



¿Por qué es el momento
de invertir en petróleo?

JESÚS SÁNCHEZ LEÓN

CASTAÑAR INVESTMENT FUND

Petra oleum y el fuego griego (s. IX a.C.)



Una historia de innovaciones y disrupciones...

The History of INNOVATION CYCLES

Below, we show waves of innovation across 250 years, from the Industrial Revolution to sustainable technology.

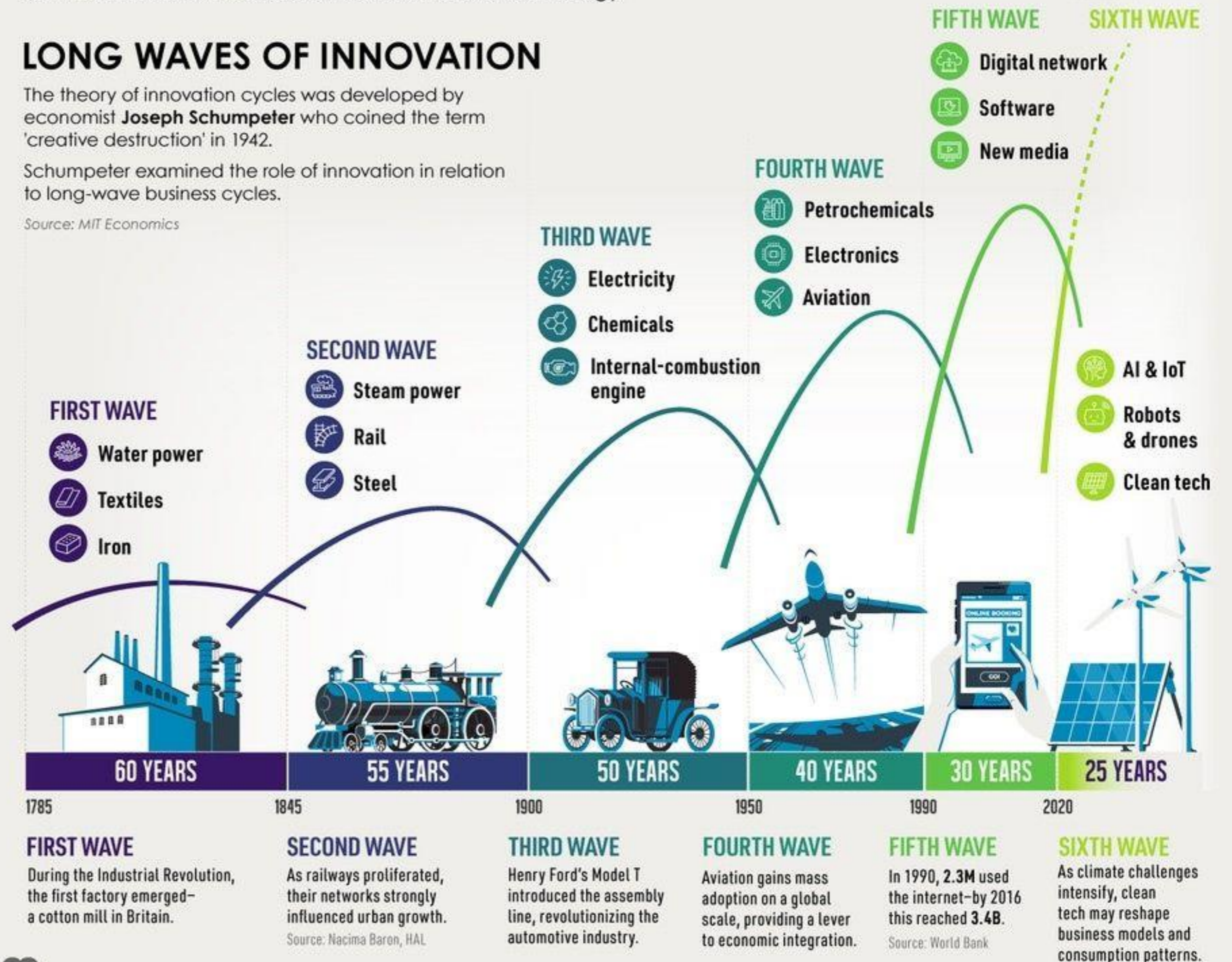
LONG WAVES OF INNOVATION

The theory of innovation cycles was developed by economist **Joseph Schumpeter** who coined the term 'creative destruction' in 1942.

Schumpeter examined the role of innovation in relation to long-wave business cycles.

Source: MIT Economics

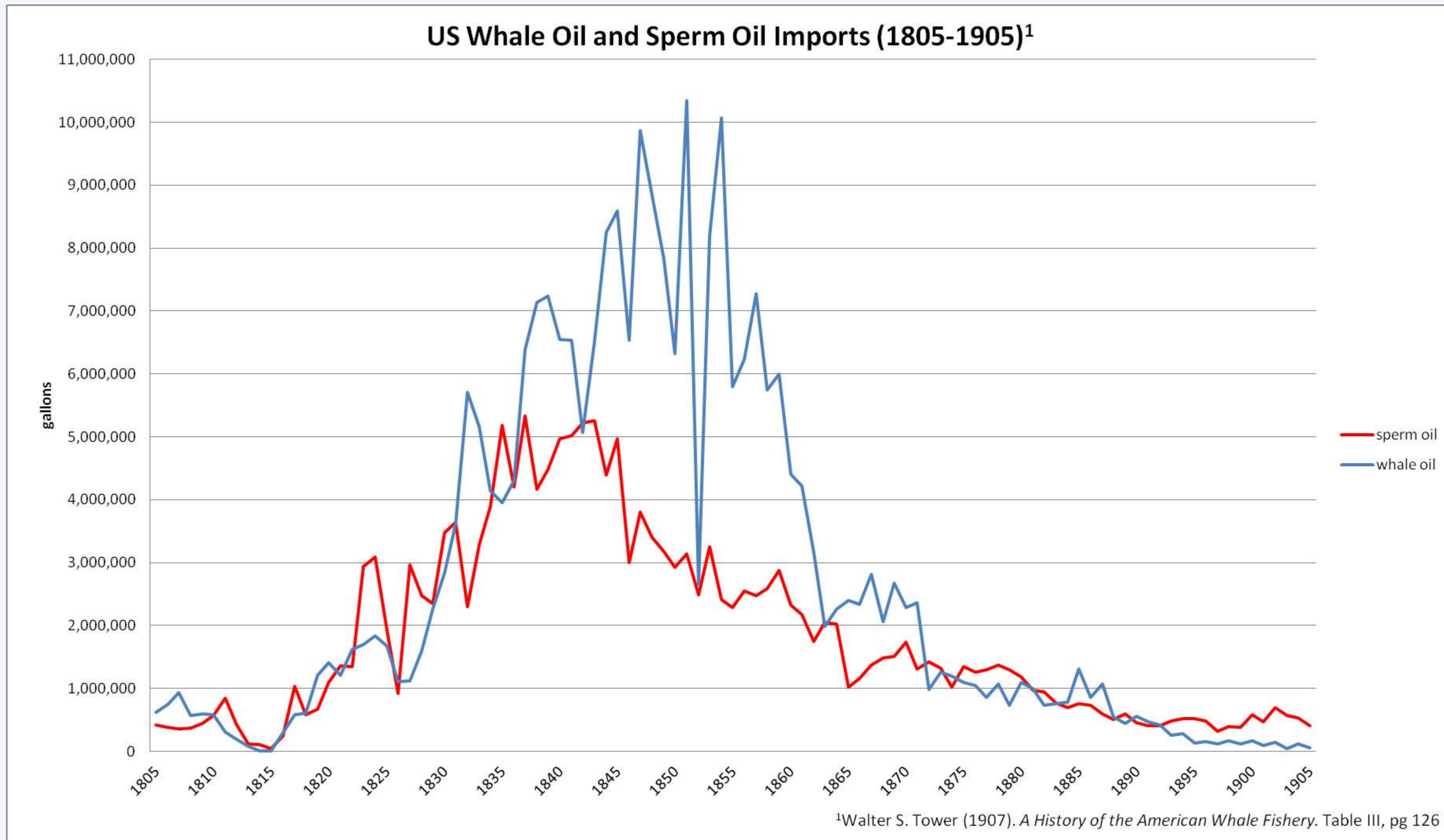
Source: Edelson Institute



Aceite de ballena (s. XIX)



Aceite de ballena (s. XIX)



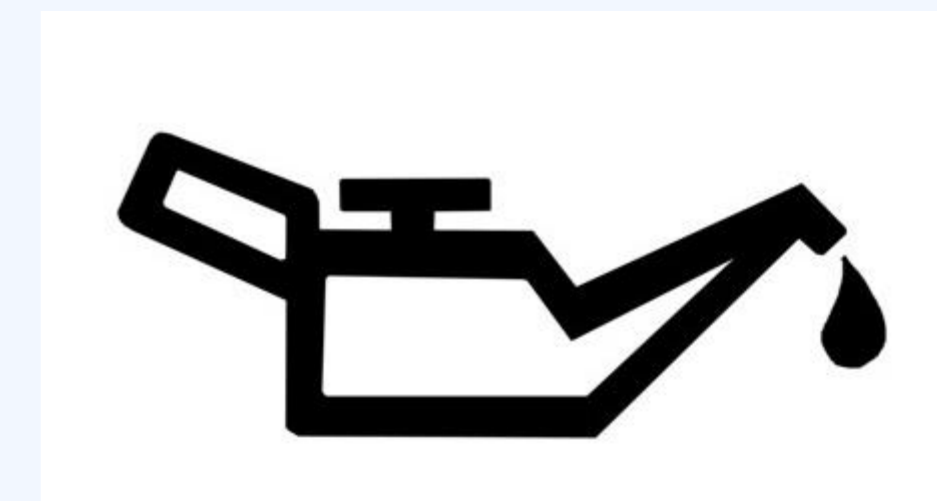
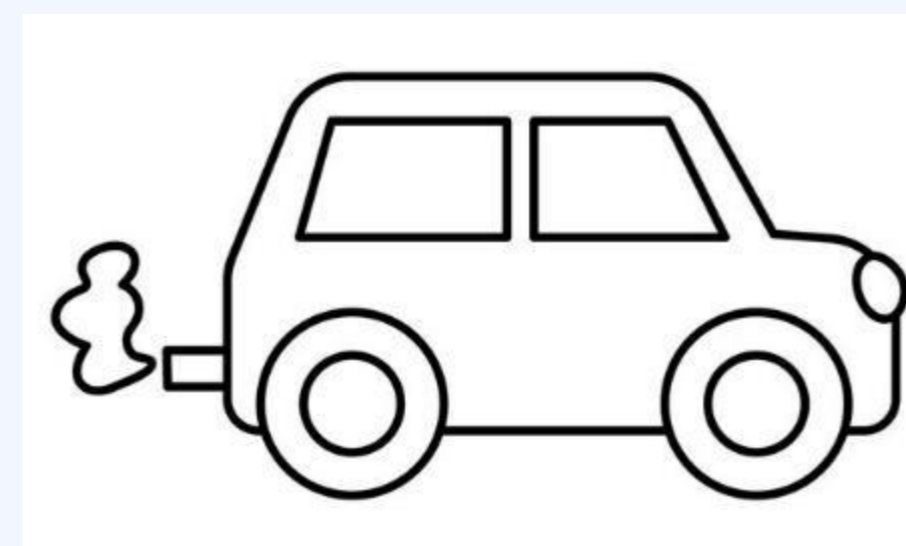
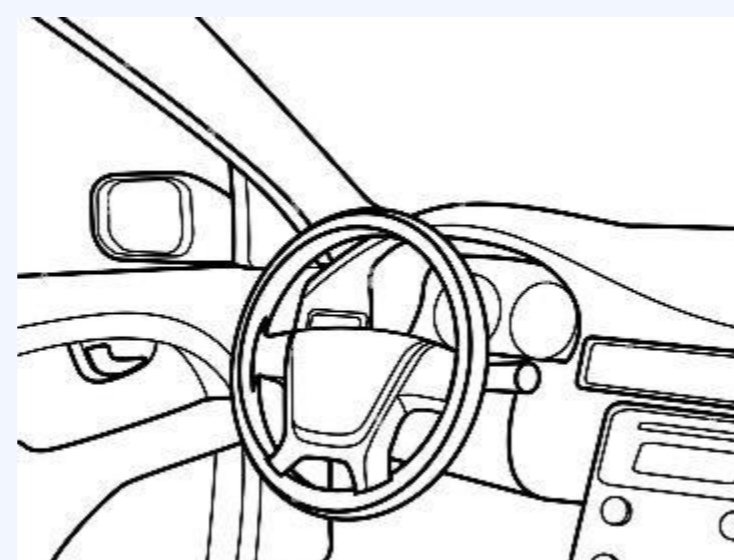
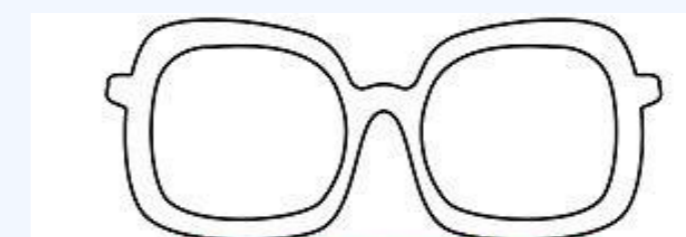
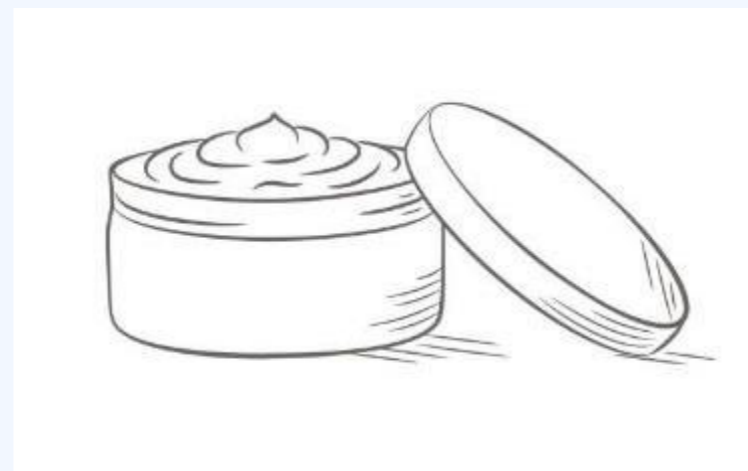
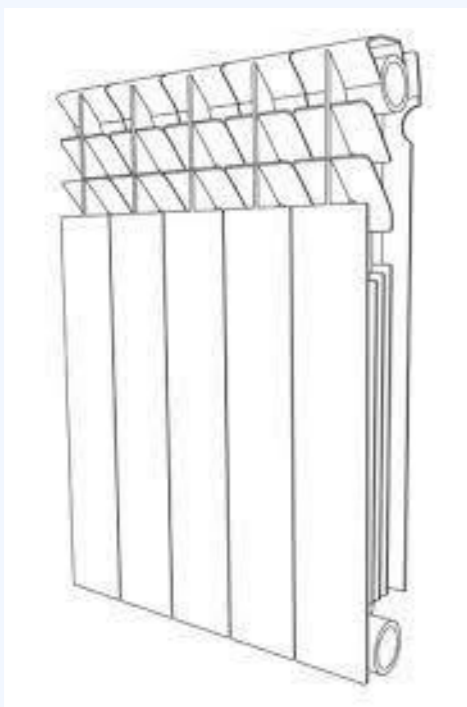
Edwin Drake (1859)



Spindletop (1901)



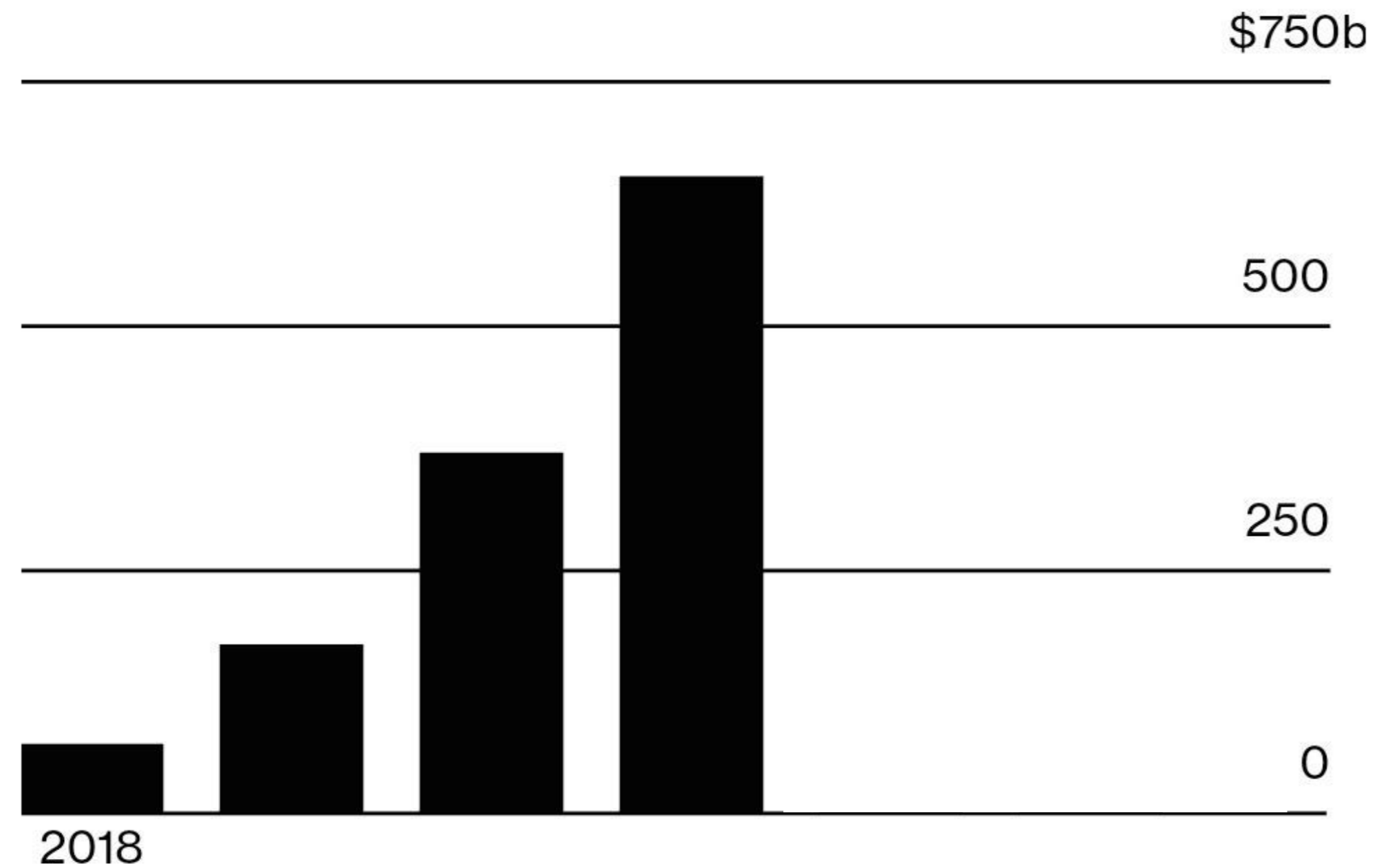
Nuestro día a día



Necesitamos
cambiar



Net Flows to ESG Funds



Source: Morningstar
Figures are estimated net flows into global sustainable funds. They include open-end funds and ETFs.

Bloomberg Businessweek

Nos
pusimos a
ello...

...sin éxito



Squawk Box  
@SquawkCNBC



"At the end of last year, overall fossil fuels represented 81% of energy consumption. 10 years ago, they were at 82%," says Jeff Currie. "\$3.8 trillion of investment in renewables moved fossil fuels from 82% to 81% of the overall energy consumption."

[Traducir post](#)



ICE BRENT CRUDE (DEC)
88.79 +3.65 [+4.29%]
YTD [14.16%]

88.79

CRUDE OIL PRICES POPPING
OPEC WEIGHING MASSIVE OUTPUT CUT: RPTS

DEVELOPING STORY

0:01 / 2:16

CC

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Meanwhile, the energy transition plan has been undermined by unrealistic scenarios and flawed assumptions because they have been mistakenly perceived as facts. For example, one scenario led many to assume that major oil use sectors would switch to alternatives almost overnight, and therefore oil demand would never return to pre-Covid levels.

In reality, once the global economy started to emerge from lockdowns, oil demand came surging back, and so did gas.

By contrast, solar and wind still only account for 10% of global power generation, and less than 2% of global primary energy supply. Even electric vehicles comprise less than 2% of the total vehicle population and now face high electricity prices.

Perhaps most damaging of all was the idea that contingency planning could be safely ignored.

Because when you shame oil and gas investors, dismantle oil- and coal-fired power plants, fail to diversify energy supplies (especially gas), oppose LNG receiving terminals, and reject nuclear power, your transition plan had better be right.

Instead, as this crisis has shown, the plan was just a chain of sandcastles that waves of reality have washed away. And billions around the world now face the energy access and cost of living consequences that are likely to be severe and prolonged.

These are the real causes of this state of energy insecurity: under-investment in oil and gas; alternatives not ready; and no back-up plan. But you would not know that from the response so far.



