -13.0%  
First Solar -14.3%  
Sunrun -19.1%

#OOT



4:55 AM · Nov 6, 2024 · 3,575 Views

SAP Dan Tsubouchi  
@Energy\_Tidbits

Here's why Germany still needs #NatGas & #coal

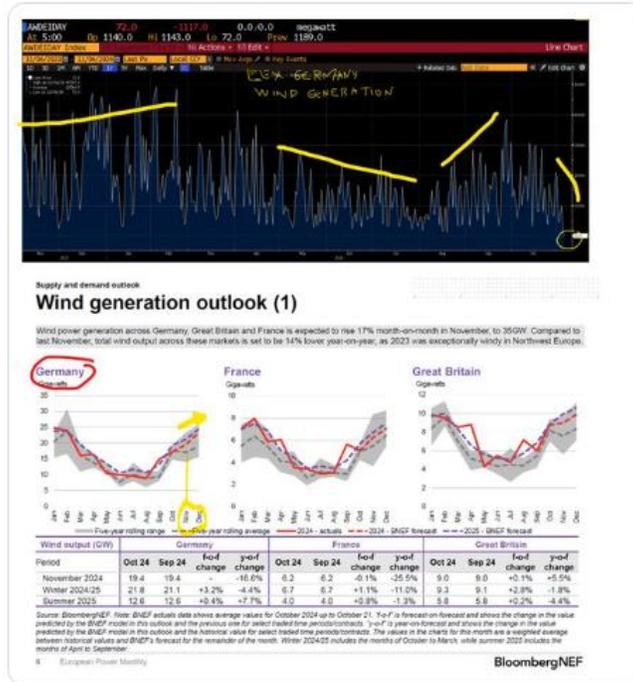
Wind generation is intermittent but also very unpredictable.

Germany wind is normally strong in Nov as it peaks in winter, troughs in summer.

But wind generation is now below summer trough.

#OOTT

Thx @business @BloombergNEF European Energy Exchange



5:25 AM · Nov 6, 2024 · 3,033 Views

SAG Dan Tsubouchi  
@Energy\_Tidbits

Offshore wind to be Trump Day 1 executive order priority.

05/11/24: "You won't have to worry about Gov Murphy's 157 windmills ..... They ruin the environment .... We are going to make sure that that ends on Day 1. I'm going to write it out in an executive order. It's going to end on Day 1." Trump

Any delays to deploy offshore wind means more #NatGas #Coal needed to fill the gap.

#OTT Thx @cspan

**"You won't have to worry about Gov Murphy's 157 windmills ..... They ruin the environment .... We are going to make sure that that ends on Day 1. I'm going to write it out in an executive order. It's going to end on Day 1." Trump on May 11, 2024**



SAG Group created transcript of comments by Donald Trump at a campaign speech in Wildwood, New Jersey on May 11, 2024. Video courtesy of <https://www.c-span.org/video/?535058-1/mr-pres-trump-campaigns-wildwood-nj>

At 26:43 min mark, Trump "But you won't have, getting back to our wonderful area that we love, you won't have to worry about Gov Murphy's 157 windmills. And you know one of the best fighters on that is Congressman Van Drew. He has fought so hard, I don't know, he's around here someplace. There's nobody that fought that, right over there, you see these things all over the place. They destroy everything. They're horrible. And the most expensive energy there is. They ruin the environment. They kill the birds. They kill the whales. But the ocean floor surveys for their construction that are causing tremendous problems with the fish and the whales, everything else. Nobody even knows what it is. But I think in 20 years, one whale washed up on shore. And then where they have these things, they come up all the time. Dead. They come up onshore. He said they remind him of Chris Christie. What the hell are you doing. This could only happen in New Jersey, right Jeff. Could only happen in New Jersey. The electricity costs, it's the highest in the country. It's what you got. We are going to make sure that that ends on Day 1. I'm going to write it out in an executive order. It's going to end on Day 1."

Prepared by SAG Group <https://saggroup.ca/insights/energy-tidbits/>

7:53 AM · Nov 6, 2024 · 6,513 Views

SAF **Dan Tsubouchi**   
@Energy\_Tidbits

...