Amin H. Nasser,
Saudi Aramco CEO

No podemos
abandonar
una
tecnología sin
tener la
siguiente lista



Jon Erlichman ✓
@JonErlichman

Subscribe



Easter in NYC
in 1900: 1 car



Easter in NYC
in 1913: 1 horse



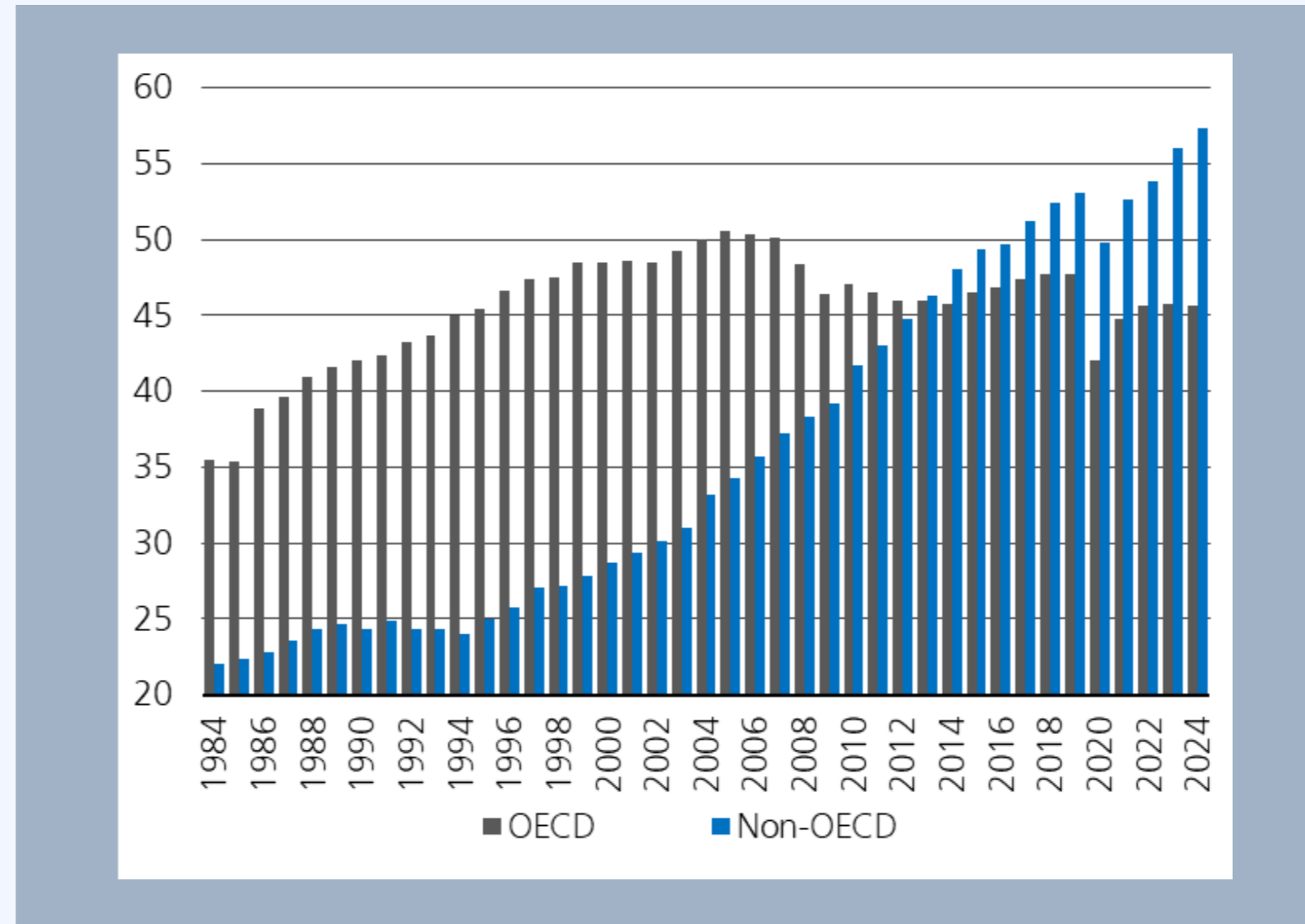
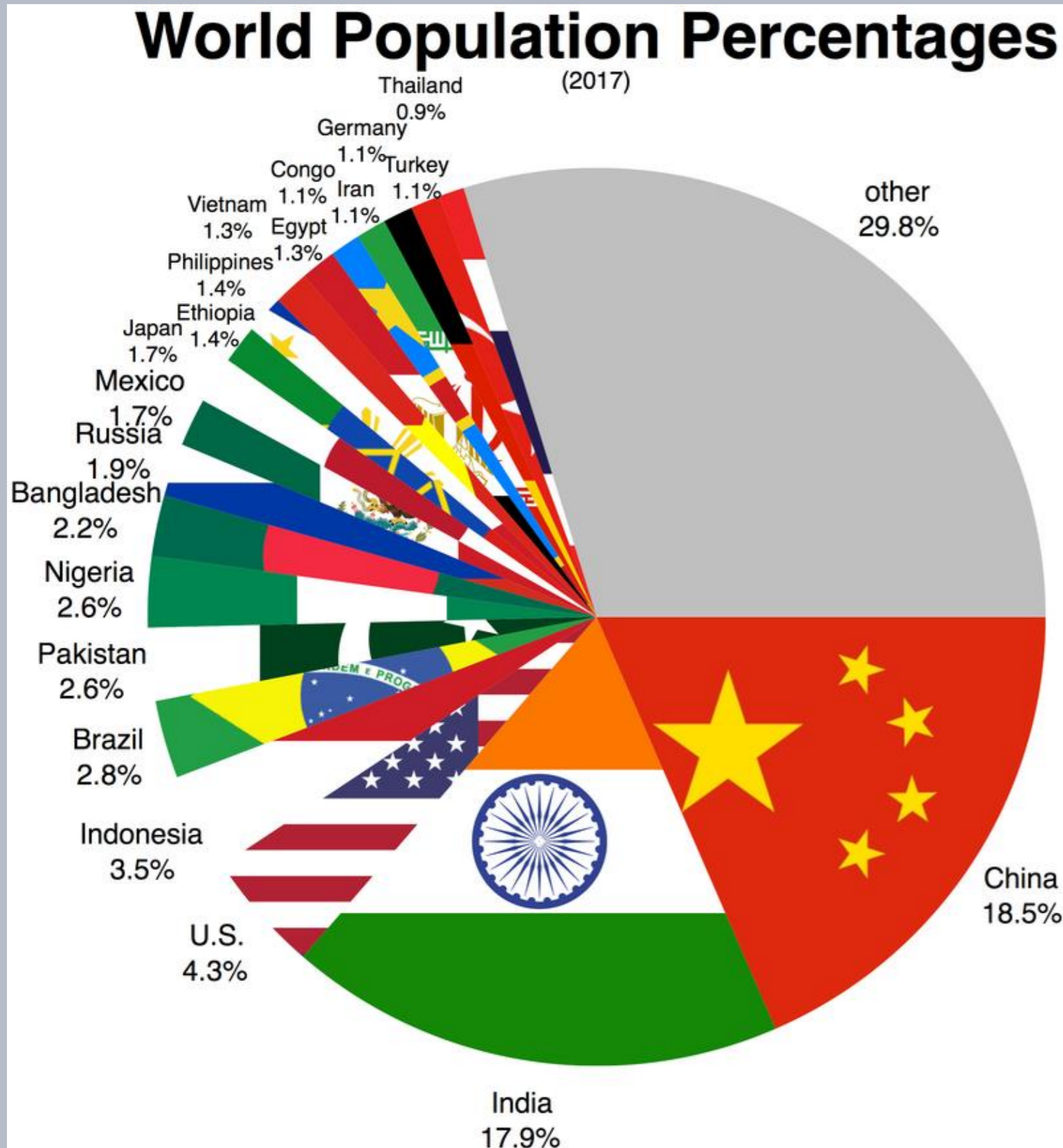
Demanda

Existen 3 agencias:

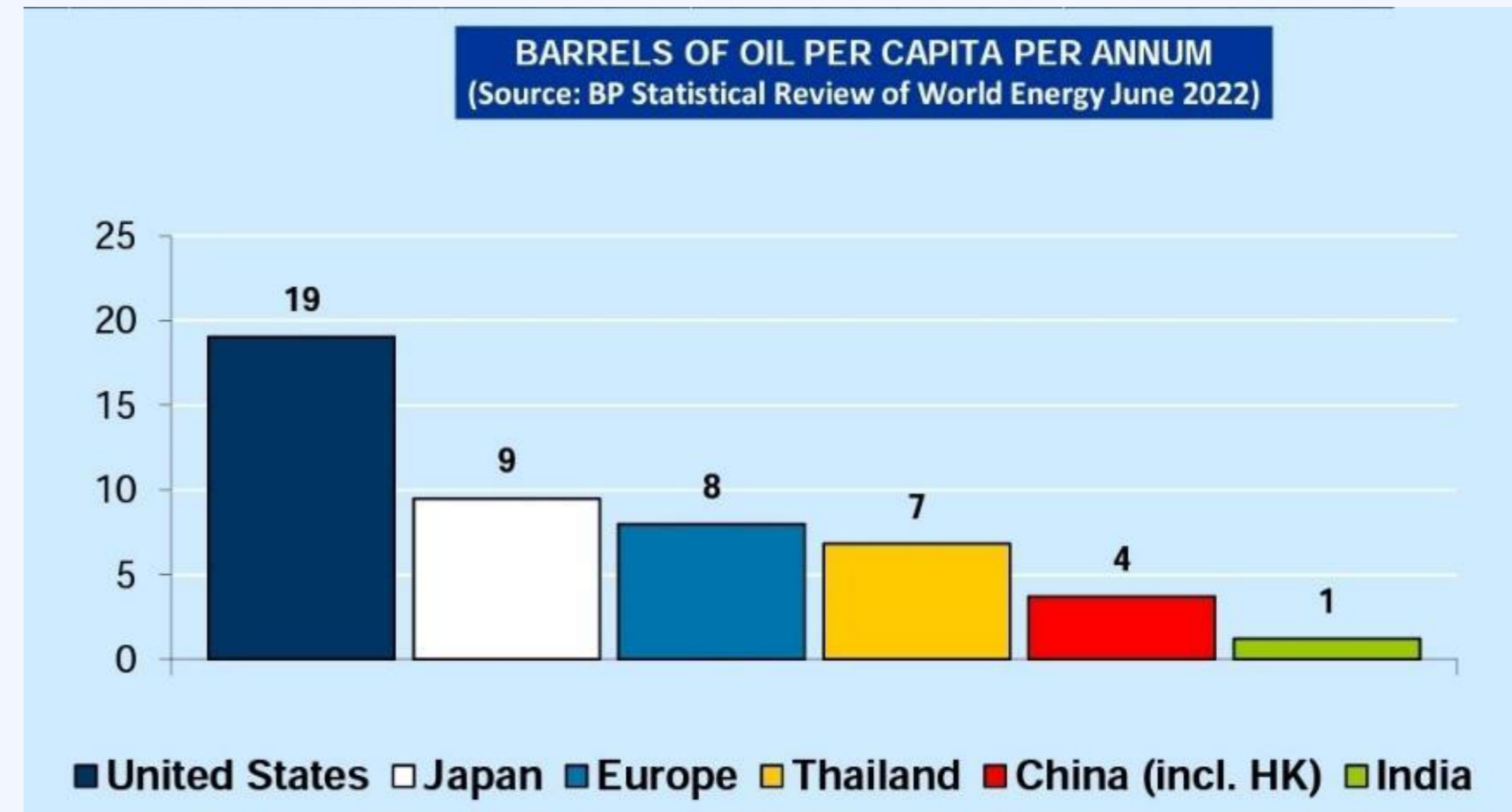
- IEA, International Energy Agency
- EIA, US Energy Information Administration
- OPEC, Organization of the Petroleum Exporting Countries



Demanda - ¿Vamos a necesitar petróleo?



El **12%** de la población consume cada año **13B** bbls/per. vs. **3B** bbls/per. del resto del mundo

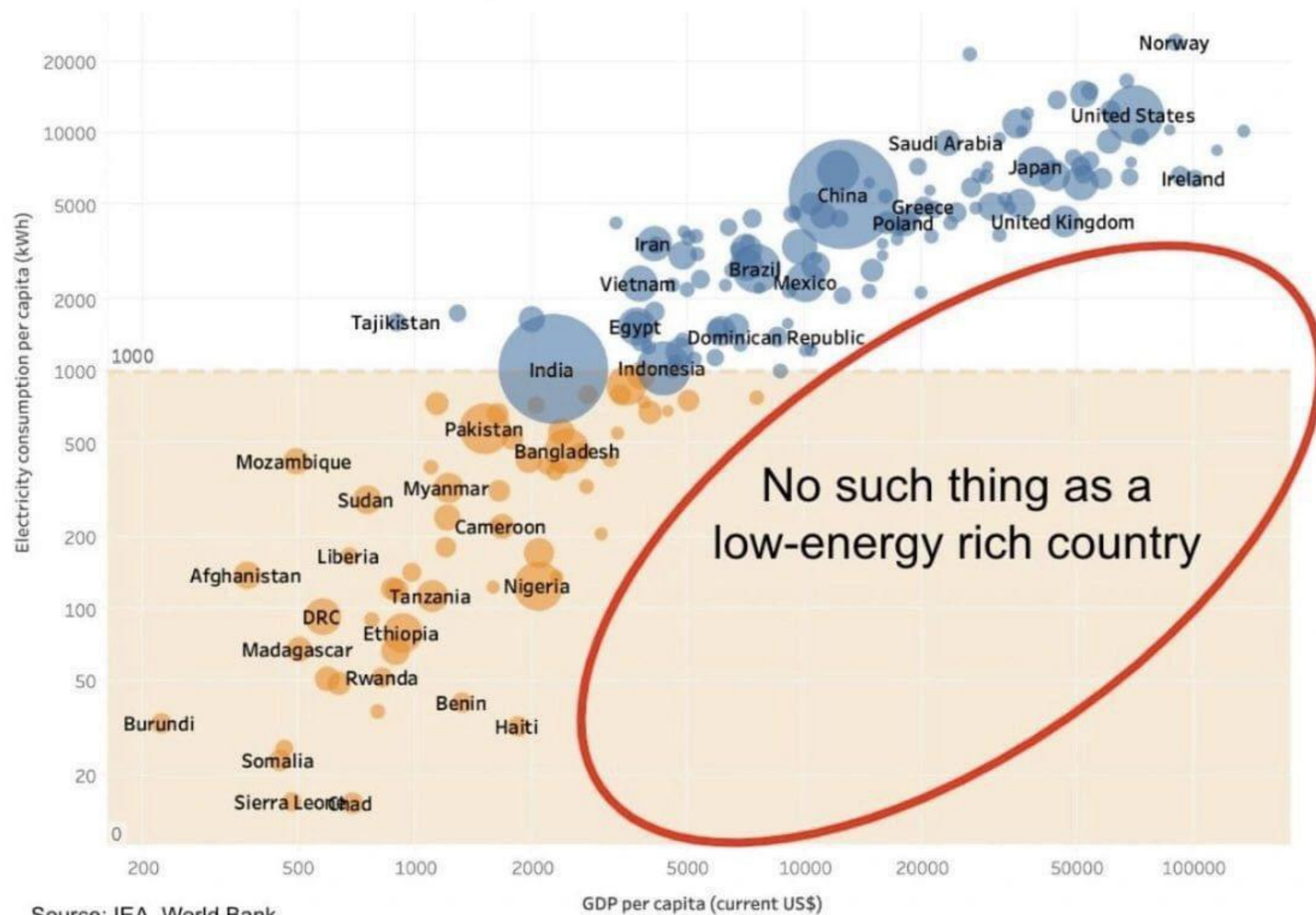


India's Oil Minister: "If we start buying more of the Middle Eastern oil, the oil price will not be at \$75 or \$76. It will be \$150."

[Traducir post](#)

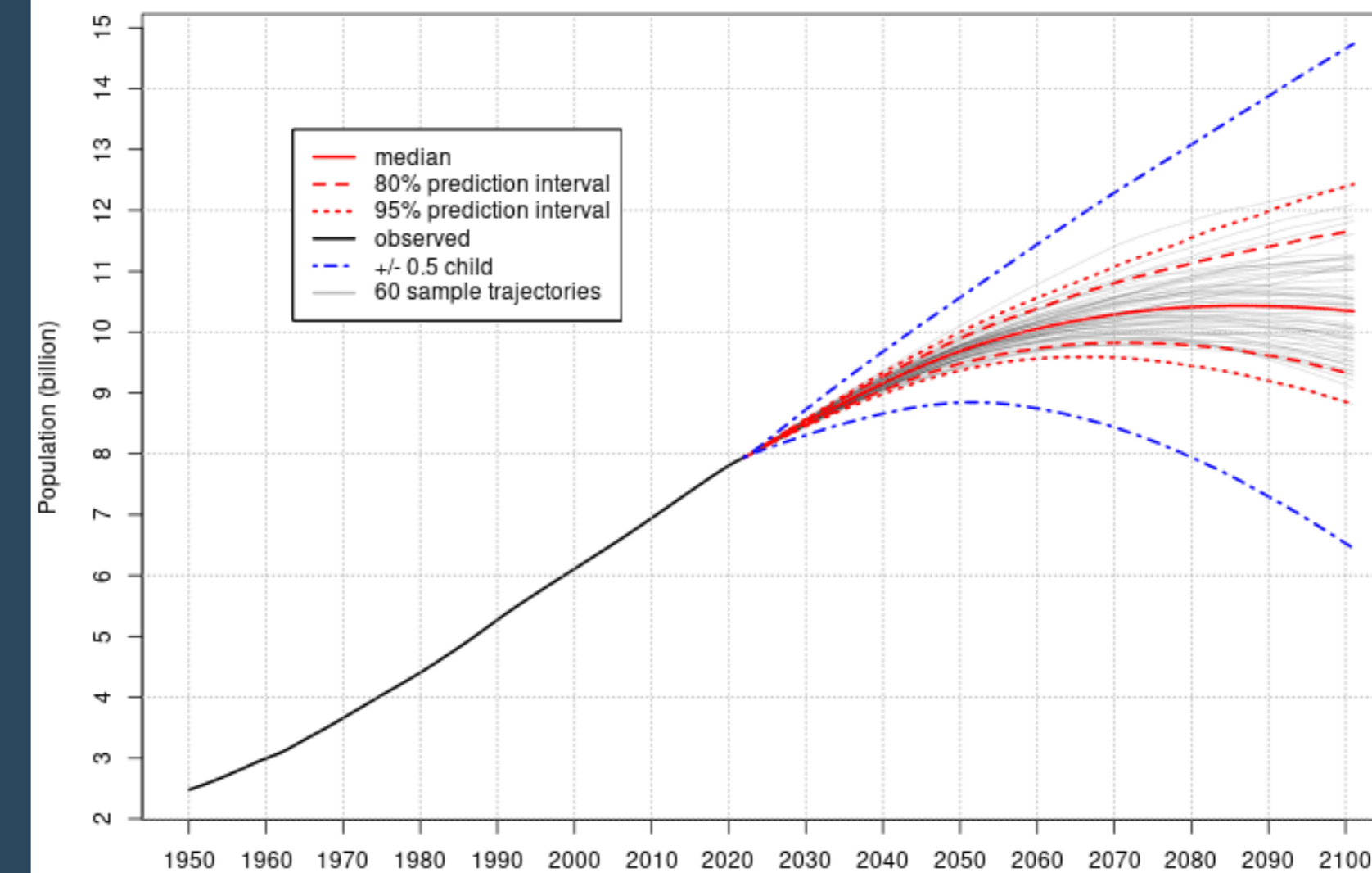
4:13 p. m. · 9 feb. 2024 · 40,6 mil Reproducciones

Electricity & Income (per capita, all countries)



Source: IEA, World Bank

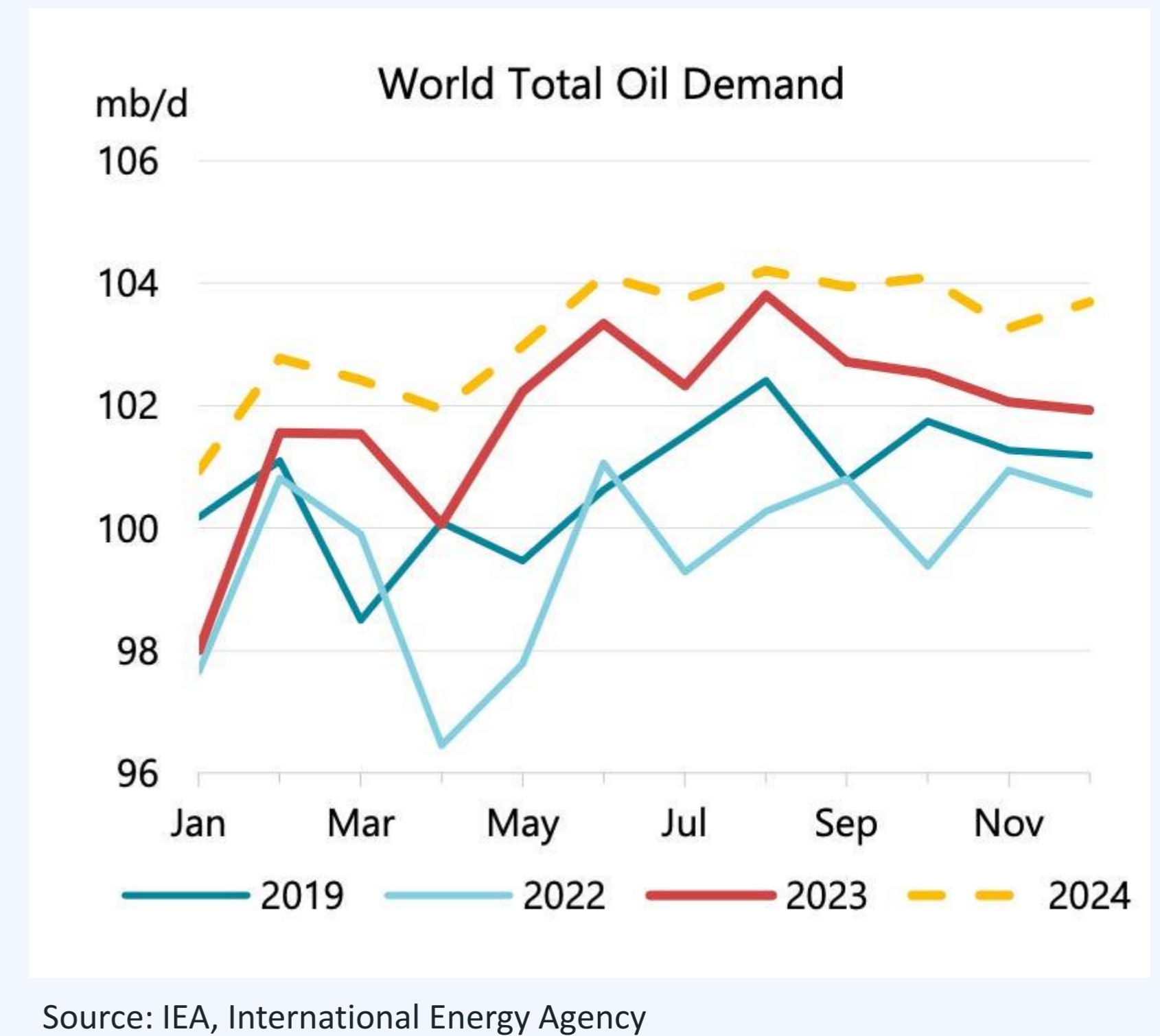
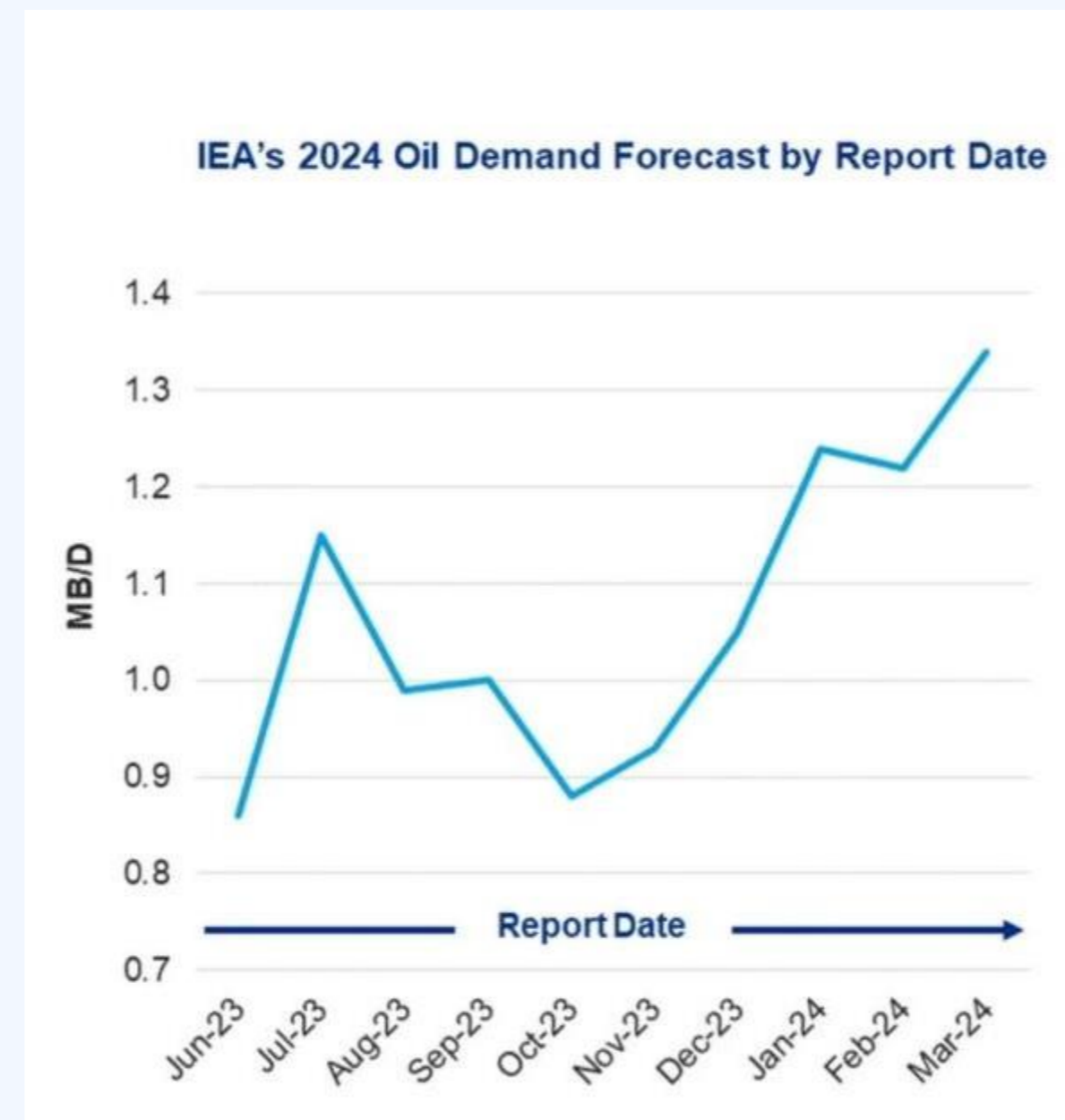
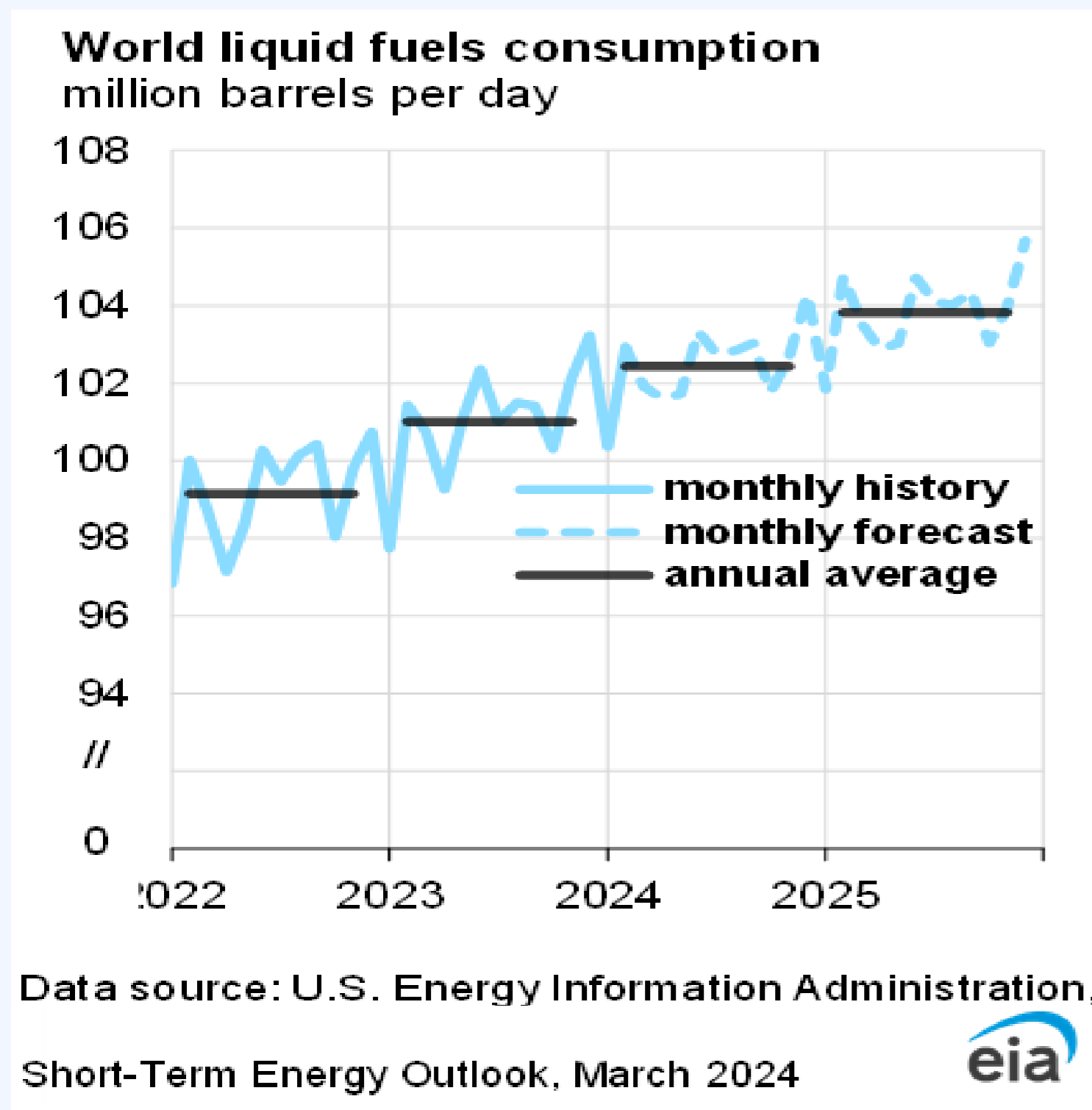
World: Total Population



© 2022 United Nations, DESA, Population Division. Licensed under Creative Commons license CC BY 3.0 IGO.
United Nations, DESA, Population Division. *World Population Prospects 2022*. <http://population.un.org/wpp/>

No podía ser de otra manera..

Las agencias “americanas” ven crecimiento



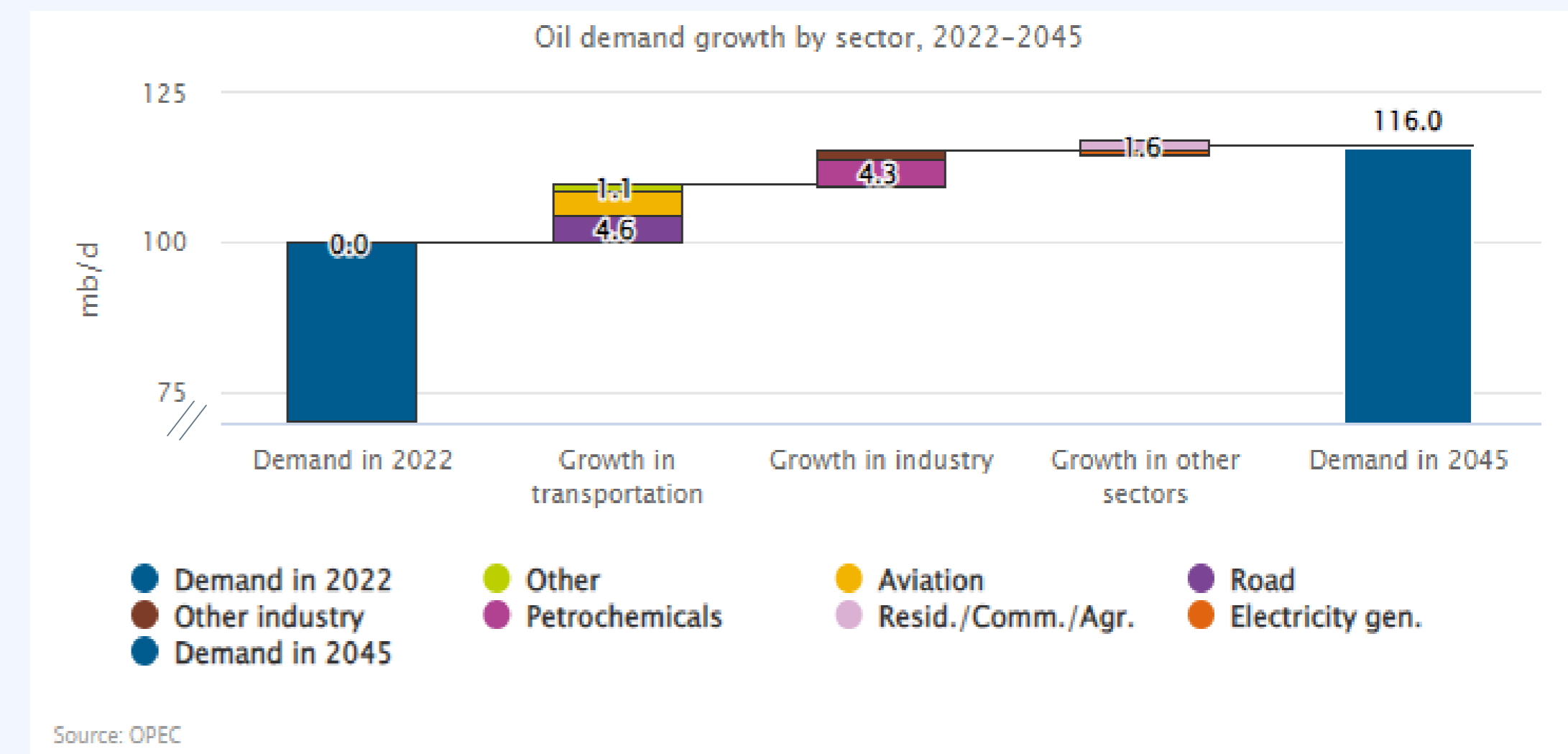
OPEC: Va a seguir creciendo hasta el 2045 como mínimo

Long-term oil demand by region

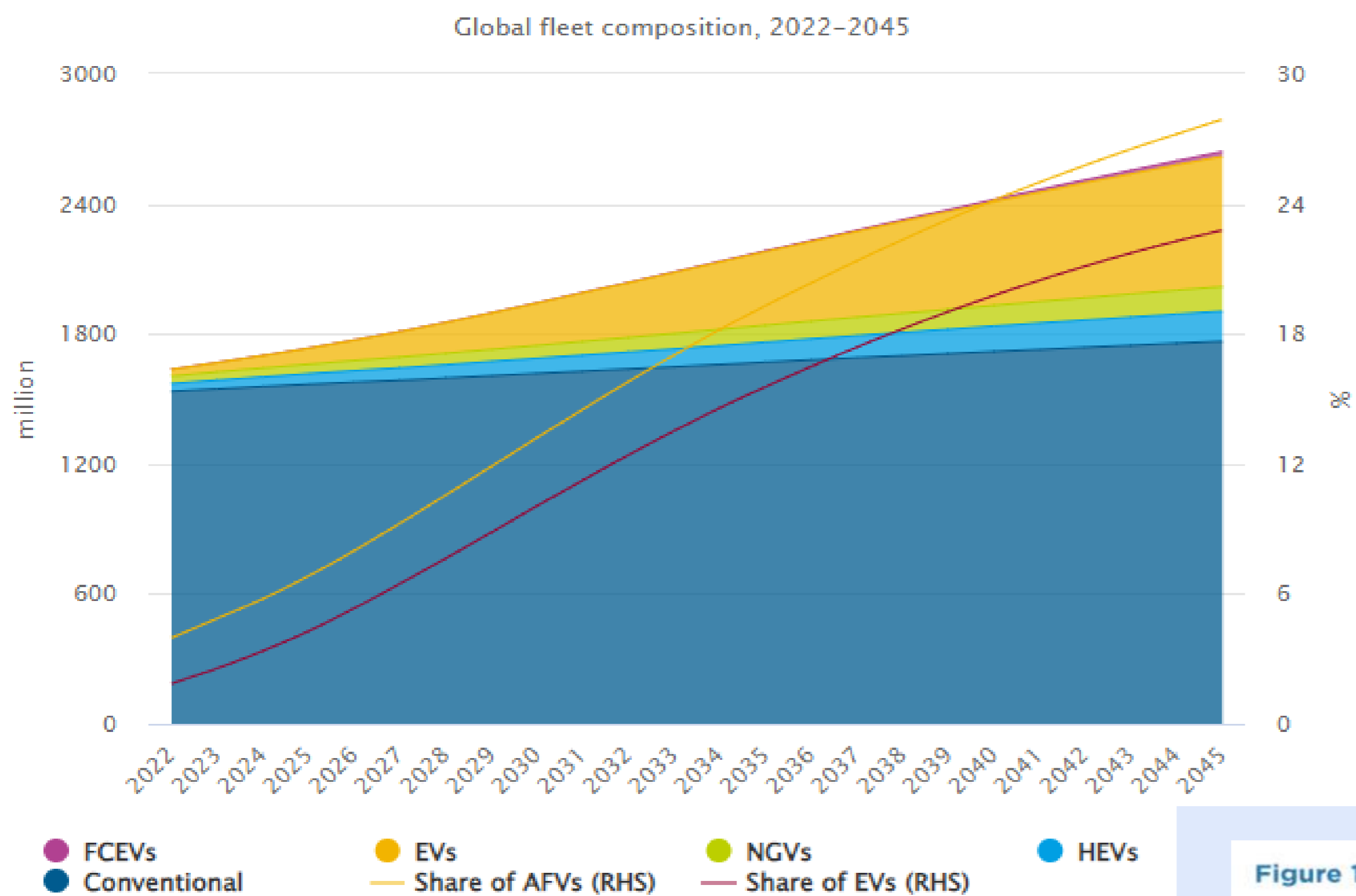
mb/d

	2022	2025	2030	2035	2040	2045	Growth 2022-2045
OECD Americas	25.0	25.5	25.8	24.8	23.2	21.5	-3.5
OECD Europe	13.5	13.5	13.1	12.0	10.8	9.8	-3.7
OECD Asia-Pacific	7.4	7.5	7.2	6.6	6.0	5.4	-2.0
OECD	45.9	46.5	46.0	43.4	40.0	36.7	-9.3
China	14.9	16.8	17.8	18.2	18.5	18.8	4.0
India	5.1	5.9	7.3	8.8	10.2	11.7	6.6
Other Asia	9.0	9.9	11.1	12.1	12.9	13.6	4.6
Latin America	6.4	6.9	7.8	8.4	8.7	9.0	2.5
Middle East	8.3	9.4	10.0	10.7	11.4	11.9	3.6
Africa	4.4	4.9	5.9	6.6	7.4	8.2	3.8
Russia	3.6	3.8	4.0	4.0	3.9	3.9	0.3
Other Eurasia	1.2	1.2	1.3	1.4	1.5	1.5	0.3
Other Europe	0.8	0.8	0.9	0.9	0.8	0.8	0.0
Non-OECD	53.6	59.6	66.0	71.0	75.4	79.4	25.7
World	99.6	106.1	112.0	114.4	115.4	116.0	16.4

Source: OPEC.



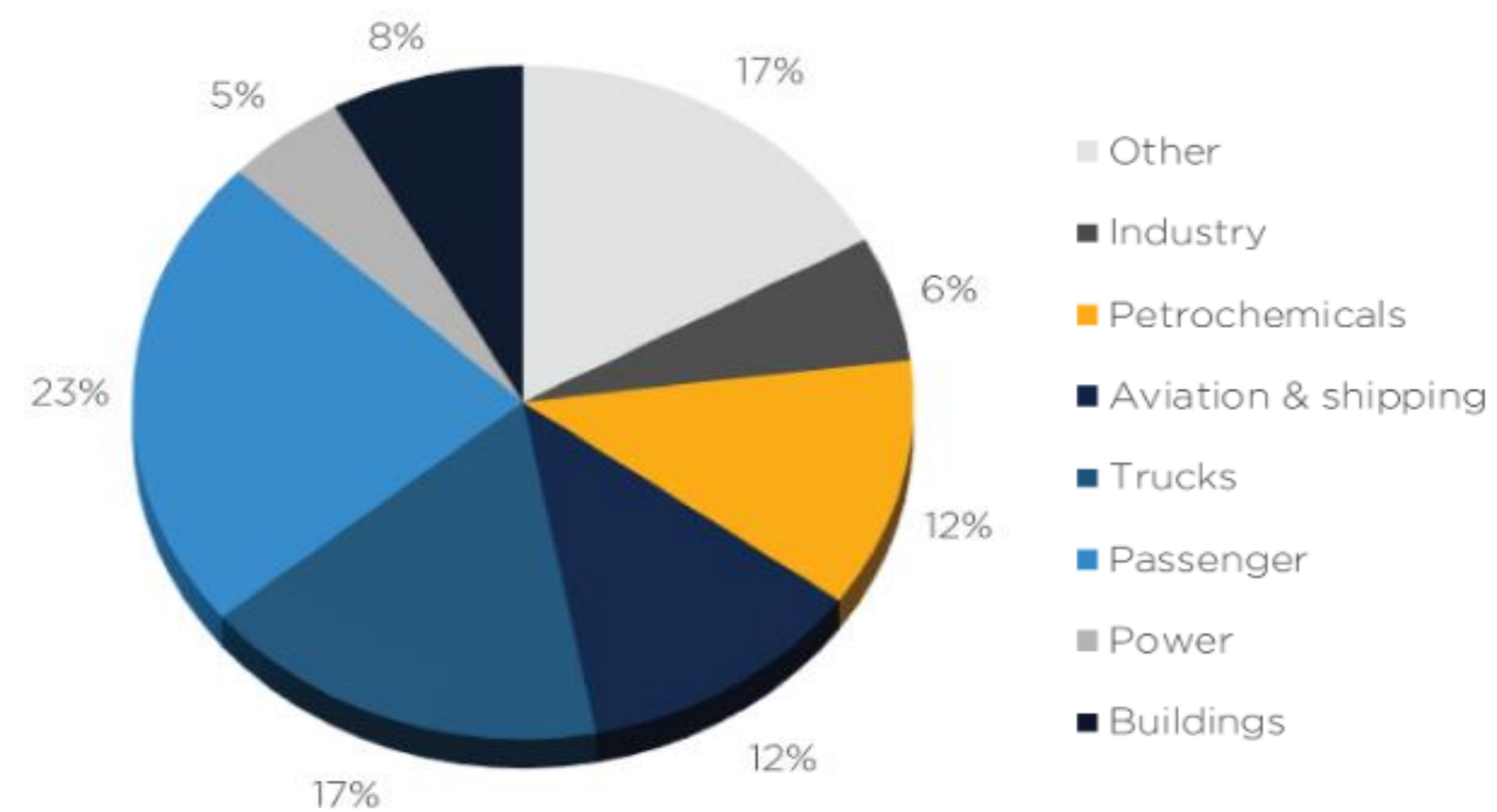
Vehículo eléctrico



Source: OPEC

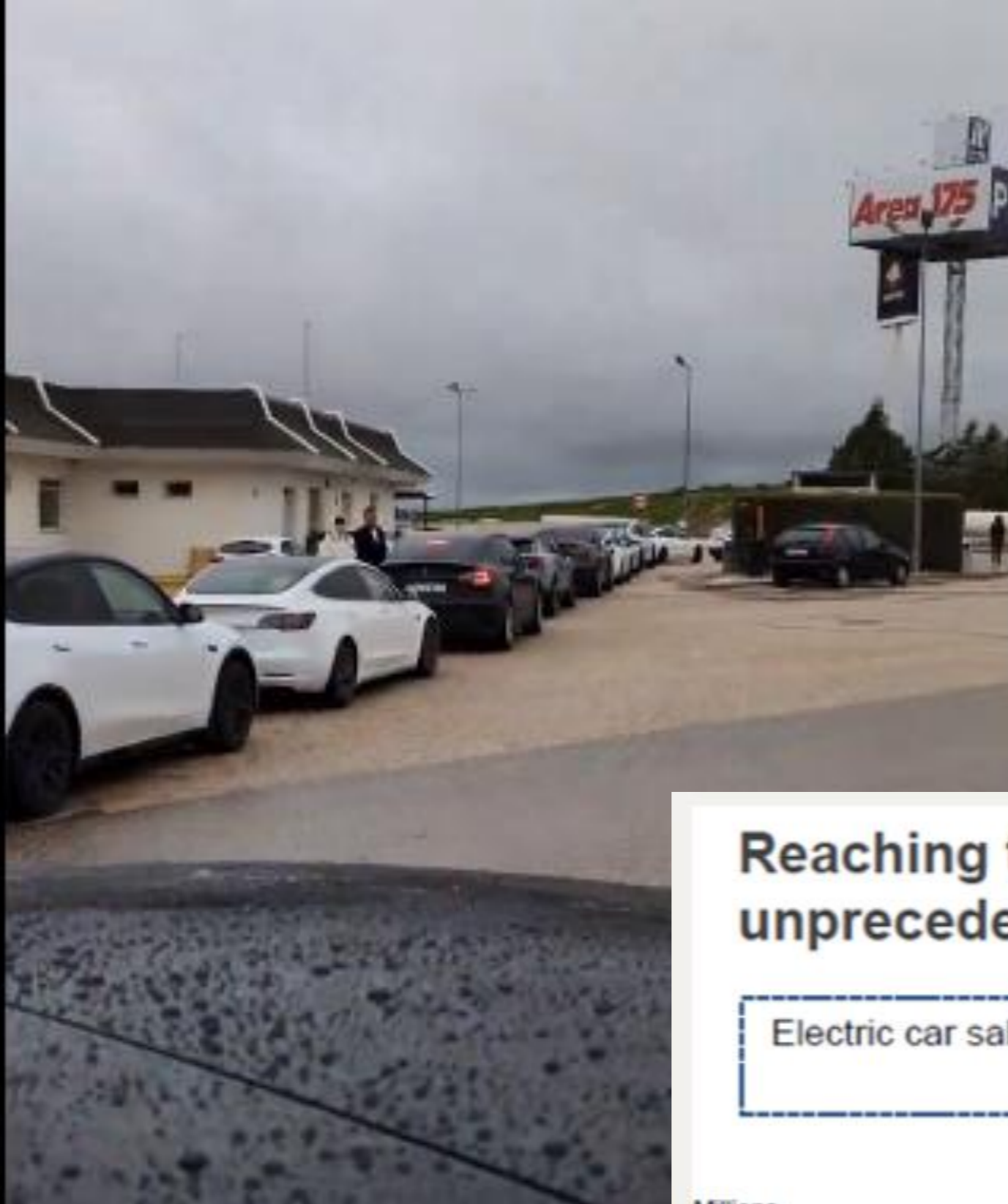


Figure 1: Global oil demand percentages by sector



Source: International Energy Agency, 2018 World Energy Outlook, New Policies scenario. Other includes biofuels. Note: 95 million barrels per day in total (2017).