Peak Oil Demand!

Ending Biden's EVs mandate is a clearly stated Trump Day 1 executive order priority.

Would fit @IEA's "stated energy policies" criteria ie. should give them the excuse to push out their peak oil demand by 2030.

05/11/24: "On Day 1, I will immediately terminate Joe Biden's insane electric vehicle mandate. And there will be no ban on gas cars and gas trucks in the Garden State. There will no ban anywhere in the USA on gas." Trump.

#OOTT Thx @cspan

**"On Day 1, I will immediately terminate Joe Biden's insane electric vehicle mandate. And there will be no ban on gas cars and gas trucks in the Garden State. There will no ban anywhere in the United States of America on gas." Trump on May 11, 2024**



SAF Group created transcript of comments by Donald Trump at a campaign speech in Wildwood, New Jersey on May 11, 2024. Video courtesy of <https://www.c-span.org/video/?535080-11/mr-ares-trump-campaign-wildwood-nj>

At 28:06 min mark, Trump "But unfortunately, the Democrats in New Jersey have embraced Joe Biden's radical pro-China plan plan to eliminate gas-powered cars and trucks. Can you believe it? And force everyone into ultra-expensive electric vehicles that don't go far. I always say, they have a couple of problems - they're too expensive, they're going to be made in China, and they don't go far. Other than that, I think they're wonderful. On Day 1, I will immediately terminate Joe Biden's insane electric vehicle mandate. And there will be no ban on gas cars and gas trucks in the Garden State. There will no ban anywhere in the United States of America on gas. You can buy electric if you want, you can buy gas, you can buy whatever you want, that's the way it should be."

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

8:10 AM · Nov 6, 2024 · 9,348 Views

SAF Dan Tsubouchi @Energy\_Tidbits · Nov 6  
ICYMI.

Trump's quote on getting rid of Biden's EV mandate is a Day 1 executive action priority.

Peak oil will inevitably be pushed later.

#OOTT

SAF Dan Tsubouchi @Energy\_Tidbits · Nov 6

Peak Oil Demand!

Ending Biden's EVs mandate is a clearly stated Trump Day 1 executive order priority.

...

[Show more](#)

***"On Day 1, I will immediately terminate Joe Biden's insane electric vehicle mandate. And there will be no ban on gas cars and gas trucks in the Garden State. There will be no ban anywhere in the United States of America on gas." Trump on May 11, 2024***



SAF Group created transcript of comments by Donald Trump at a campaign speech in Wildwood, New Jersey on May 11, 2024. Video courtesy of <https://www.c-span.org/video/?533056-1/fmr-pres-trump-campaigns-wildwood-nj>

At 28:05 min mark, Trump "But unfortunately, the Democrats in New Jersey have embraced Joe Biden's radical pro-China plan egg to eliminate gas-powered cars and trucks. Can you believe it? And force everyone into ultra-expensive electric vehicles that don't go far. I always say, they have a couple of problems - they're too expensive, they're going to be made in China, and they don't go far. Other than that, I think they're wonderful. On Day 1, I will immediately terminate Joe Biden's insane electric vehicle mandate. And there will be no ban on gas cars and gas trucks in the Garden State. There will be no ban anywhere in the United States of America on gas. You can buy electric if you want, you can buy gas, you can buy whatever you want, that's the way it should be."

Prepared by SAF Group <https://safgroup.ca/mi@ta/energy-tidbits/>

1

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5K

Share

SAF Dan Tsubouchi  @Energy\_Tidbits

Big challenges for whatever German govt emerges next Mar. See 📌 Nov 4 tweet outlook remains bleak for DE Industry on Germany Manufacturing PMI.

Chancellor Scholz to call non-confidence vote for Jan 15 with likely election in Mar 2025. FM Lindner dismissed. [x.com/dwnews/status/...](https://x.com/dwnews/status/...)

#OOTT

SAF Dan Tsubouchi  @Energy\_Tidbits · Nov 4

"Outlook remains bleak" for German industry.

Manufacturing PMI:  
Oct 43.0  
Sept 40.6...  
[Show more](#)



base 22 Nov 03:30 Survey --  
... S&P Global  
ions · 7/ Edt ·  
Nov Aug · Key Events  
Back · Assets · News · Data

NSI CUT 01/28/22  
NSI CUT TO ZERO 08/31/22  
GERMANY

PMI  
by S&P Global  
Manufacturing PMI  
Dives in output and new orders ease

4:38 PM · Nov 6, 2024 · 2,853 Views

SAF Dan Tsubouchi  
@Energy\_Tidbits

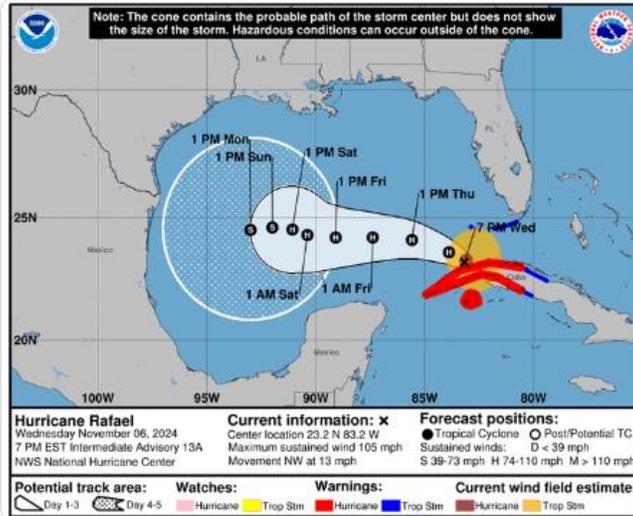
Big shift south in Rafael projected path.

@NHC\_Atlantic 7pm ET update forecast path has eye at north part of Mexico, just south of US border.

Still potential at risk is Corpus Christi #Oil infra.

Still expect tropical storm strength.

#OOTT



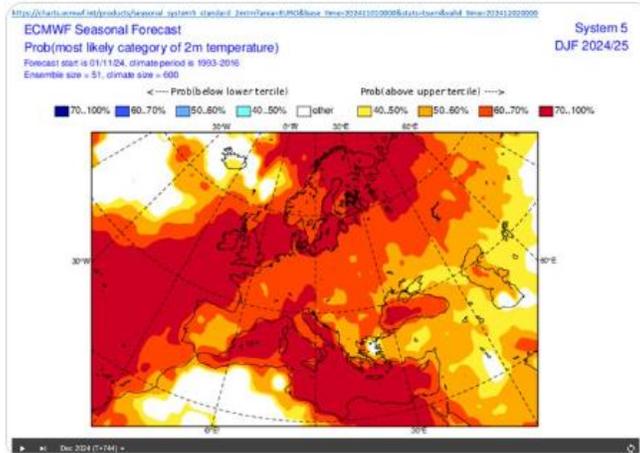
SAF Dan Tsubouchi  
@Energy\_Tidbits

Reason to be cautious on Europe #NatGas going into the winter.

@ECMWF updated Dec/Jan/Feb temperature forecast is for warmer than normal temperatures across Europe.

Absent unexpected supply interruption, warm winters are never positive for #NatGas