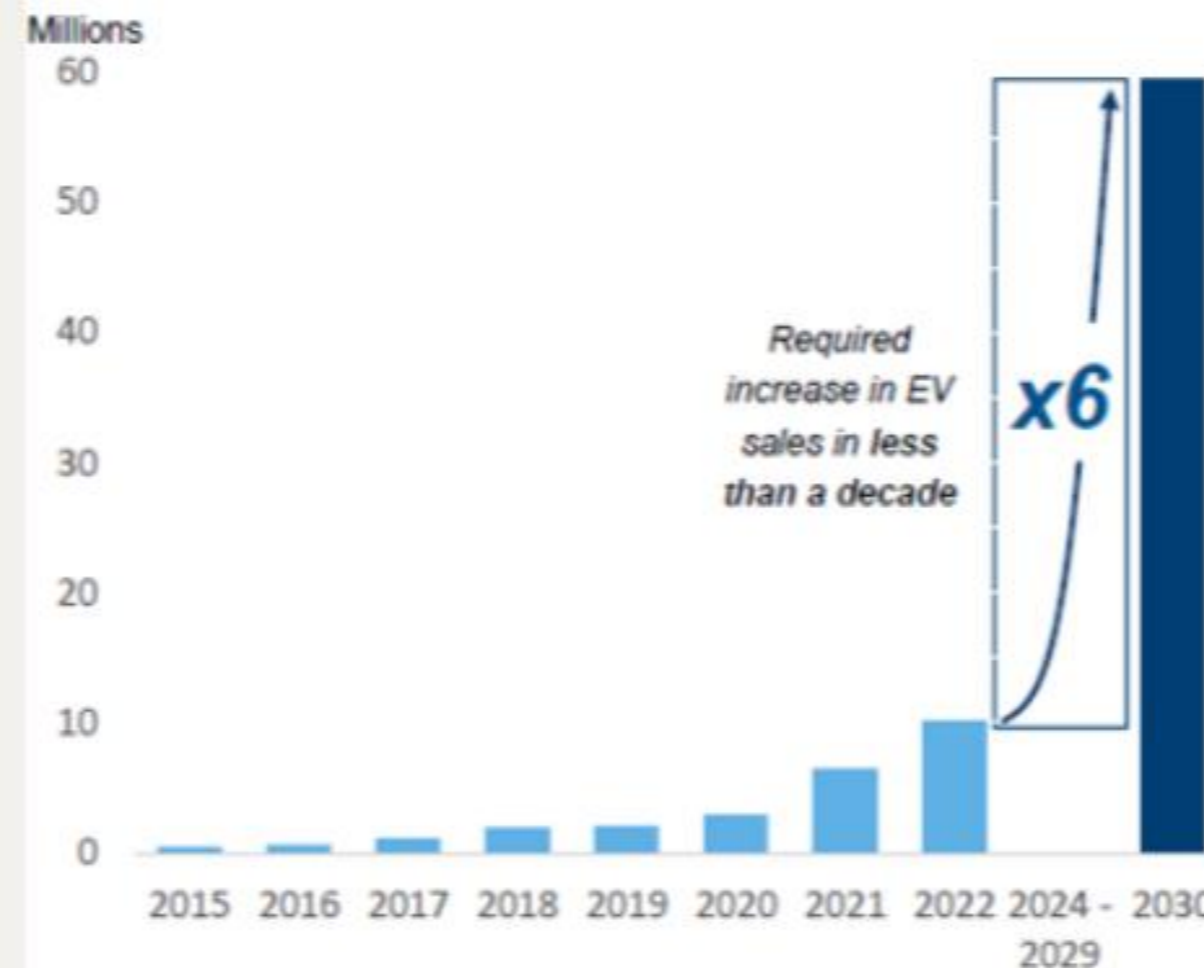


¡¡No estamos listos!!

Largas colas de dos horas para cargar sus Tesla de vuelta de las vacaciones de Semana Santa

Reaching the EV penetration target by 2030 requires addressing unprecedented industrial and infrastructure development challenges

Electric car sales in the IEA Net Zero Scenario, 2015 – 2030 [1]



In 5 years, EV global annual manufacturing capacity must grow by **500%** to reach 60 million - comparable to current motor vehicle capacity of ~80 million



While \$100bn has been invested in charging infrastructure thus far, we still require almost **\$400bn globally by 2030** [2]



Over 90% of global sales in 2022 were incentivized by **subsidies** which **developing nations lack the capacity to match** [3]

Source: [1] IEA Electric car sales and sales share in the Net Zero Scenario, 2015-2030, [2] BNEF [3] IEA Global EV Outlook 2023

Oferta

Proven reserves (millions of barrels)

	Country	US EIA [5]	OPEC [6]	BP [7]	Others	Oil production 2020 (bbl/day) ^[8]	Years of production in reserve
1	 Venezuela *(OPEC)	303,806	302,809	300,900		527,063	1,578
2	 Saudi Arabia *(OPEC)	258,600	266,260	266,000		9,264,921	76
3	 Iran *(OPEC)	208,600	^[9] 208,600	155,600		2,665,809	214
4	 Canada *	170,300	4,421	172,200	^[10] 171,000	4,201,101	111
5	 Iraq *(OPEC)	145,019	147,223	143,100		4,102,311	97
6	 Somalia *	-	-	-	111,777 ^{[11][12]}	-	-
7	 Kuwait *(OPEC)	101,500	104,000	104,000		2,625,145	106
8	 United Arab Emirates *(OPEC)	97,800	98,630	98,630		3,138,249	85
9	 Russia *	80,000	80,000	102,400		9,865,495	22
10	 Libya *(OPEC)	48,363	74,363	78,400		408,074	324
11	 United States *	47,107	32,773	55,000	^[13] 43,629	11,307,560	11
12	 Nigeria *(OPEC)	36,890	37,453	37,100		1,775,940	57
13	 Kazakhstan *	30,000	30,000	30,000		1,756,705	47
14	 China *	26,022	25,627	18,500		3,888,989	18

El petróleo
no se va a
acabar

Desde el 2014 hemos reducido la exploración significativamente

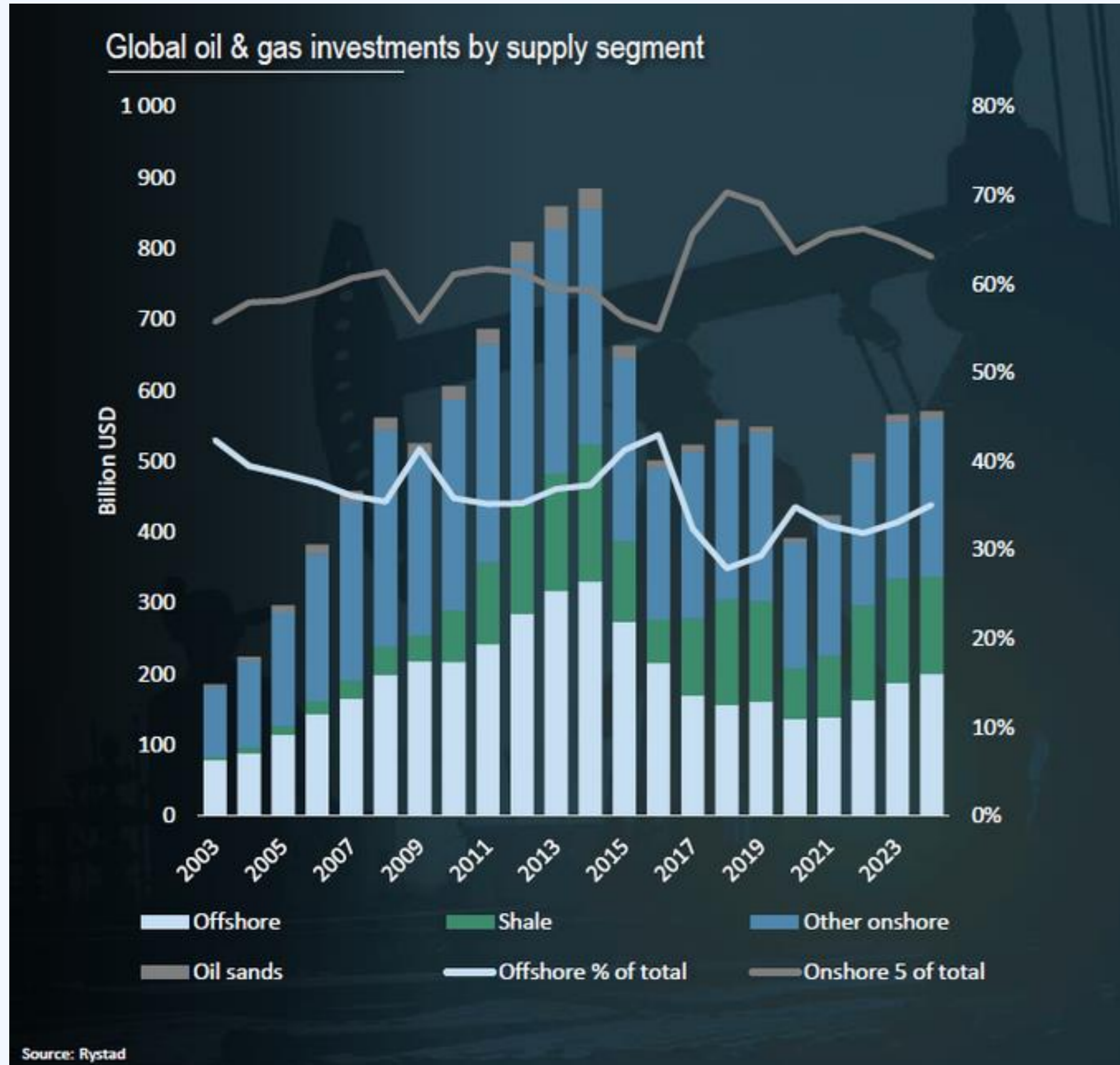
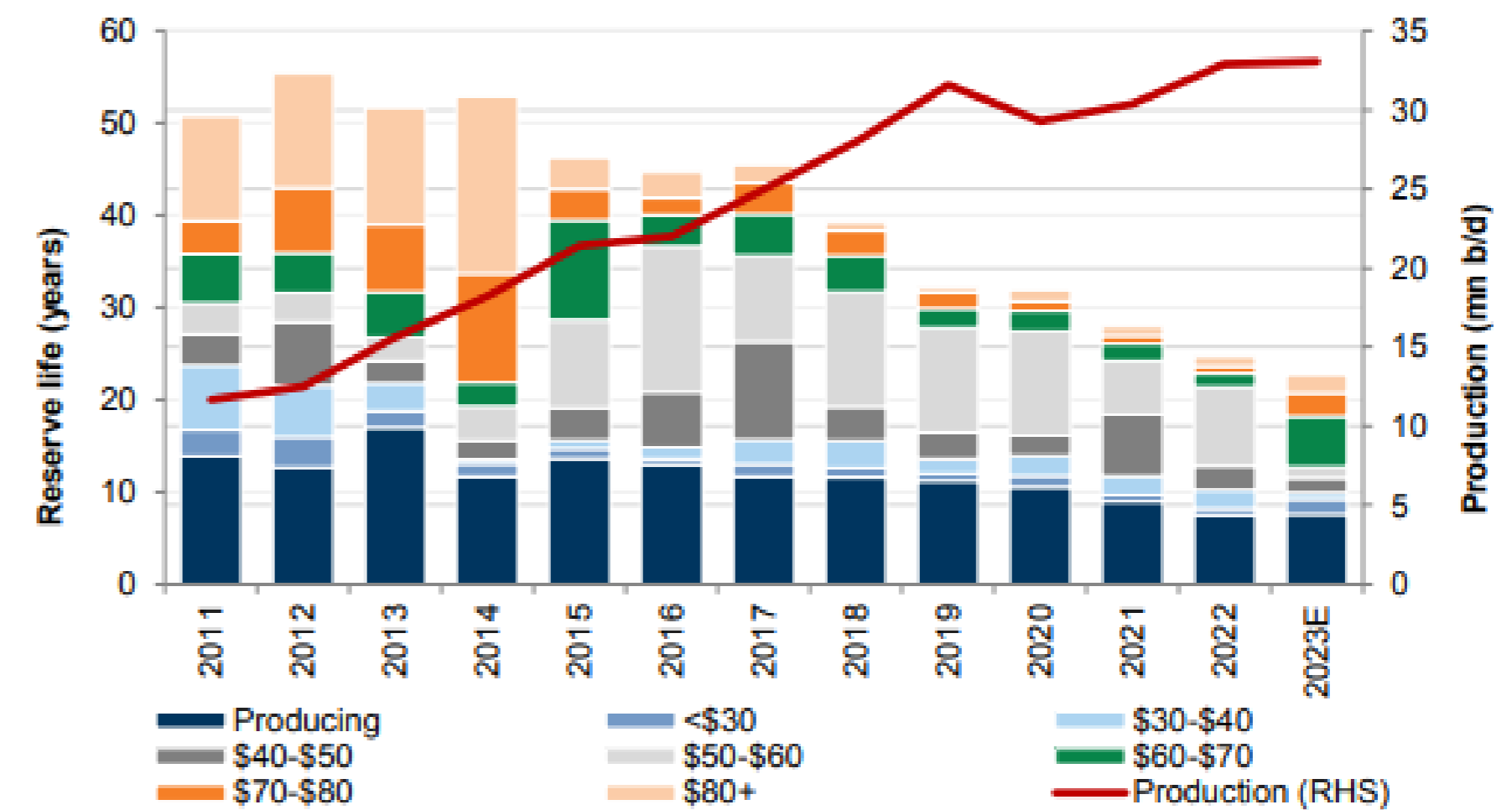


Exhibit 1: Seven years of energy under-investment have pushed the oil industry to more than halve its resource life since 2014...