#OOTT



5:52 PM · Nov 6, 2024 · 2,823 Views

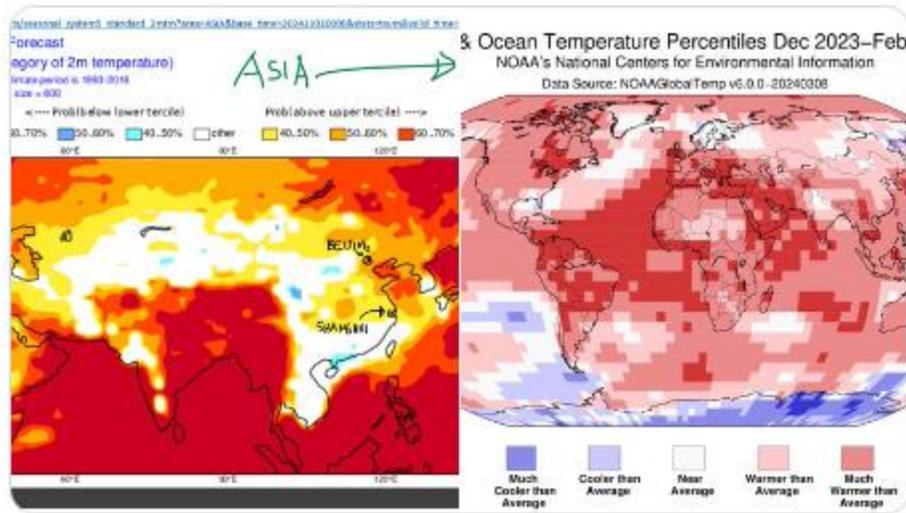
SAF — Dan Tsubouchi   
@Energy\_Tidbits

...

Asia forecast warmer than normal temperatures in Dec/Jan/Feb in Japan and for northern part of China incl Beijing. @ECMWF update. Rest of China mostly normal temp.

Not as hot as winter 23/24 but warm enough to be cautious on #LNG going into the winter.

#OOTT



6:06 PM · Nov 6, 2024 · 1,381 Views

SAF Dan Tsubouchi @Energy\_Tidbits

Peak oil demand keeps getting pushed out.

**"What we're saying today is that peak oil demand is about 10 years away. The unfortunate thing is, we said five years ago that peak oil demand is 10 years away," Vitol CEO Hardy.**

Fits 10/24 tweet, moving peak oil demand higher & later will be the craze for 2025 outlooks.

Thx @TheNationalNews John Benny. #OOTT



SAF Dan Tsubouchi @Energy\_Tidbits

**"A single prompt on ChatGPT needs ten times more energy than a Google search". @ADNOCGroup Dr. Sultan Al Jaber at 4:58 min mark.**

Example of massive increase in electricity consumption by AI data centers.

Lot more throughout his keynote!

Thx @jamesvingerich #OOTT #NatGas



2:17 PM · Nov 7, 2024 · 4,807 Views

Key near term Trump impact on #Oil.

If Trump returns to 1st term priority to enforce sanctions that cut Iran and Venezuela oil exports to almost nothing, the big winners would be Saudi Arabia & Russia who could bring back voluntary barrels without crashing oil price.

Also Israel as Iran cash flow crashes.

Discussion in my 📌 Nov 3, 2024 Energy Tidbits memo.  
#OOTT

Energy Tidbits **SAF GROUP**

Excerpt SAF Group Nov 3, 2024 Energy Tidbits memo

Figure 59: Iran oil exports (as of July 2024)

Source: Bloomberg

Figure 60: US oil imports from Venezuela (as of July 2024)

Source: Bloomberg

Posted on SAF Group website on Nov 3, 2024 <https://safgroup.ca/insights/energy-tidbits/>

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of 78 31820 words English (Canada) Text Predictions: On Accessibility: Investigate

SAF Dan Tsubouchi  
@Energy\_Tidbits

...

Near-term Ukraine/Russia ceasefire/deal could see even more lands to Russia.

Putin "Yes, or course, it is possible .....fixing the new borders of Ukraine along the line of division, and, perhaps, **even taking into account the fact that we have new regions**"

#OOTT

**"It has long been known that [the conditions for ending the conflict] are neutral Ukraine, fixing the new borders of Ukraine along the line of division, and, perhaps, even taking into account the fact that we have new regions" Russia President Putin**



<https://tass.ru/politika/22349385>

November 7, 04:52 PM

Expert **Dynkin**: after Putin's speech at Valdai, there was a chance to end the NWO

© Kristina Kormilitsyna/ POOL/ TASS

President of the Primakov National Research Institute of World Economy and International Relations, Academician of the Russian Academy of Sciences Alexander **Dynkin** also drew attention to the words of US President-elect Donald Trump that he "will keep in the focus of his attention" the issue of the Ukrainian crisis

SOCHI, November 8. /TASS/. The chance to end the conflict in Ukraine appeared after Russian President Vladimir Putin's speech at the plenary session of the annual meeting of the Valdai International Discussion Club, the United States will study the statements of the Russian president. This opinion was expressed in an interview with TASS by the President of the National Research Institute of World Economy and International Relations named after E. M. Primakov, Academician of the Russian Academy of Sciences Alexander **Dynkin** on the sidelines of the Valdai.