Top Projects reserve life, by year of report and breakeven

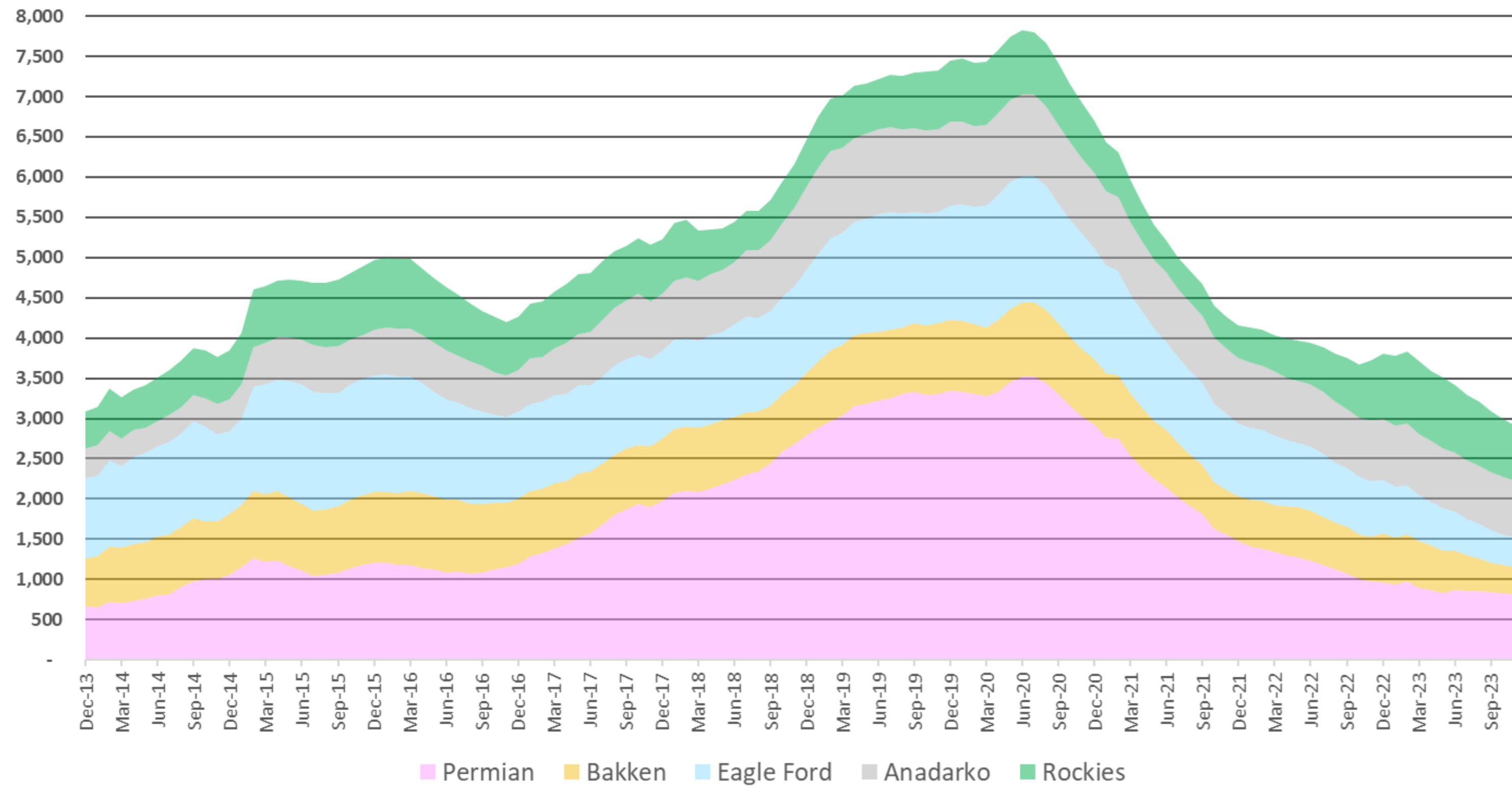


Source: Goldman Sachs Global Investment Research

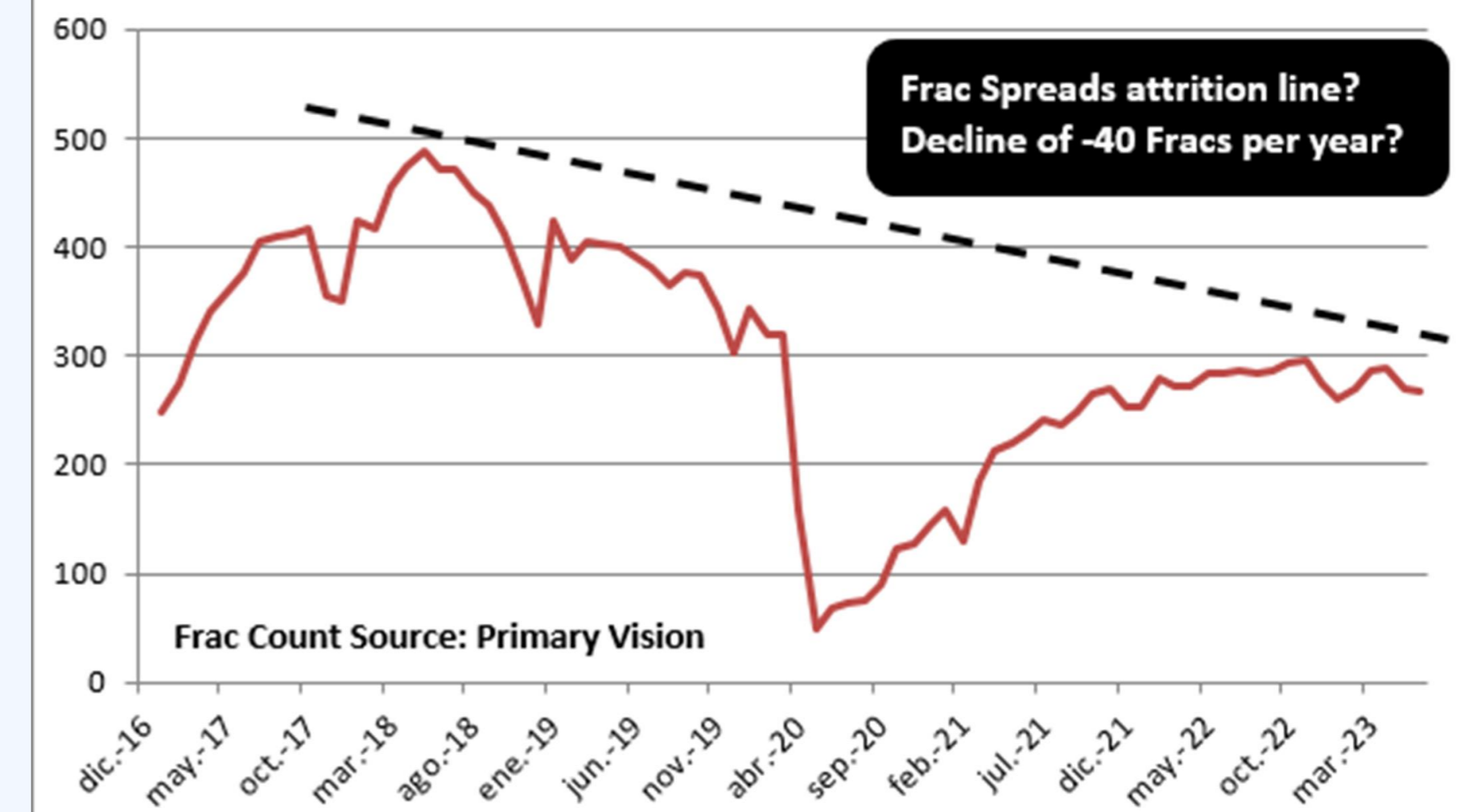
La producción fácil ya se ha acabado

Drilled & Uncompleted (DUC) Wells: Oil Basins

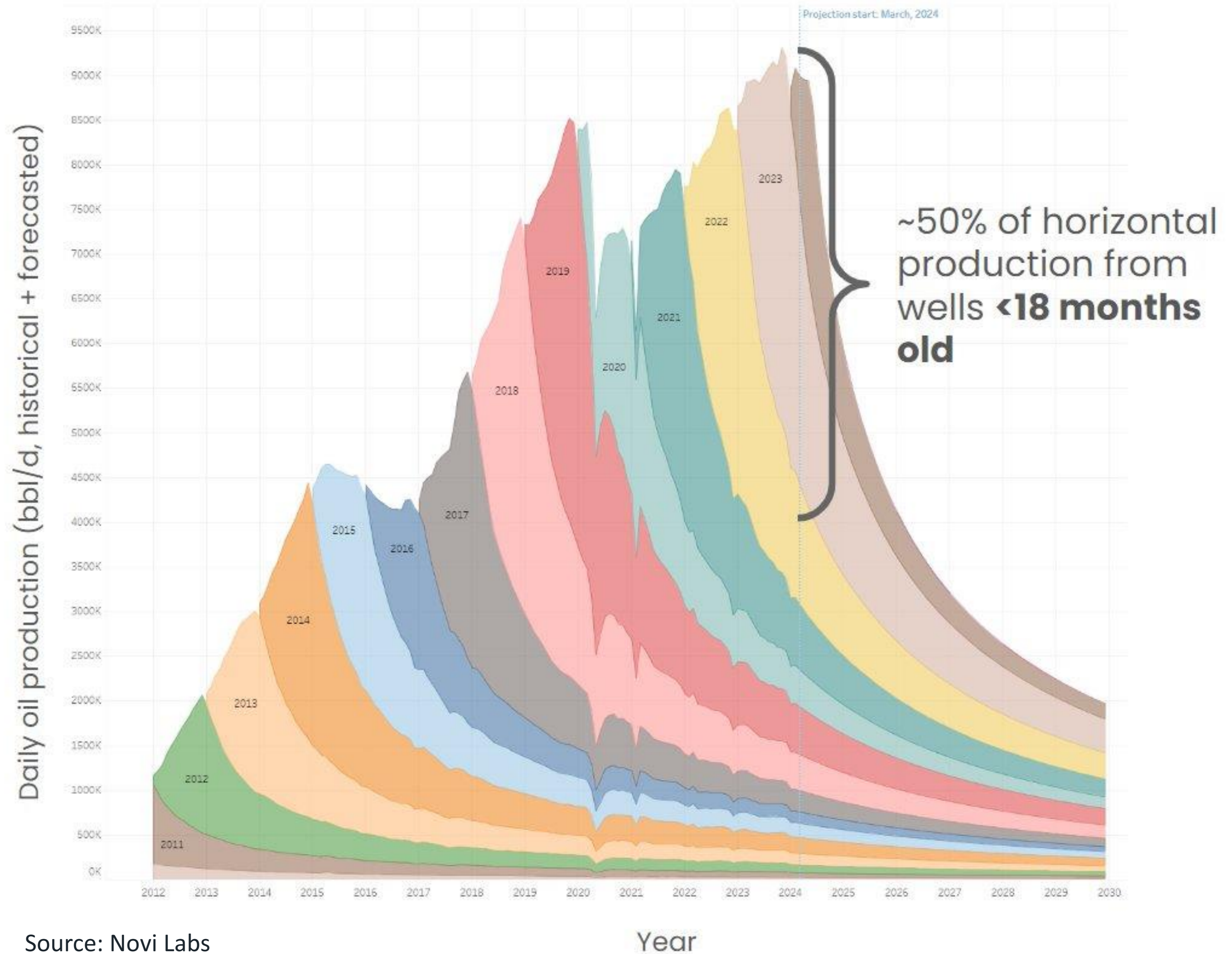
Via EIA, to November 2023



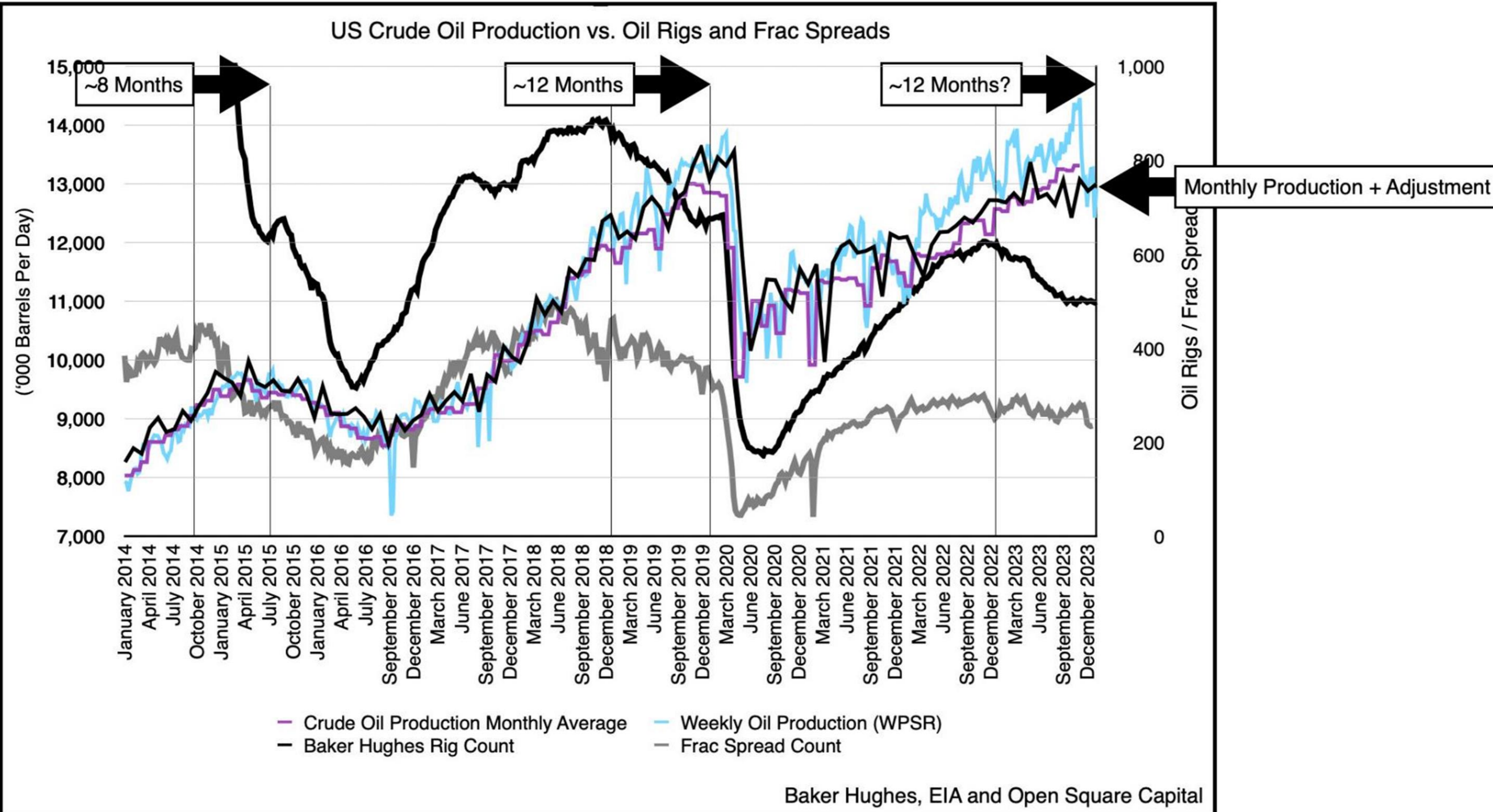
Frac Spreads



Los pozos
son cada
vez peores

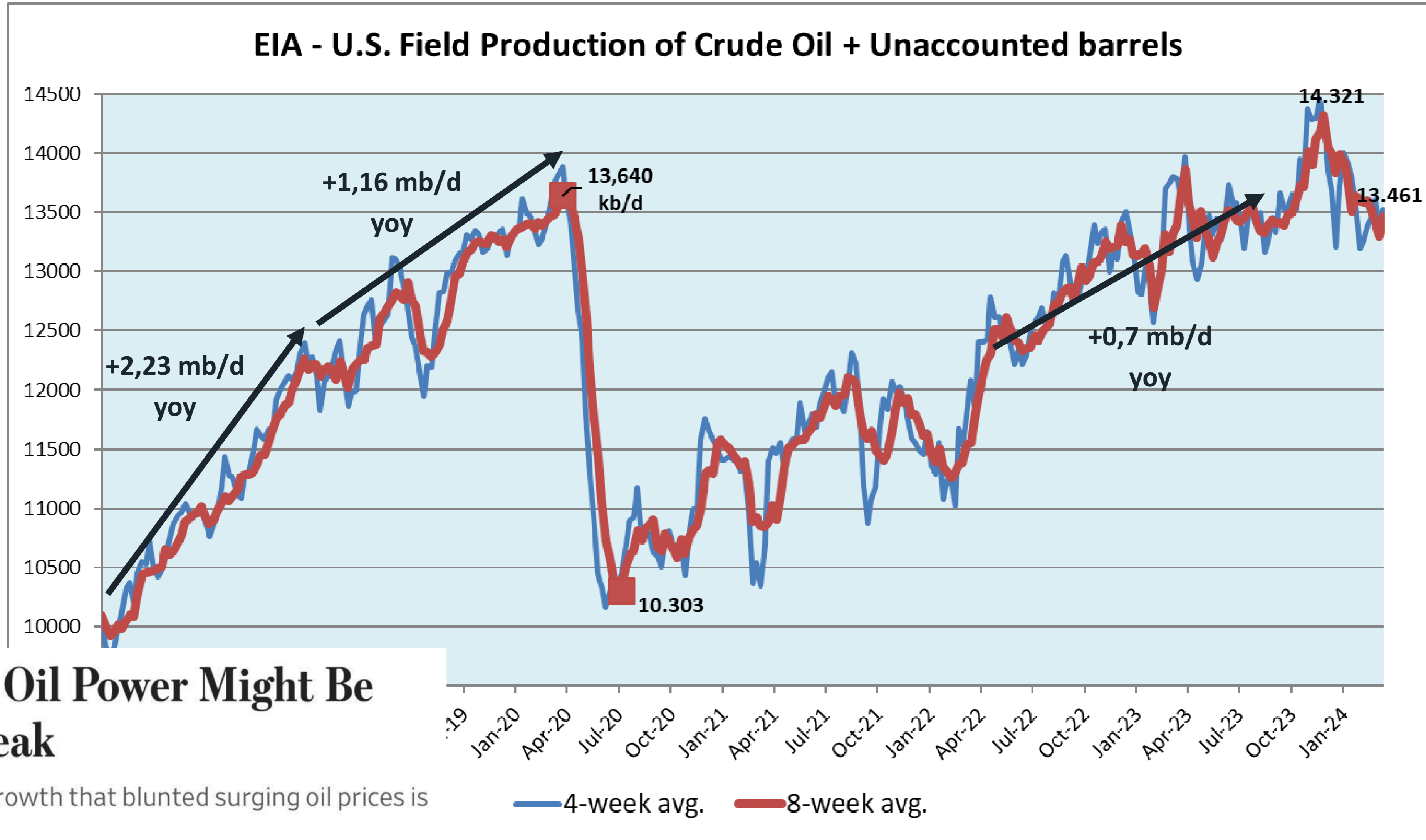


Source: Novi Labs



La producción descende unos 12 meses después del pico de Rig Count

La producción en USA está ralentizándose



America's Oil Power Might Be Near Its Peak

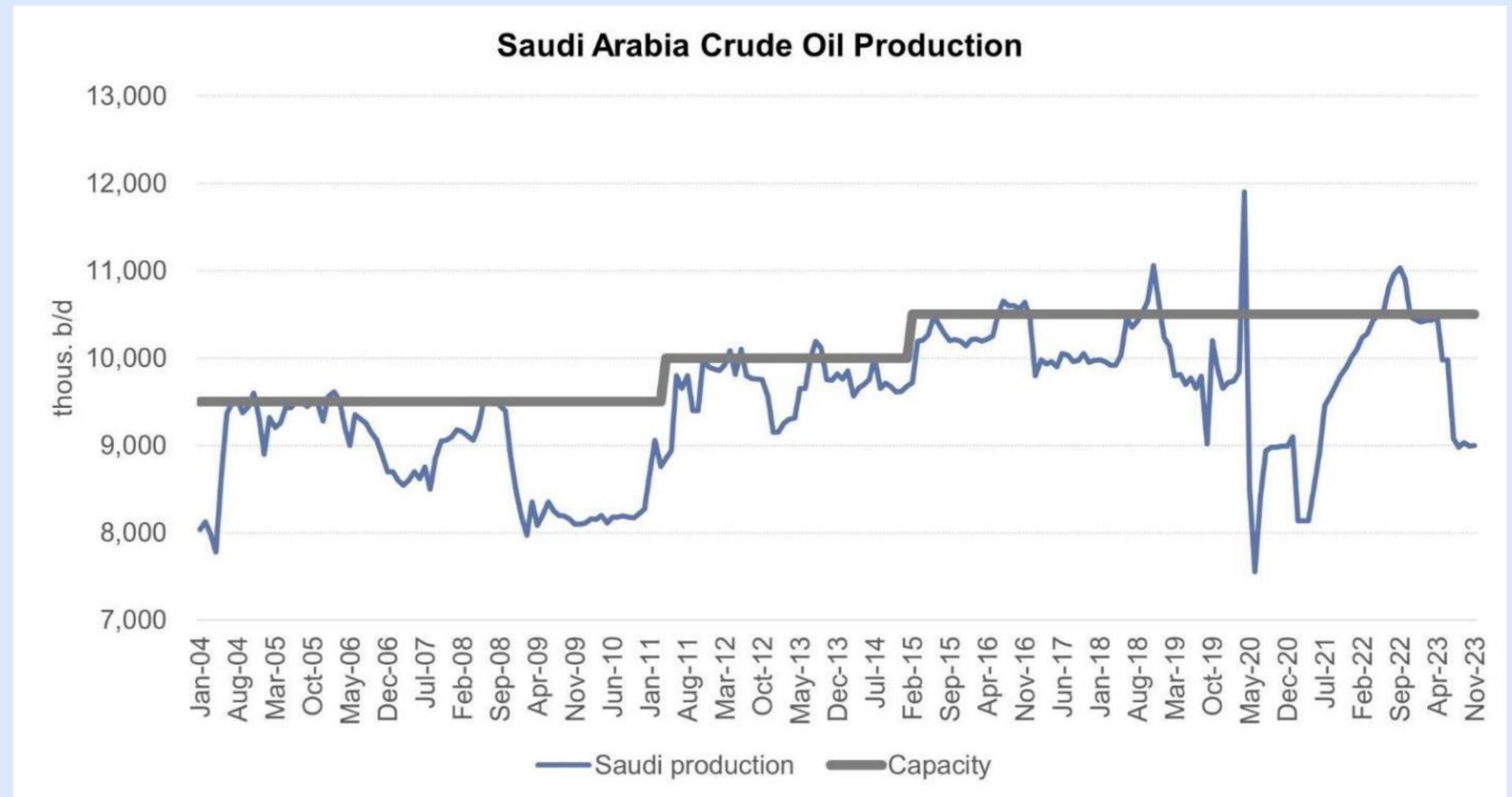
The production growth that blunted surging oil prices is dwindling

By [Bob Henderson](#) [Follow](#)

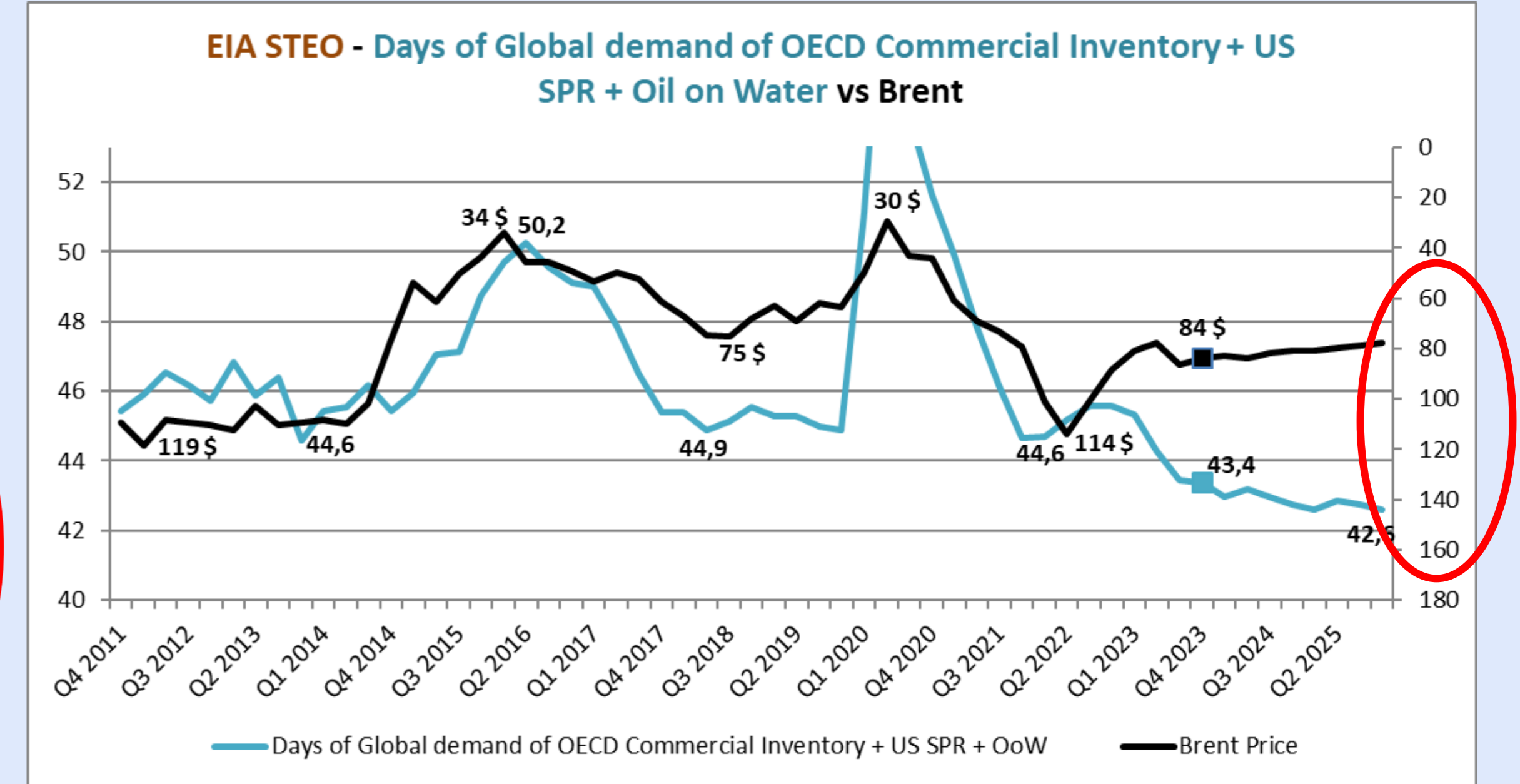
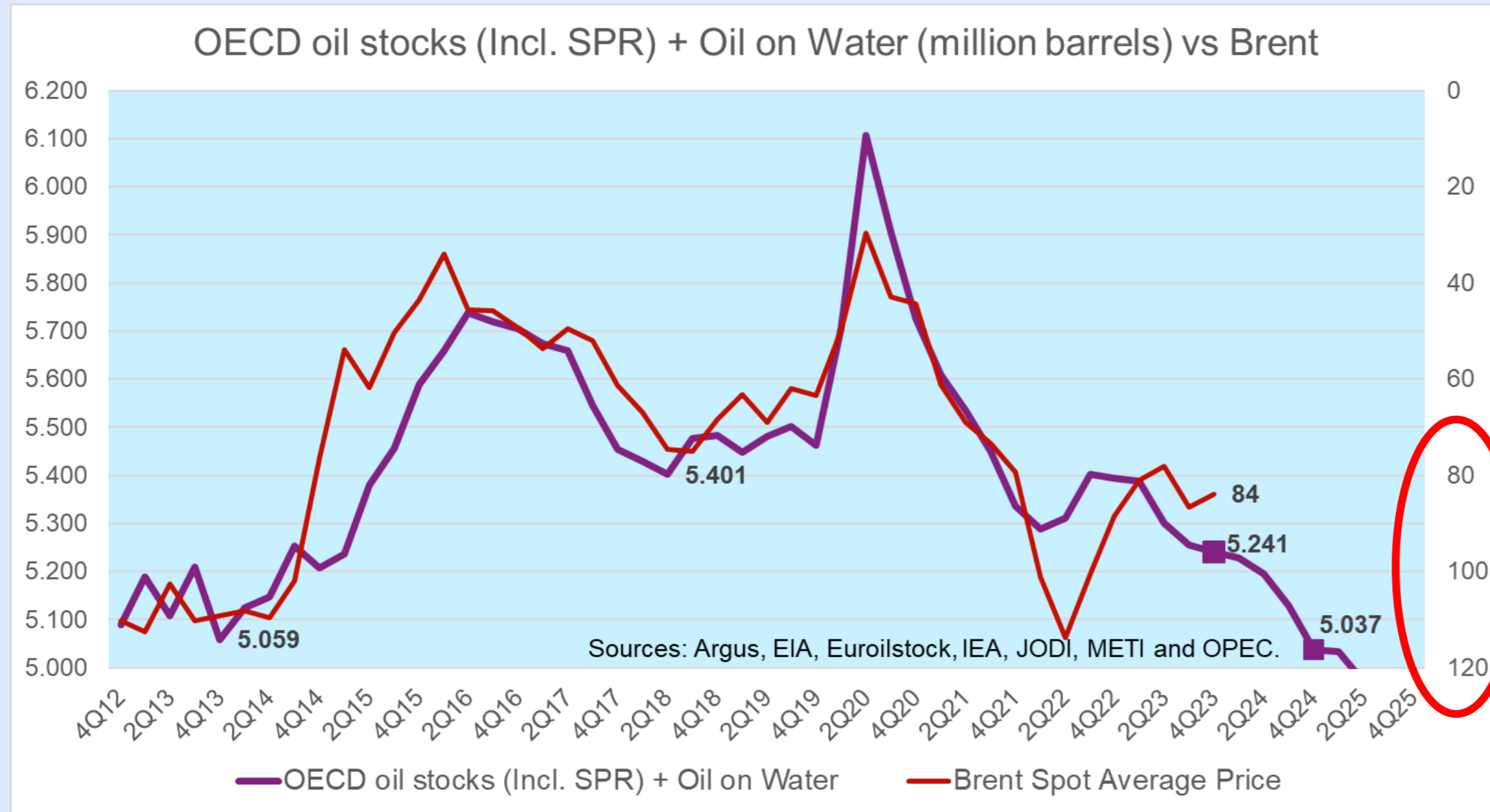
Feb. 19, 2024 at 5:30 am ET