"Yes, of course, it is possible," he said, answering a question about the possibility of ending the Ukrainian conflict. - It has long been known that [the conditions for ending the conflict] are neutral Ukraine, fixing the new borders of Ukraine along the line of division, and, perhaps, even taking into account the fact that we have new regions. So there was some chance."

**Dynkin** drew attention to the words of US President-elect Donald Trump that he "will keep in focus" the issue of the Ukrainian crisis, unlike the 46th US President Joe Biden. "And I hope that American professionals will carefully study this speech [Putin] and see his idea," the expert stressed.

At the same time, the specialist added that when concluding this kind of agreement on the end of the conflict, "it is necessary to keep in mind some guarantees, some insurance tools" from the American side. "I think we have already been deceived so much that we will not do it again," **Dynkin** said.

7:44 AM · Nov 8, 2024 · 976 Views

SAF **Dan Tsubouchi**   
@Energy\_Tidbits

Hydrogen 101.

Great step thru on the issues for the simplistic view that [#Hydrogen](#) can just be layered into, or on top of, existing [#NatGas](#) supply chain with some modest modifications.

Don't forget hydrogen is not an energy source, it's a carrier. Energy gets lost in conversion of [#NatGas](#) to hydrogen. See 01/22/22 tweet [x.com/energy\\_tidbits...](https://x.com/energy_tidbits...)

Another great [@RBNEnergy](#) post.

[#OOTT](#)

 **RBN Energy**  @RBNEnergy · 9h

One of the biggest challenges to an expansion of the commercial hydrogen market is the lack of a comprehensive transportation network. That has spurred interest in repurposing parts of the existing natural gas infrastructure to ship hydrogen. But that approach comes with some [Show more](#)

**Hydrogen plans or tests at U.S. power plants (2024)**



10:10 AM · Nov 8, 2024 · 1,470 Views

SAF **Dan Tsubouchi**   
@Energy\_Tidbits

Higher & later Peak #Oil Demand forecasts

*"I will govern by a simple motto. Promises made, promises kept. We're going to keep our promises." Trump victory speech.*

Ending Biden's EV mandate is a clearly stated Trump Day 1 executive order priority.

#OOTT

SAF **Dan Tsubouchi**  @Energy\_Tidbits · Nov 6

Peak Oil Demand!

Ending Biden's EVs mandate is a clearly stated Trump Day 1 executive order priority.

...

[Show more](#)

***"On Day 1, I will immediately terminate Joe Biden's insane electric vehicle mandate. And there will be no ban on gas cars and gas trucks in the Garden State. There will no ban anywhere in the United States of America on gas." Trump on May 11, 2024***



SAF Group created transcript of comments by Donald Trump at a campaign speech in Wildwood, New Jersey on May 11, 2024. Video courtesy of <https://www.c-span.org/video/?535068-1/frn-prse-trump-campaigns-wildwood-nj>

At 28:06 min mark. Trump *"But unfortunately, the Democrats in New Jersey have embraced Joe Biden's radical pro-China plan to eliminate gas-powered cars and trucks. Can you believe it? And force everyone into ultra-expensive electric vehicles that don't go far. I always say, they have a couple of problems - they're too expensive, they're going to be made in China, and they don't go far. Other than that, I think they're wonderful. On Day 1, I will immediately terminate Joe Biden's insane electric vehicle mandate. And there will be no ban on gas cars and gas trucks in the Garden State. There will no ban anywhere in the United States of America on gas. You can buy electric if you want, you can buy gas, you can buy whatever you want, that's the way it should be."*

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

1:47 PM · Nov 8, 2024 · 1,291 Views

SAF Dan Tsubouchi  
@Energy\_Tidbits

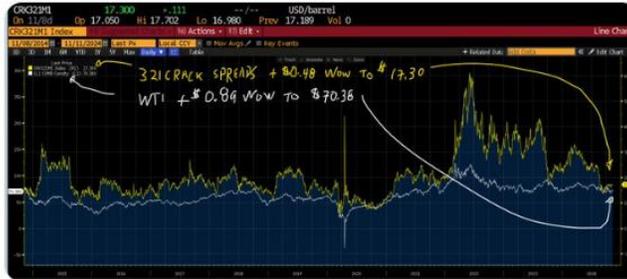
321 crack spreads +\$0.48 WoW to \$17.30 on Nov 8.

WTI +\$0.89 WoW to \$70.30.

Cracks were fairly flat all week. WTI was up & down on Thurs/Fri as markets guess on Trump impact.

\$17.30 cracks not high enough to incentivize refineries to take extra crude.

Thx @business  
#OOTT



5:11 PM · Nov 8, 2024 · 1,247 Views

SAF Dan Tsubouchi  
@Energy\_Tidbits

Big positive for Cdn #Oil Q4/24 cash flows.

Ramp up of volumes on 590,000 b/d TMX has, at least so far, kept WCS less WTI differentials from normal Sept/Oct/Nov widening.

WCS less WTI diffs:

11/08/24: \$11.70

11/08/23: \$26.50

11/08/22: \$29.10

Thx @garquake @business  
#OOTT



5:48 PM · Nov 8, 2024 · 4,457 Views

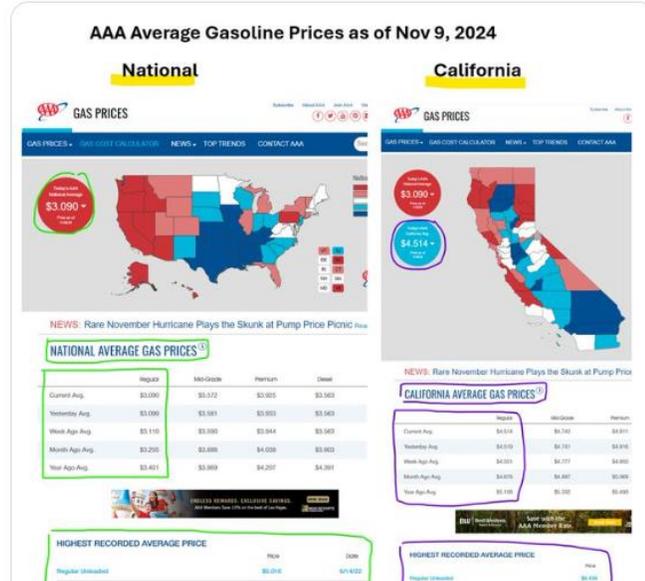
SAF Dan Tsubouchi  
@Energy\_Tidbits

AAA National average prices -\$0.02 WoW to \$3.09 on Nov 9, -\$0.12 MoM & -\$0.31 YoY.

California average prices -\$0.04 WoW to \$4.51, -\$0.17 MoM & -\$0.60 YoY

Grocery prices, not gasoline prices. were the bigger factor in election

Thx @AAANews  
#OOTT



SAF Dan Tsubouchi  
@Energy\_Tidbits

Vortexa crude #Oil floating storage.

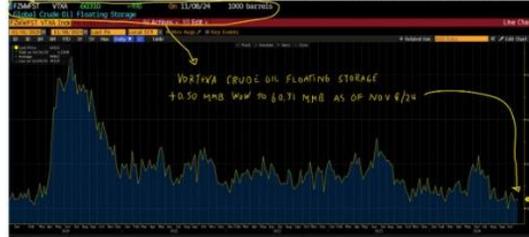
+0.50 mmb WoW to 60.31 mmb at Nov 8.

Nov 1 revised +10.74 mmb, Oct 25 revised +3.65 mmb but prior 5 wks had small +/- revisions.

7-wk moving average 61.24 mmb but prior 4-wk moving averages were only times <60 mmb since Covid.