Source: EIA, vía Jorge Arjona

Y la OPEC tiene recortes de +2,2 millones de barriles



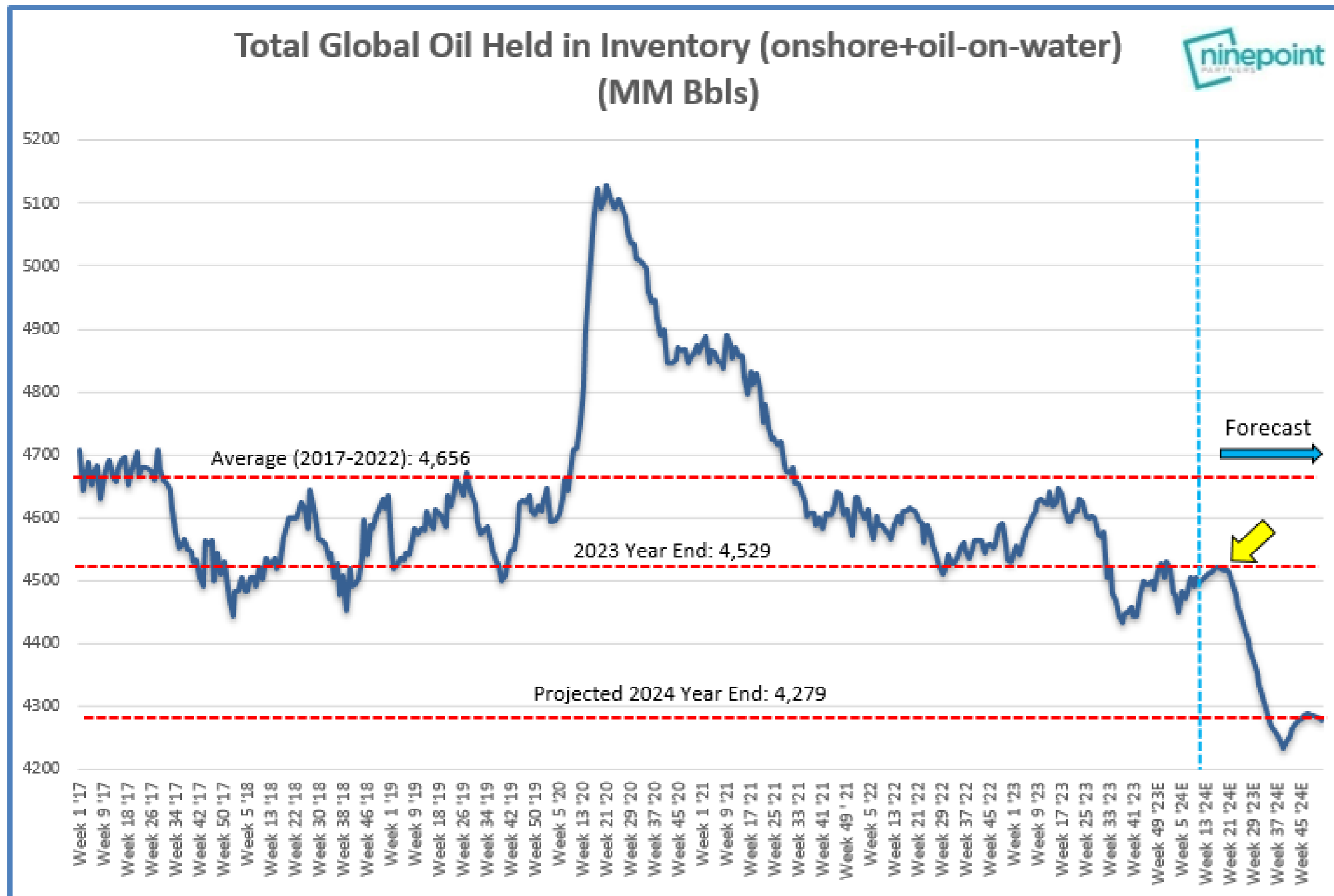
Inventarios = Oferta - Demanda



¿Por qué son importantes los inventarios?

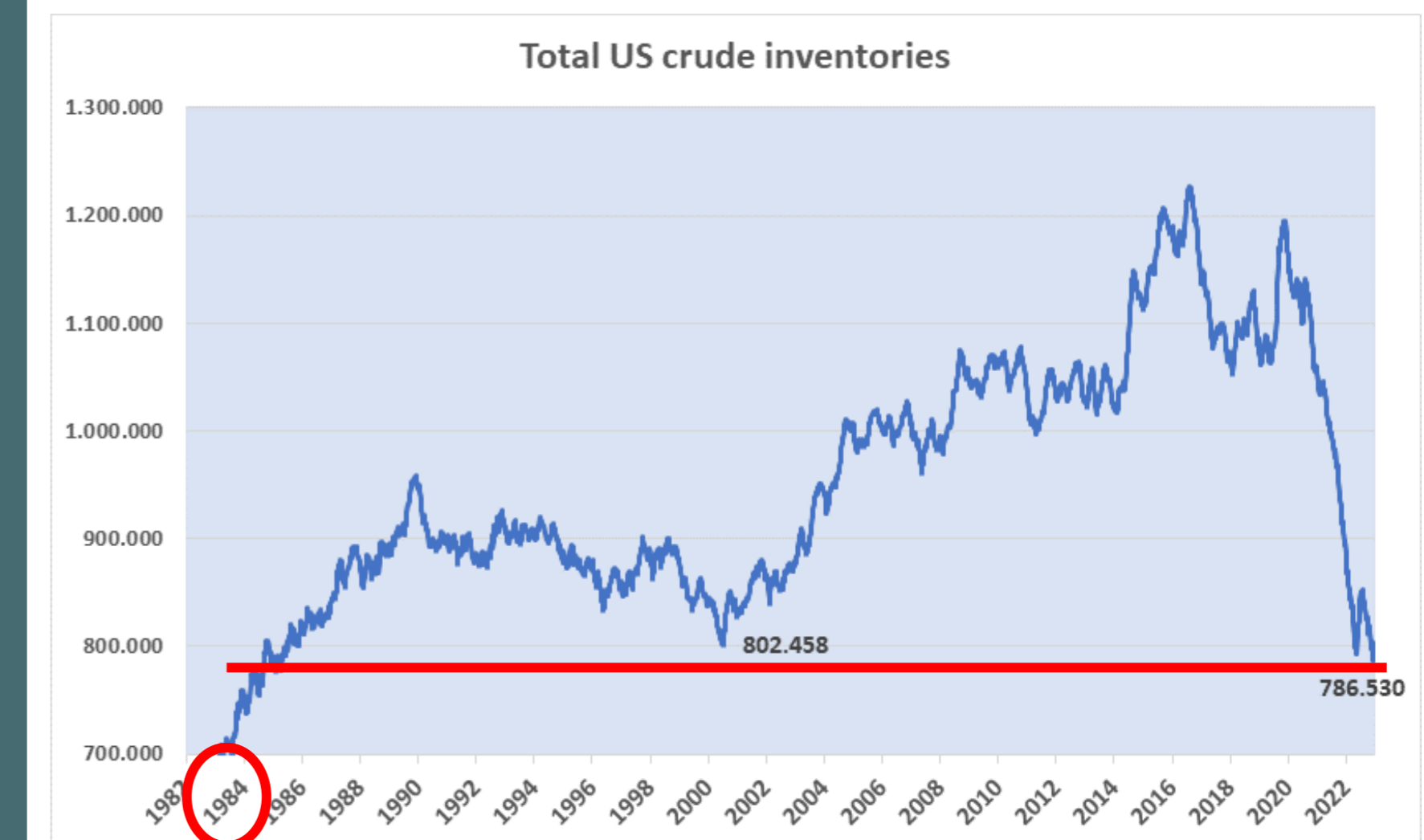
➤ El precio del petróleo sigue a los inventarios

¿Dónde estamos?

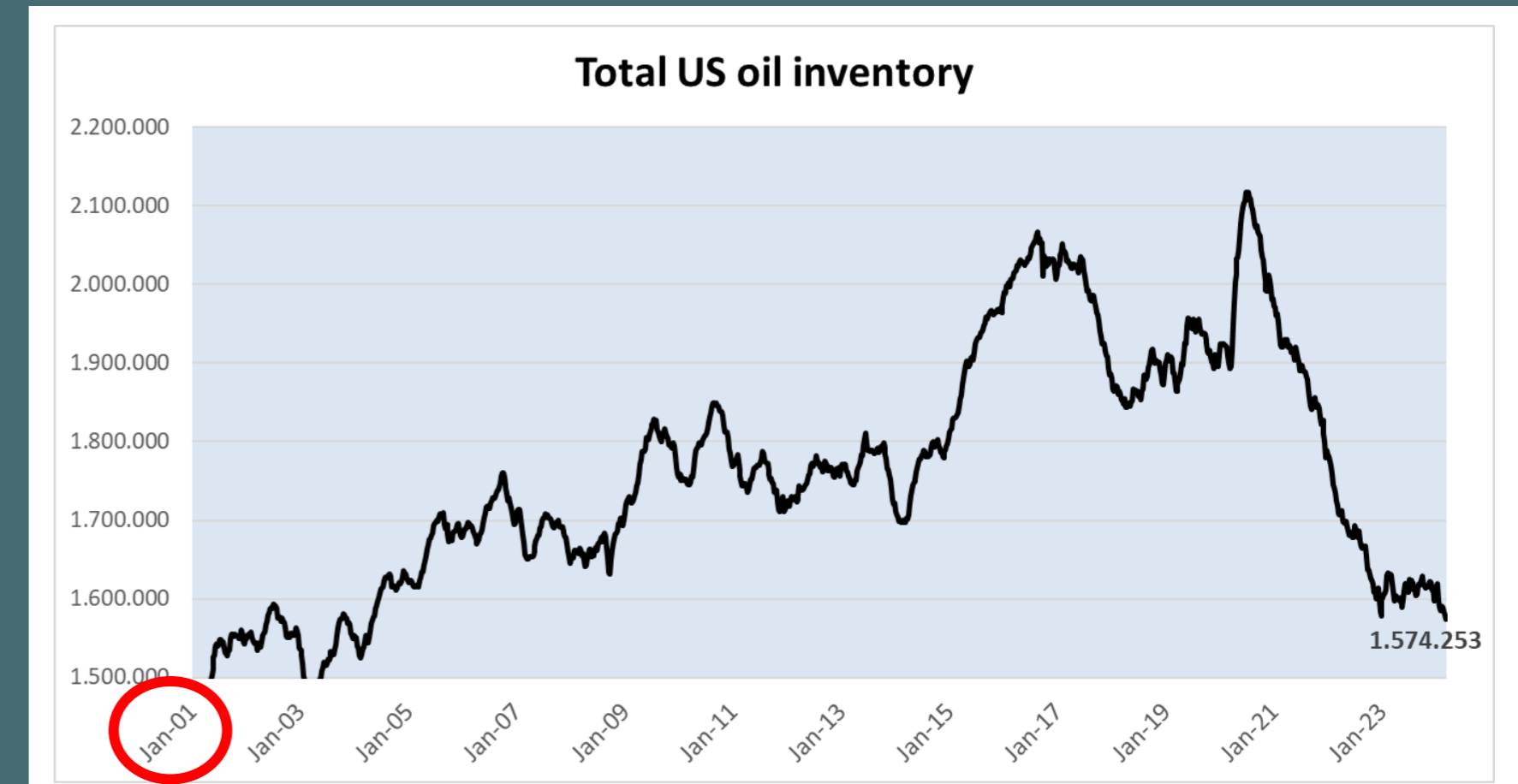


Source: Kpler, Energy Aspects, Ninepoint Partners

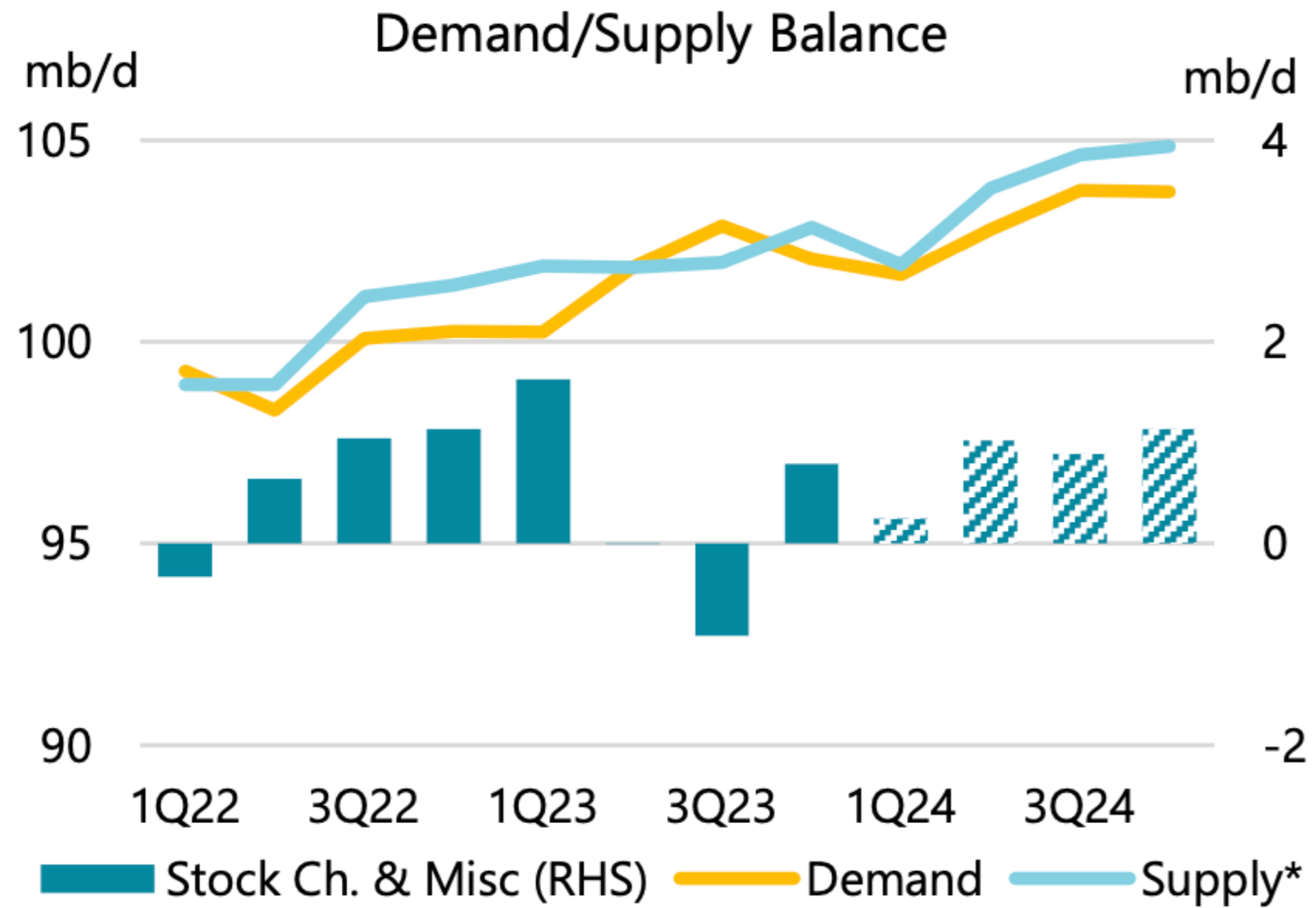
Assumptions: 1MM Bbl/d Saudi lollipop cut tapers in Q3/24, 2024 demand growth of 1.4MM Bbl/d to 103MM Bbl/d, Iran supply growth of +0.2MM Bbl/d 24/23, Non-OPEC production growth of 0.9MM Bbl/d (US = 0.4MM Bbl/d)



Source: EIA, vía Jorge Arjona

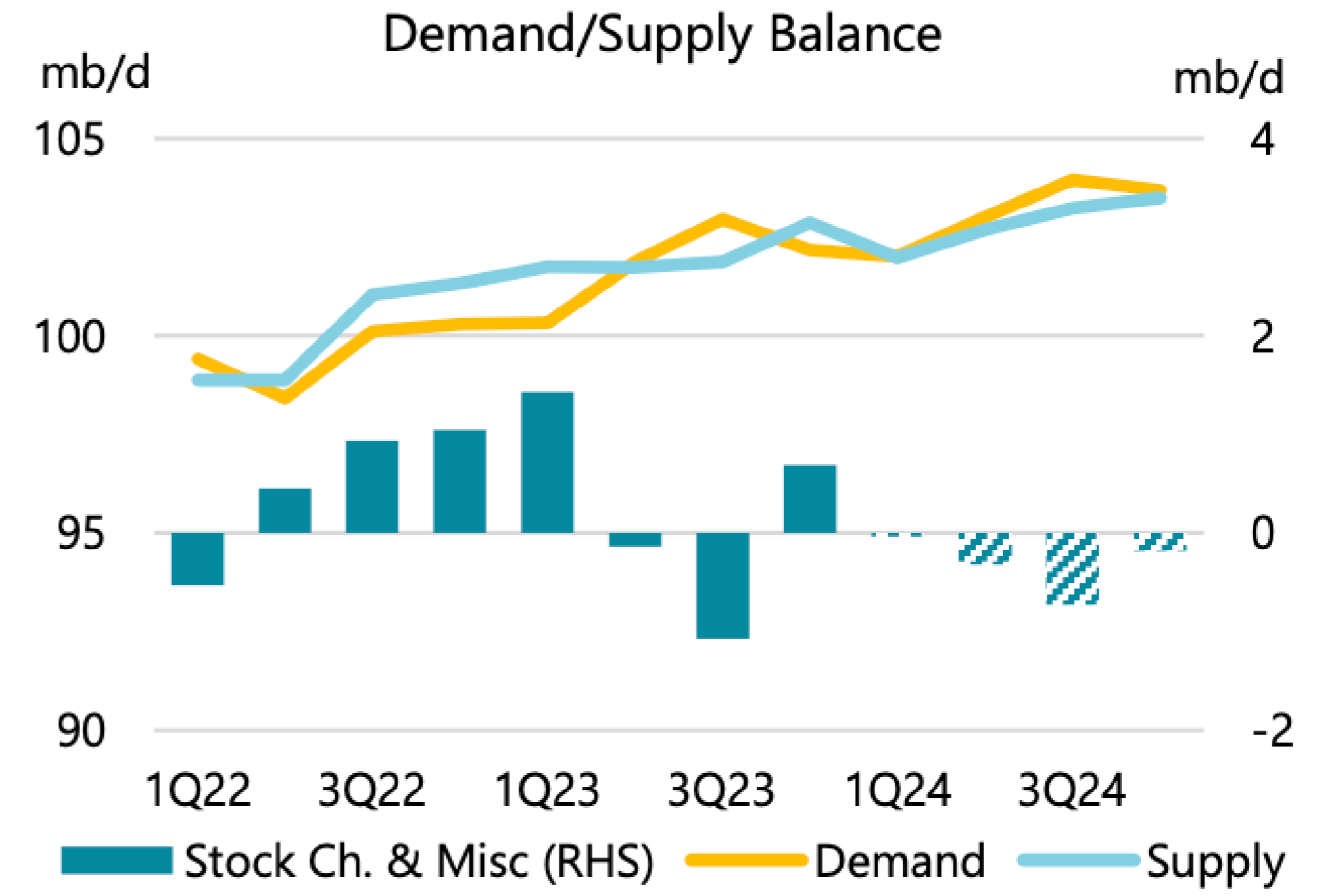


¿Y a dónde vamos?