Thx @vortexa @business  
#OOTT

Vortexa Crude Oil Floating Storage Estimate Jan 1, 2020 – Nov 1, 2024, Posted as of 9 am MT, Nov 9, 2024



Source: Bloomberg, Vortexa

Posted Nov 9, 9am MT					Nov 2, 9am MT					Oct 26, 9am MT				
SP	30	60	90	YTD	SP	30	60	90	YTD	SP	30	60	90	YTD
11/09/2024	11/02/2024	10/26/2024	10/19/2024	10/12/2024	11/02/2024	10/26/2024	10/19/2024	10/12/2024	10/05/2024	10/26/2024	10/19/2024	10/12/2024	10/05/2024	09/29/2024
Date	Last Pk	Date	Last Pk	Date	Last Pk	Date	Last Pk	Date	Last Pk	Date	Last Pk	Date	Last Pk	Date
11/09/2024	60.31	11/02/2024	59.66	10/26/2024	53.26	10/19/2024	64.23	10/12/2024	62.27	10/05/2024	48.11	09/29/2024	67.35	09/22/2024
11/01/2024	59.81	10/25/2024	54.09	10/18/2024	64.23	10/11/2024	63.15	10/04/2024	48.11	09/21/2024	60.89	09/14/2024	63.26	09/07/2024
10/25/2024	54.01	10/18/2024	69.63	10/11/2024	196.30	10/04/2024	70.15	09/20/2024	60.56	09/13/2024	60.92	09/06/2024	60.35	
10/18/2024	67.16	10/11/2024	63.15	10/04/2024	70.15	09/20/2024	60.56	09/13/2024	60.92	09/06/2024	60.35			
10/11/2024	63.28	10/04/2024	196.30	09/27/2024	70.15	09/20/2024	60.56	09/13/2024	60.92	09/06/2024	60.35			
10/04/2024	48.52	09/27/2024	70.15	09/20/2024	60.56	09/13/2024	60.92	09/06/2024	60.35					
09/27/2024	68.56	09/20/2024	60.56	09/13/2024	60.92	09/06/2024	60.35							
09/20/2024	61.31	09/13/2024	60.92	09/06/2024	60.35									

SAF Dan Tsubouchi  
@Energy\_Tidbits

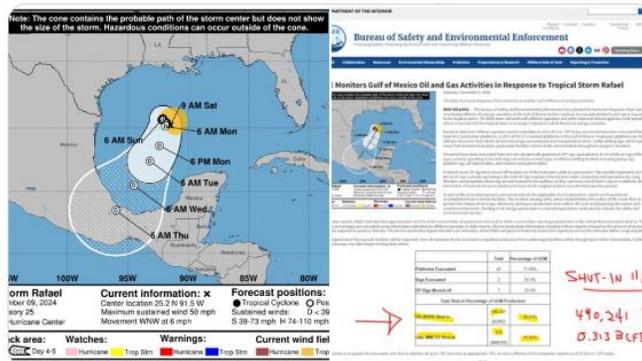
Tropical Storm Rafael projected to move south in GoM away from offshore #Oil #NatGas.

Shut-in offshore GoM is 490,241 b/d oil, 0.313 bcf/d NatGas.

but given projected path, shut-in should start to be restored tomorrow.

Thx @NHC\_Atlantic @BSEEGov

#OOTT



1:08 PM · Nov 9, 2024 · 1.581 Views

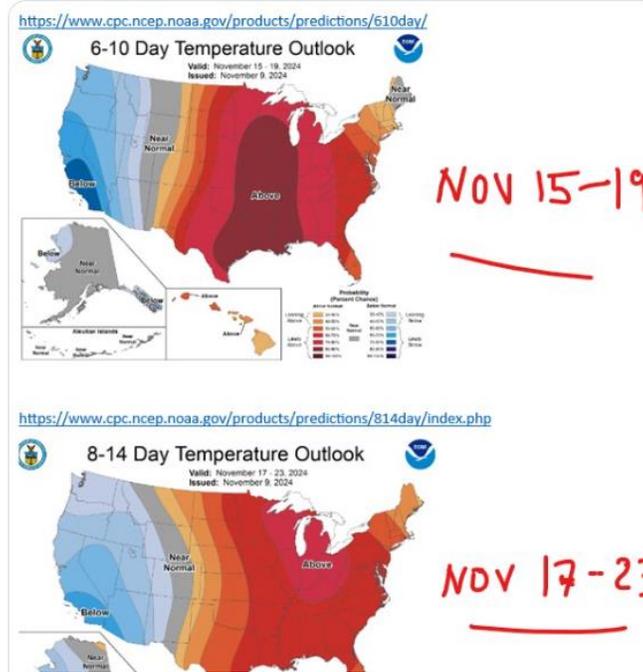
SAF **Dan Tsubouchi**   
@Energy\_Tidbits