* Assumes OPEC+ targets in place through 2024, voluntary cuts unwound in 2Q

Febrero 2024



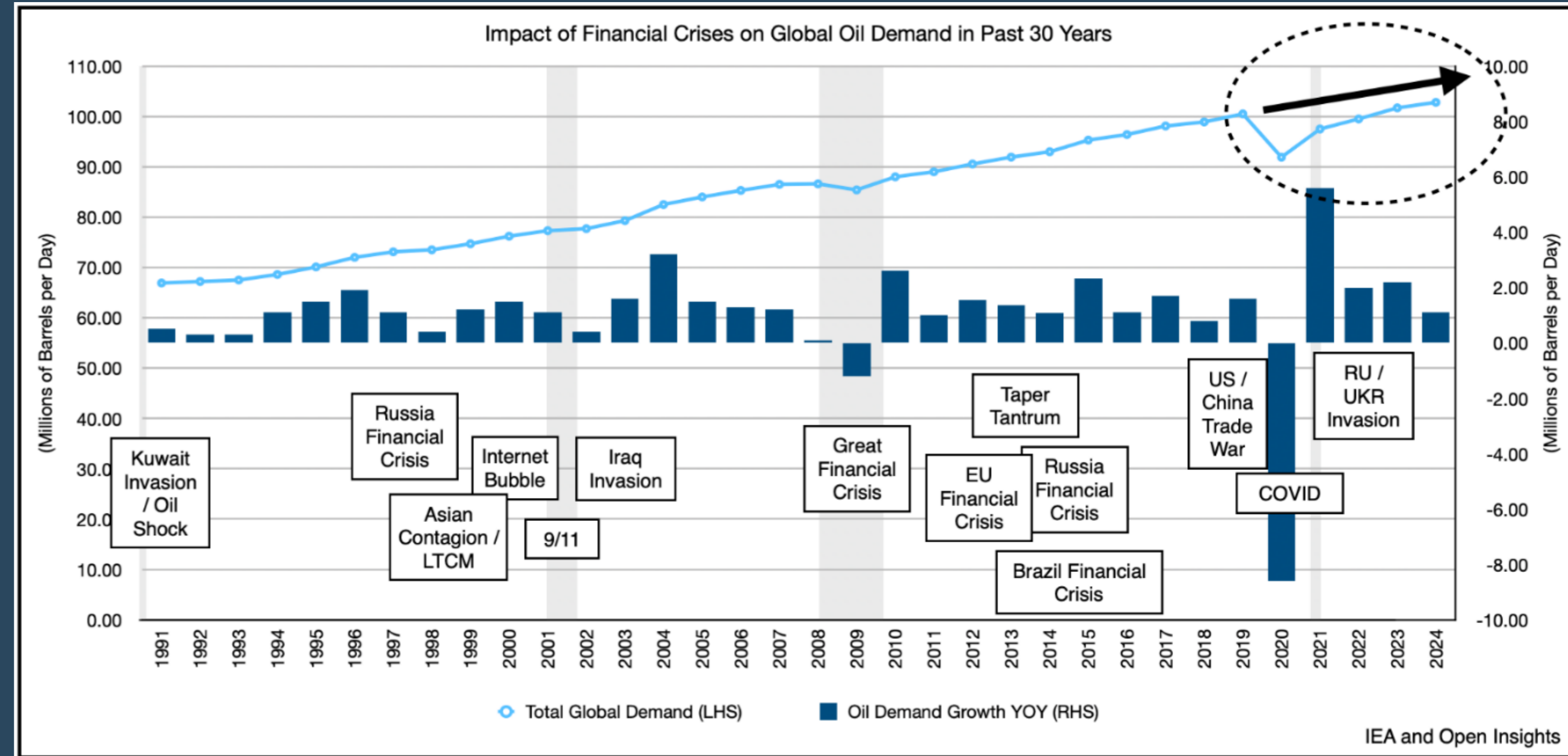
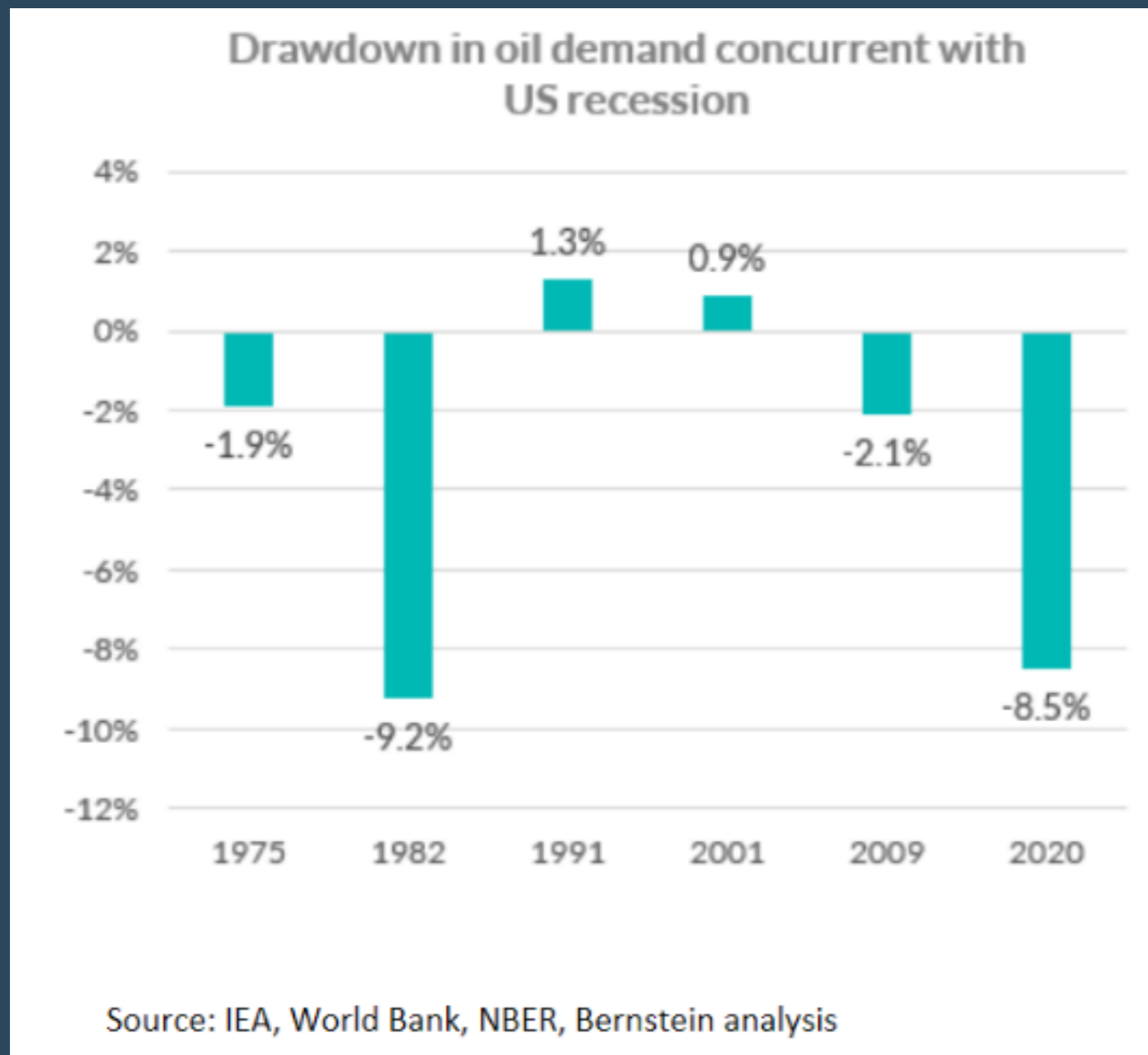
Note: Assumes OPEC+ curbs remain in place.

Marzo 2024

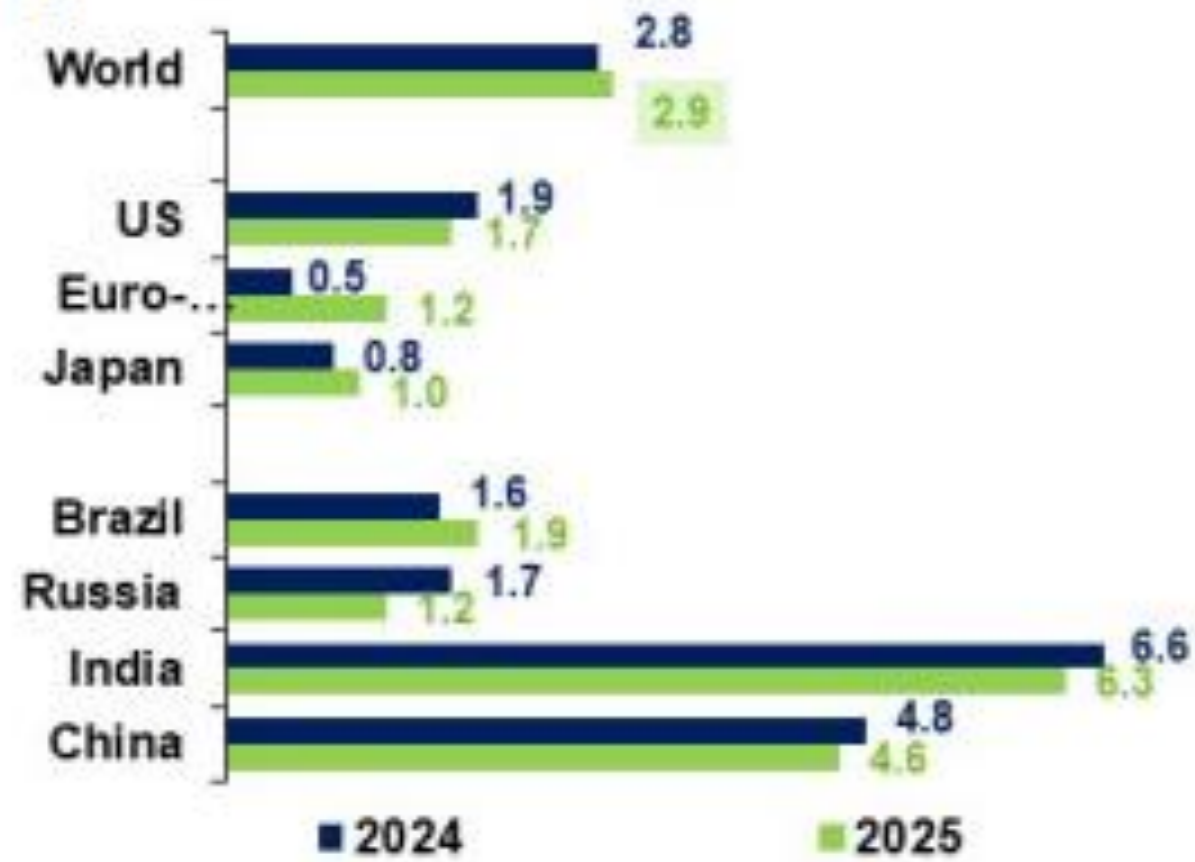
Source: IEA

Narrativa vs. Realidad

1. Viene una recesión

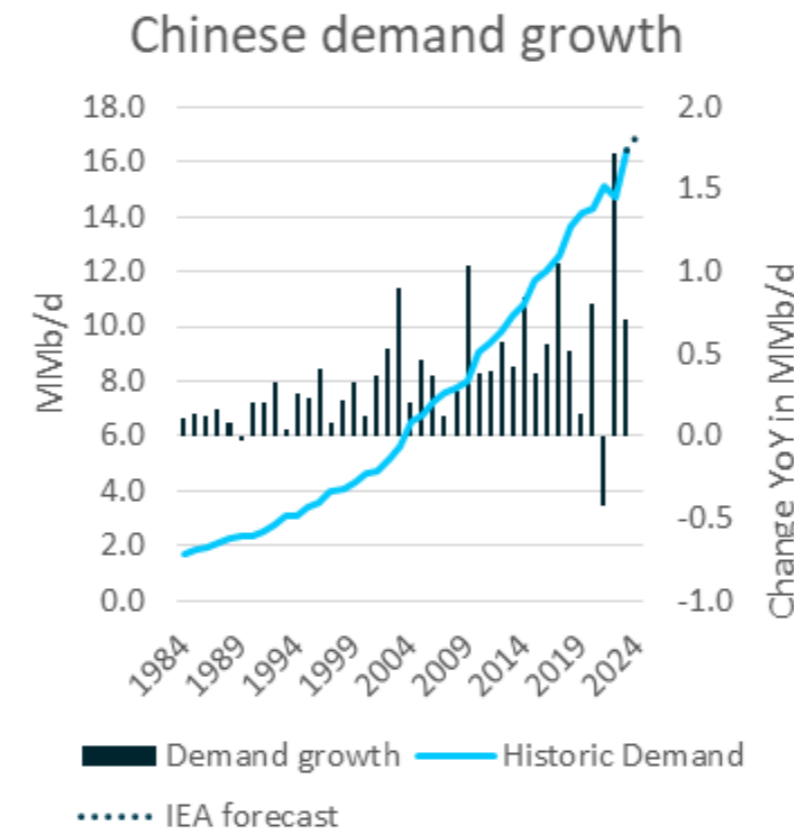


Graph 1: GDP growth forecast for 2024–25, % change y-o-y

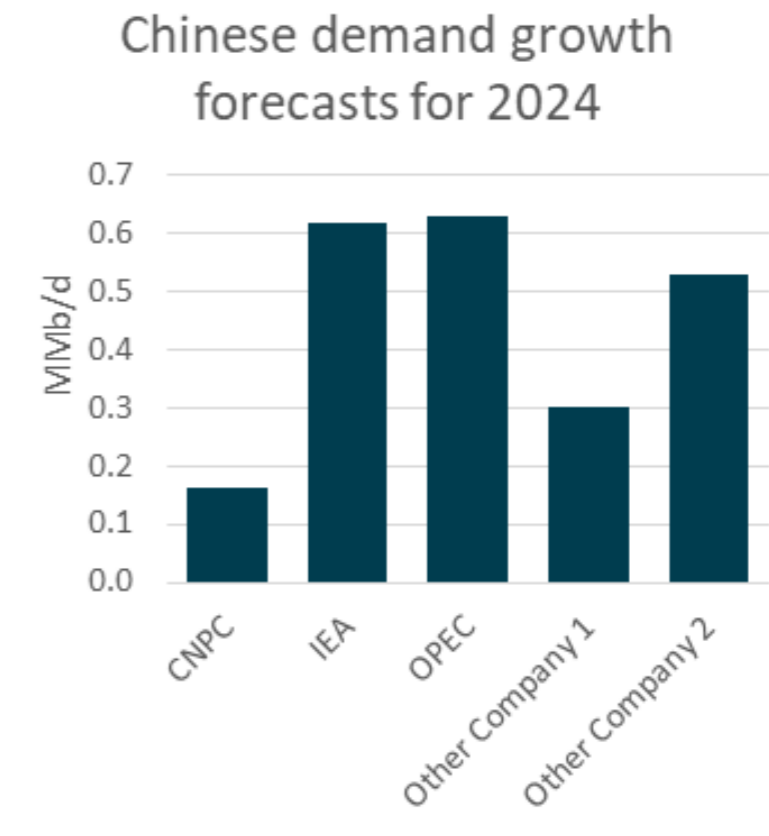


Note: 2024-2025 = Forecast. Source: OPEC.

2. China se está ralentizando



Sources: BTU Analytics – a FactSet Company, IEA (Data Updated March 14, 2024)



Sources: BTU Analytics – a FactSet Company, IEA, OPEC, CNPC, CNBC (Data Updated March 14, 2024)

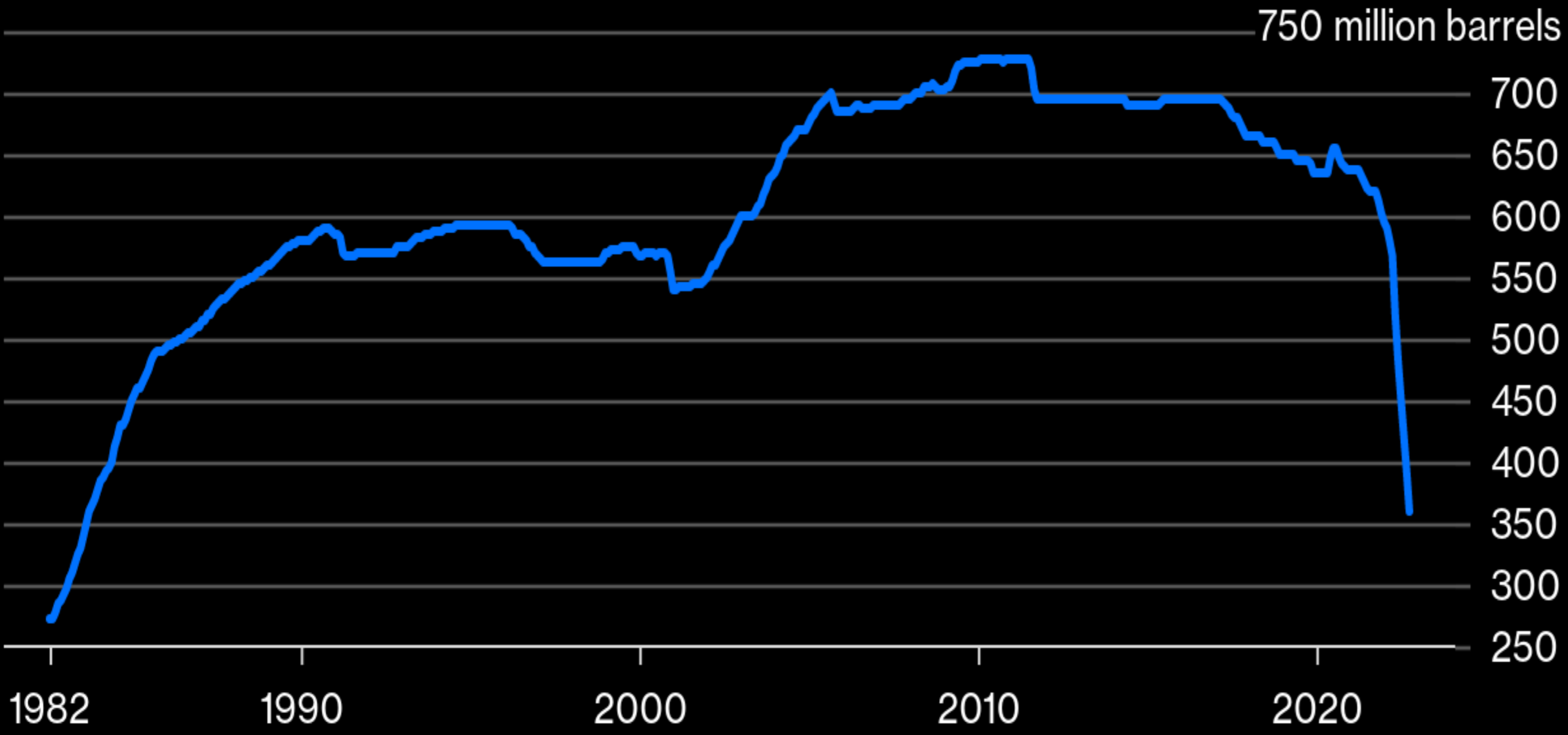
China's Jet Fuel Demand to Surge Demand from overseas flights to jump 74% this quarter



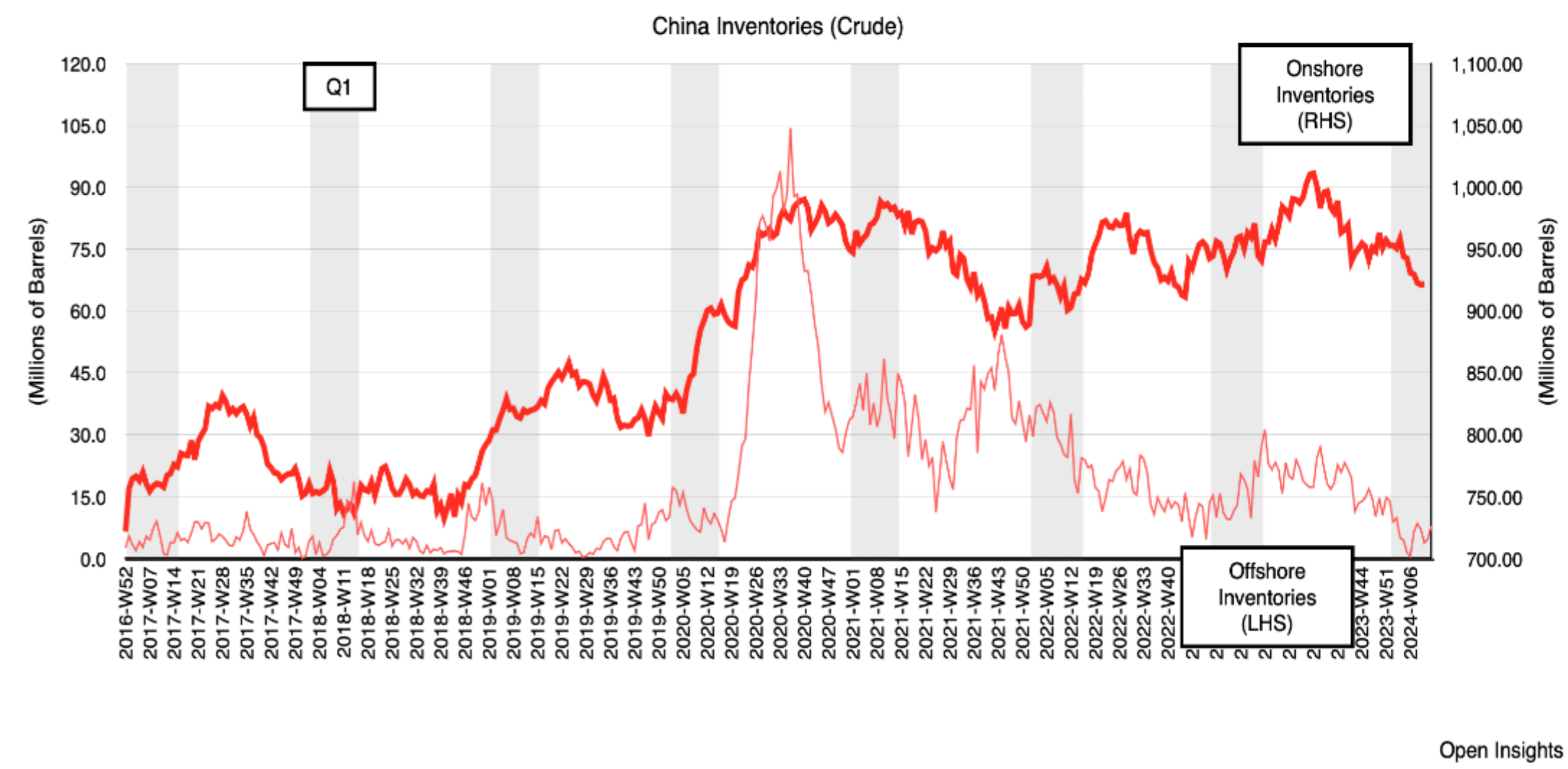
Source: BloombergNEF
Demand is allocated to the departure airport and does not account for load factor or inefficiencies and excludes cargo flights (As of April 21 flight schedules)