...

A warm start to winter is never a positive to HH #NatGas prices.

@NOAA updated 6-10 & 8-14 day temp outlook for Nov 15-23 calls for much warmer than normal temps across the populous east 2/3 of Lower 48.

#OOTT



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@Energy\_Tidbits

Reason to be cautious on #NatGas as long as 📍@NOAA next 2 weeks temp forecasts is for warm start to winter.

Other than 2022 when global #NatGas prices were driven up post RUS 02/24/22 UKR invasion, HH prices weakened in Nov/Dec with warm or even normal temps in Nov/Dec.

#OOTT

Figure 8: HH gas prices seasonal comparison to Nov 8, 2024 close



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

SAF Dan Tsubouchi  @Energy\_Tidbits · 19h

A warm start to winter is never a positive to HH #NatGas prices.

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...  
[Show more](#)

<https://www.cpc.ncep.noaa.gov/products/predictions/610day/>



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...

Overlooked.

Talking points in Liberals cap on oil & gas emissions were still see oil & gas production growth of 16% to 2030-2032.

Most overlooked the +16% was vs 2019 starting point.

Using CER govt data:

Production growth has been +10.32% from 2019 thru H1/24.

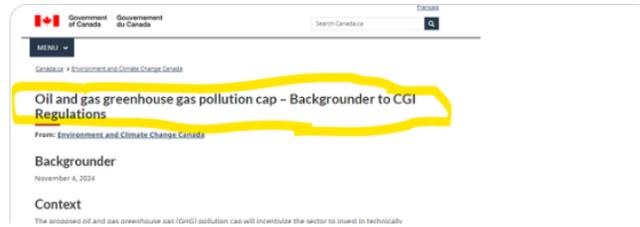
Leaves +5.15% to 2030-2032.

Applied equally to oil & gas leaves +258,000 b/d oil & +0.94 bcf/d natural gas from H1/24 to 2030-2032.

Most expect continued oil growth over next 12-mths and natural gas growth with LNG Canada 1.8 bcf/d Phase 1 startup mid-2025.

The +16% growth from 2019 to 2030-2032 effectively means Liberals assume zero growth from H2/25 to 2030-2032.

#OOTT @ABDanielleSmith @PierrePoilievre



jpw3.5

ICYMI.

Key Trump Iran advisor, Brian Hook, points to Trump hitting Iran oil exports.

Positive for #Oil and also for Saudi, Russia et al in providing the ability for them to add back voluntary cuts in Q1/25

#OOTT

SAF Dan Tsubouchi @Energy\_Tidbits · Nov 8

Positive for #Oil.

Seems Brian Hook (rumored to lead transition team at State Dept) is clearly pointing to Trump is going to clamp down on Iran oil exports like he did in 1st term....

[Show more](#)

The image shows a screenshot of a tweet from Dan Tsubouchi (@Energy\_Tidbits) dated Nov 8. The tweet text reads: "Positive for #Oil. Seems Brian Hook (rumored to lead transition team at State Dept) is clearly pointing to Trump is going to clamp down on Iran oil exports like he did in 1st term...." Below the text is a "Show more" link. The screenshot also includes a document titled "Energy Totals" with several pages of text and yellow annotations. The document appears to be a report or memo, possibly related to energy policy or Iran oil exports, as suggested by the tweet's context. The annotations highlight specific sections of the document, including a table and several paragraphs of text.

8:20 AM · Nov 10, 2024 · 1,319 Views