Oil Piggy Bank

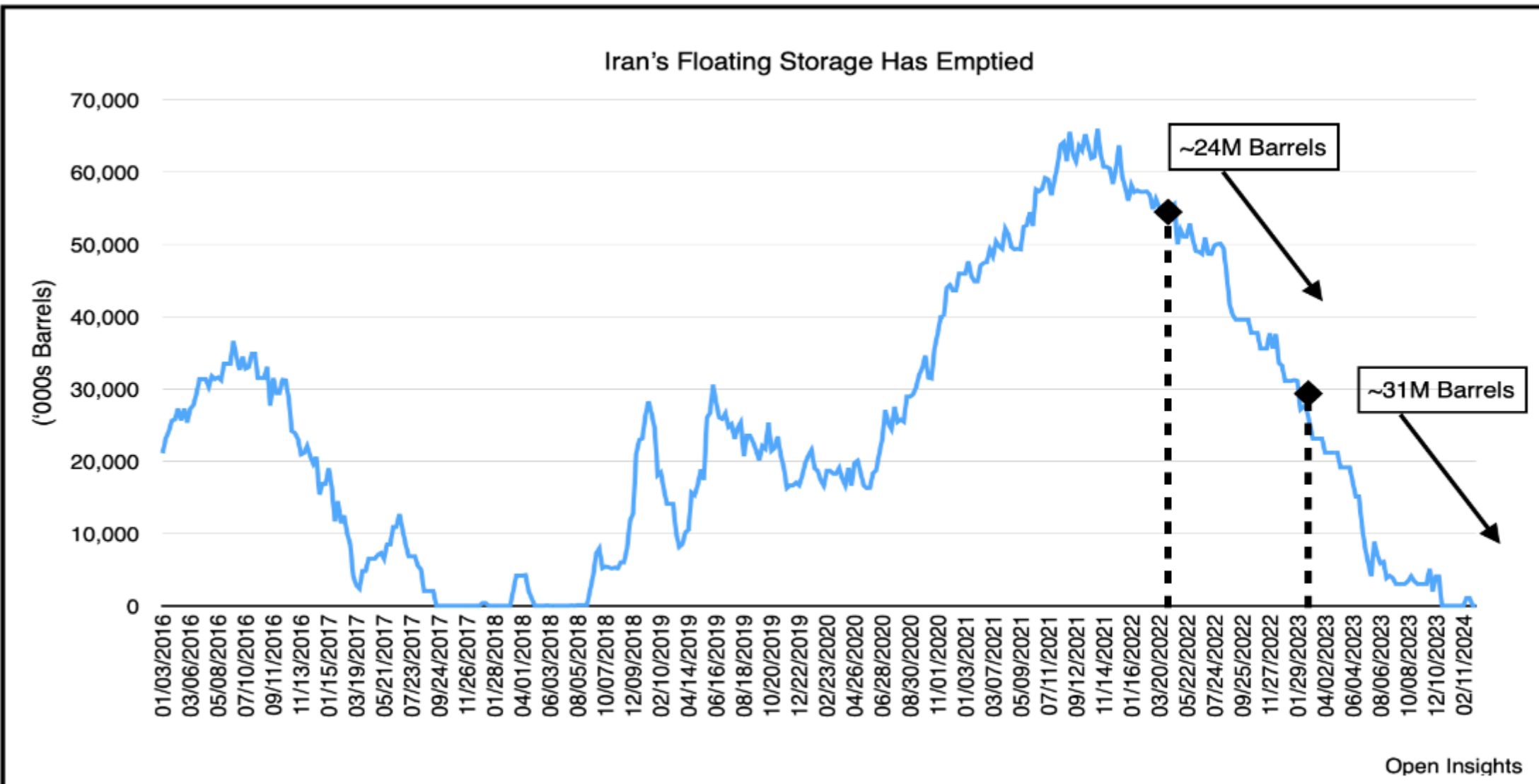
By October, the US Strategic Petroleum Reserve will shrink to a 40-year low as the White House taps it to put a lid on global oil prices



Source: US Department of Energy
 Source: Jun-Oct 2022 is forecast based on releases already pre-announced



Open Insights



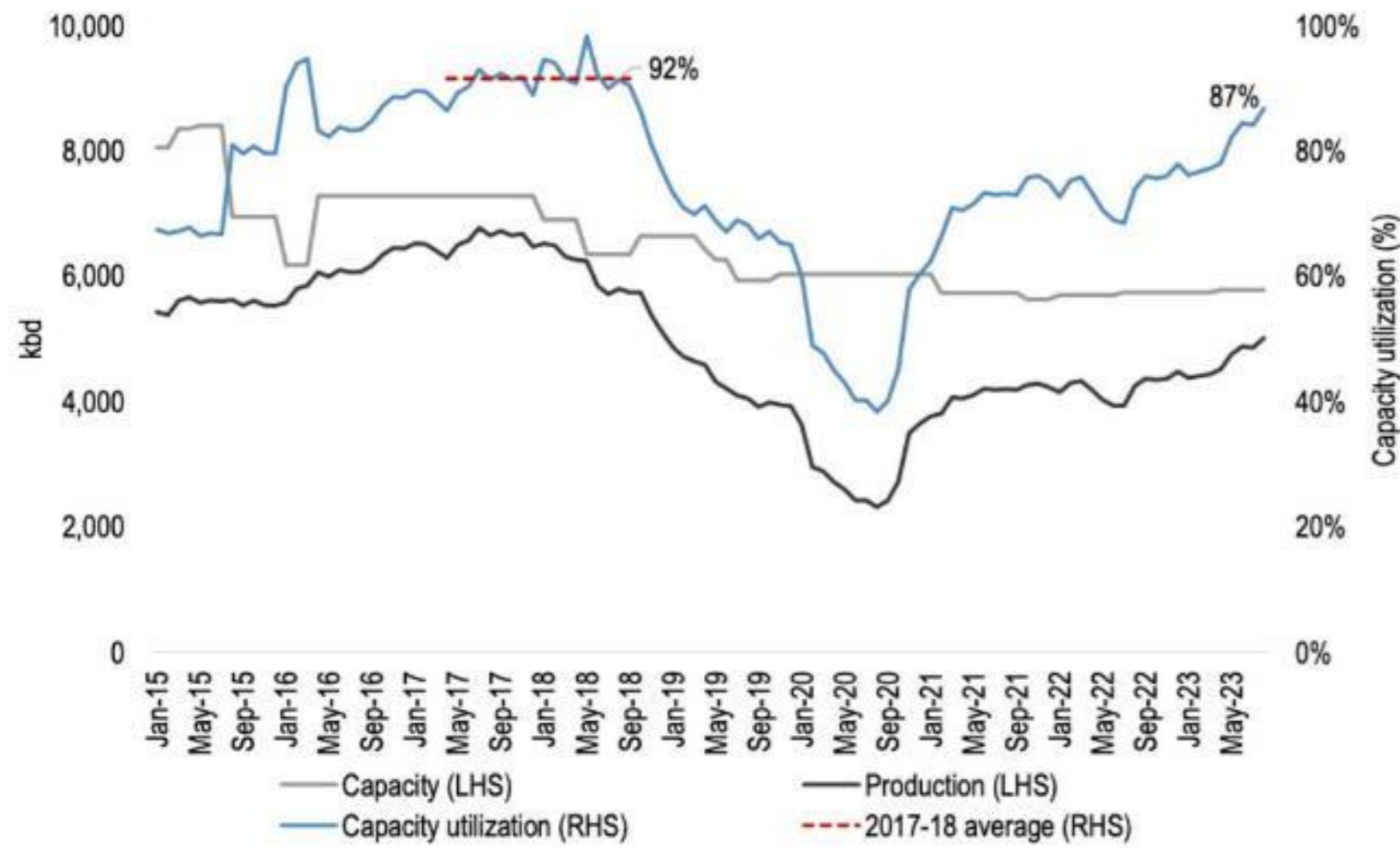
Open Insights

3. Nuevos SPR Releases



4. La OPEC se desmiembra

Figure 23: Iran, Venezuela and Libya are nearing their maximum production capacity

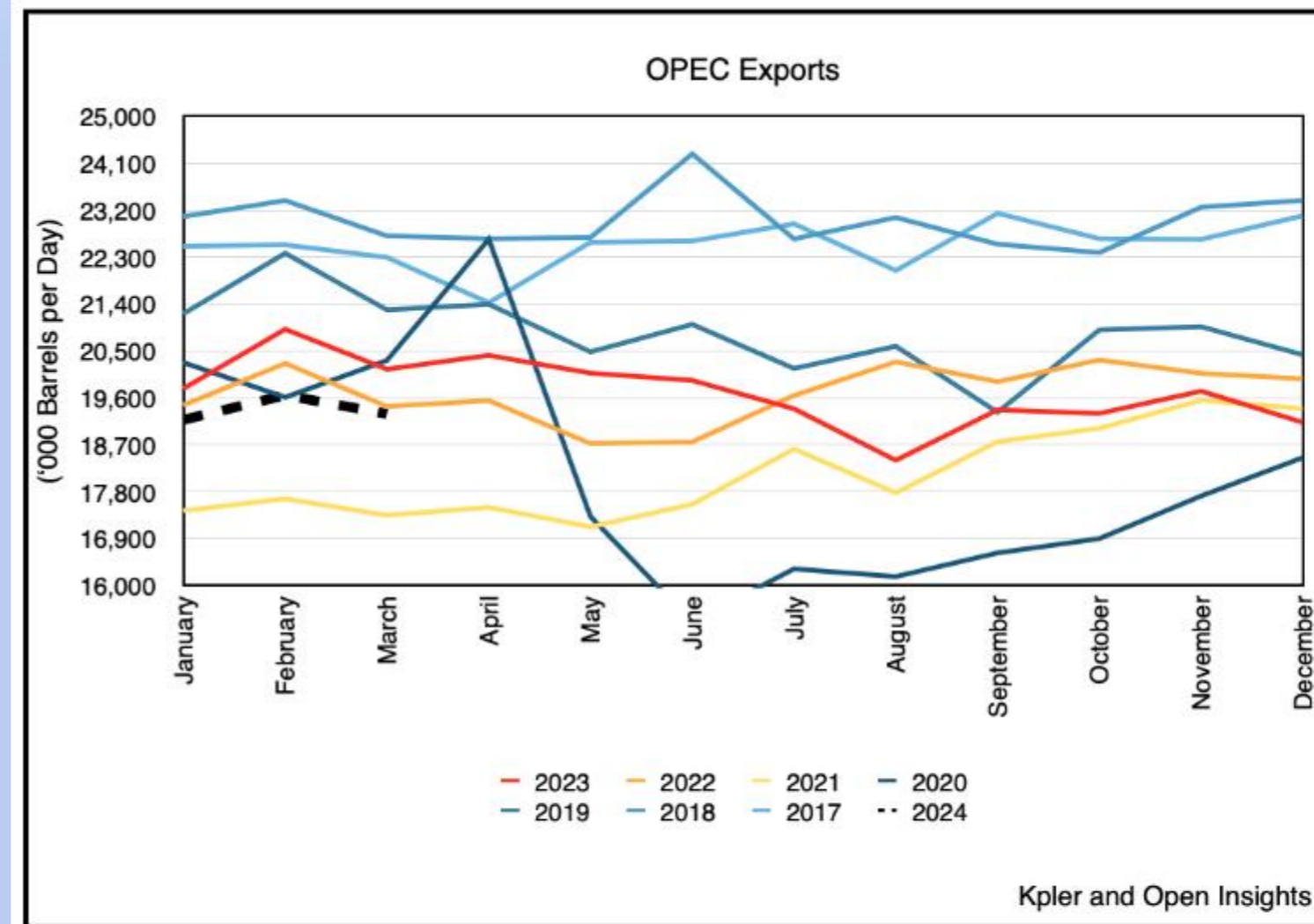


Source: Bloomberg Finance L.P. and J.P. Morgan Global Energy Strategy

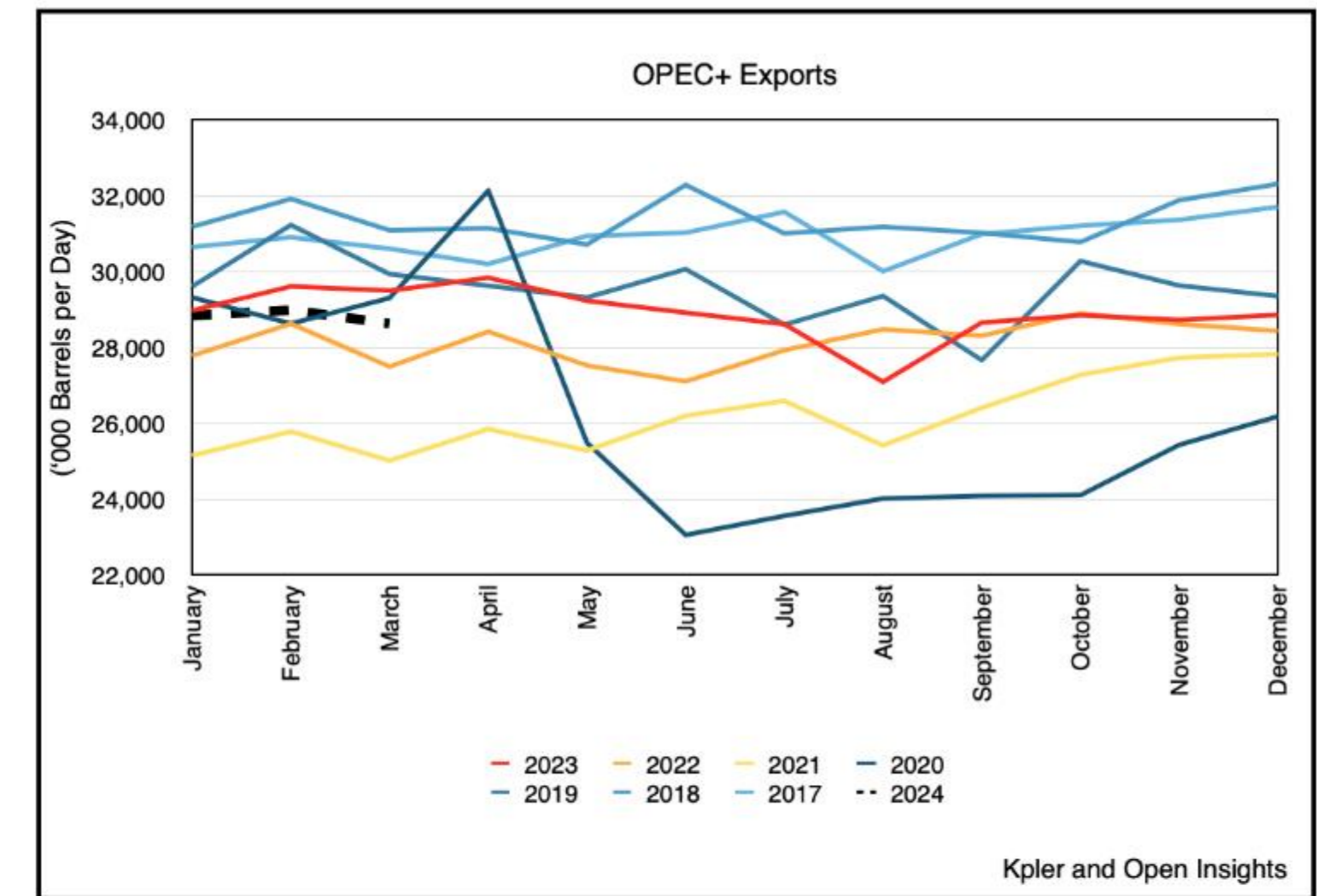
Novak: Russia will cut oil output in Q2 to catch up with other OPEC+ countries

By Olesya Astakhova

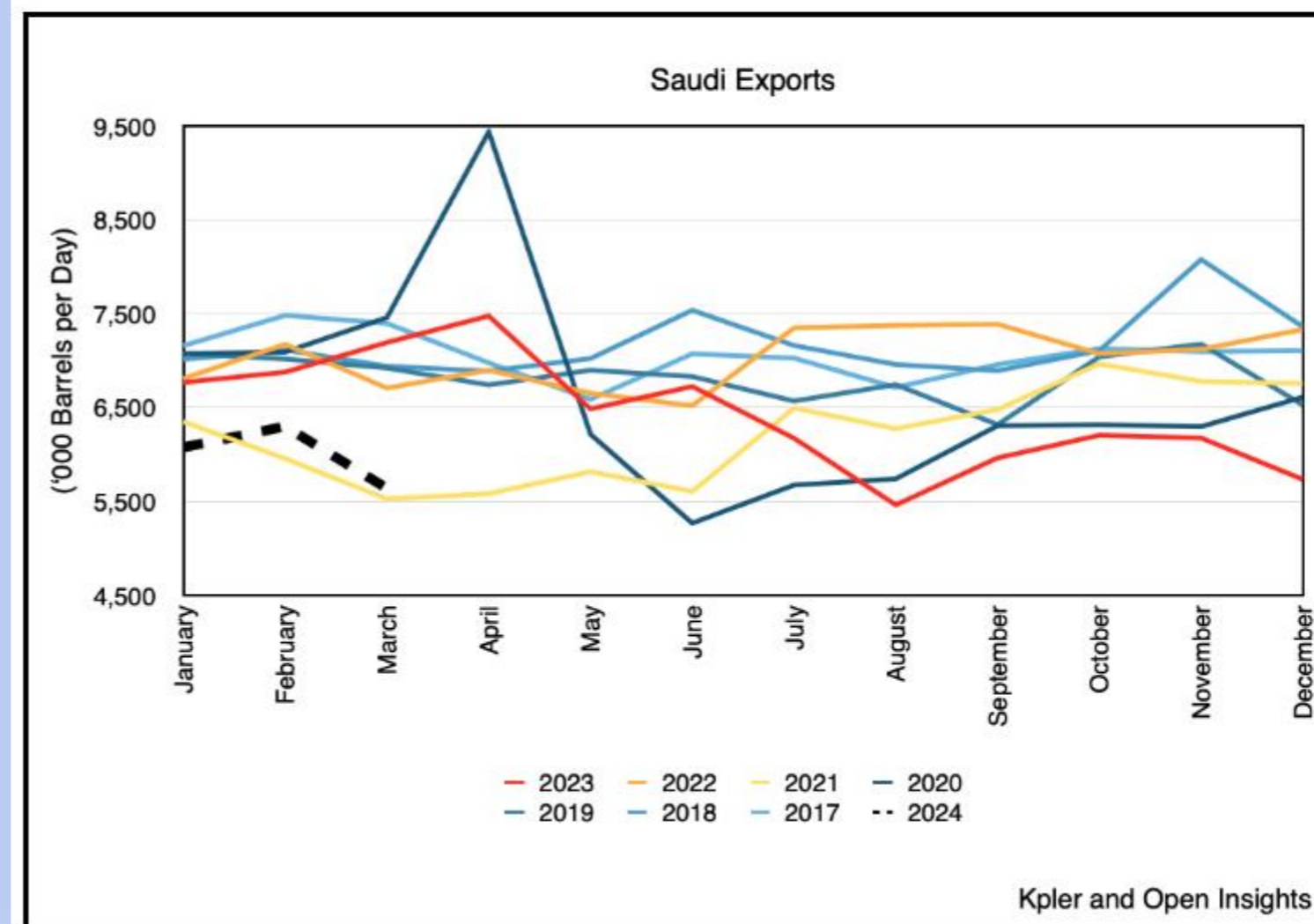
March 29, 2024 12:10 PM GMT+1 · Updated 3 days ago



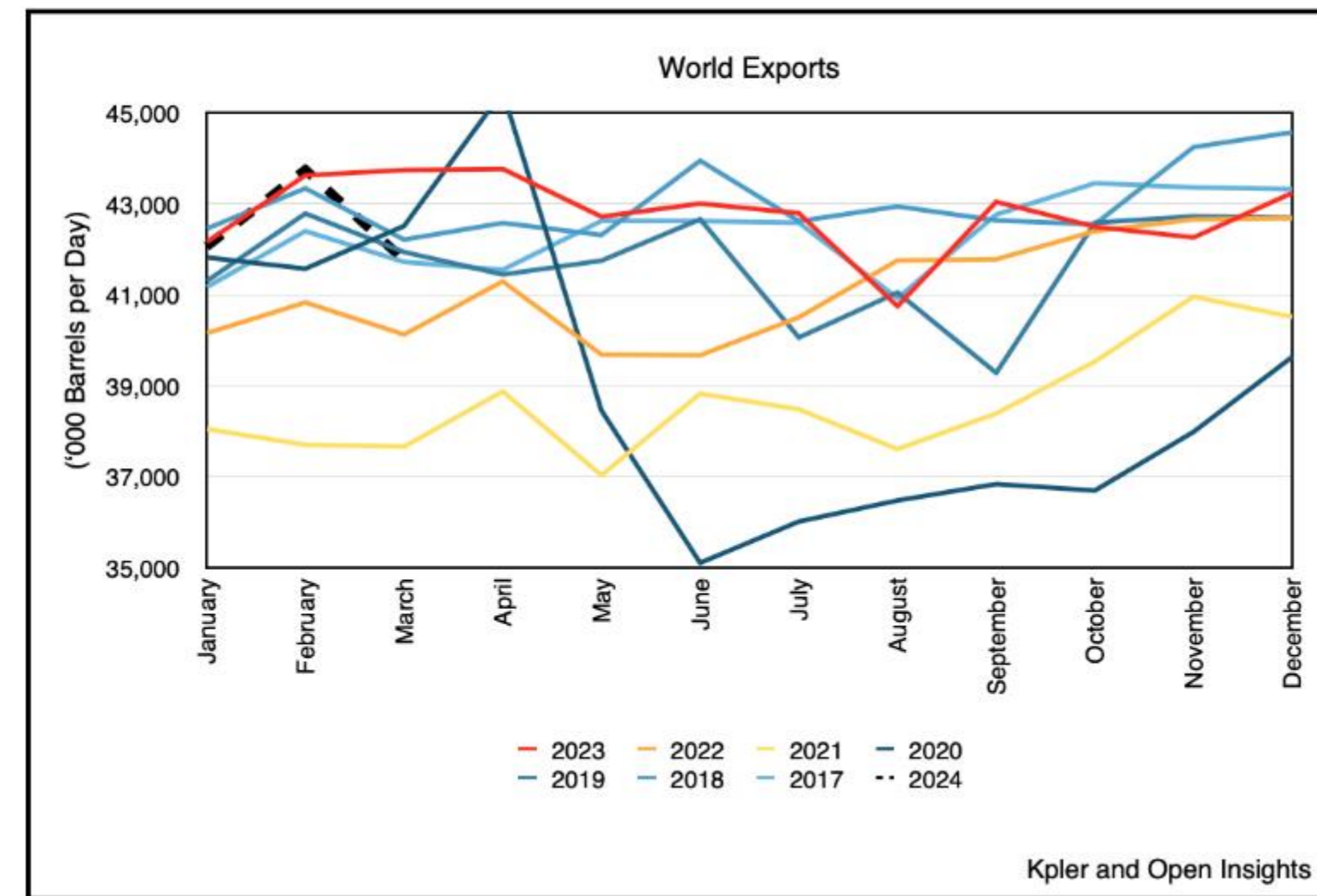
Kpler and Open Insights



Kpler and Open Insights



Kpler and Open Insights



Kpler and Open Insights

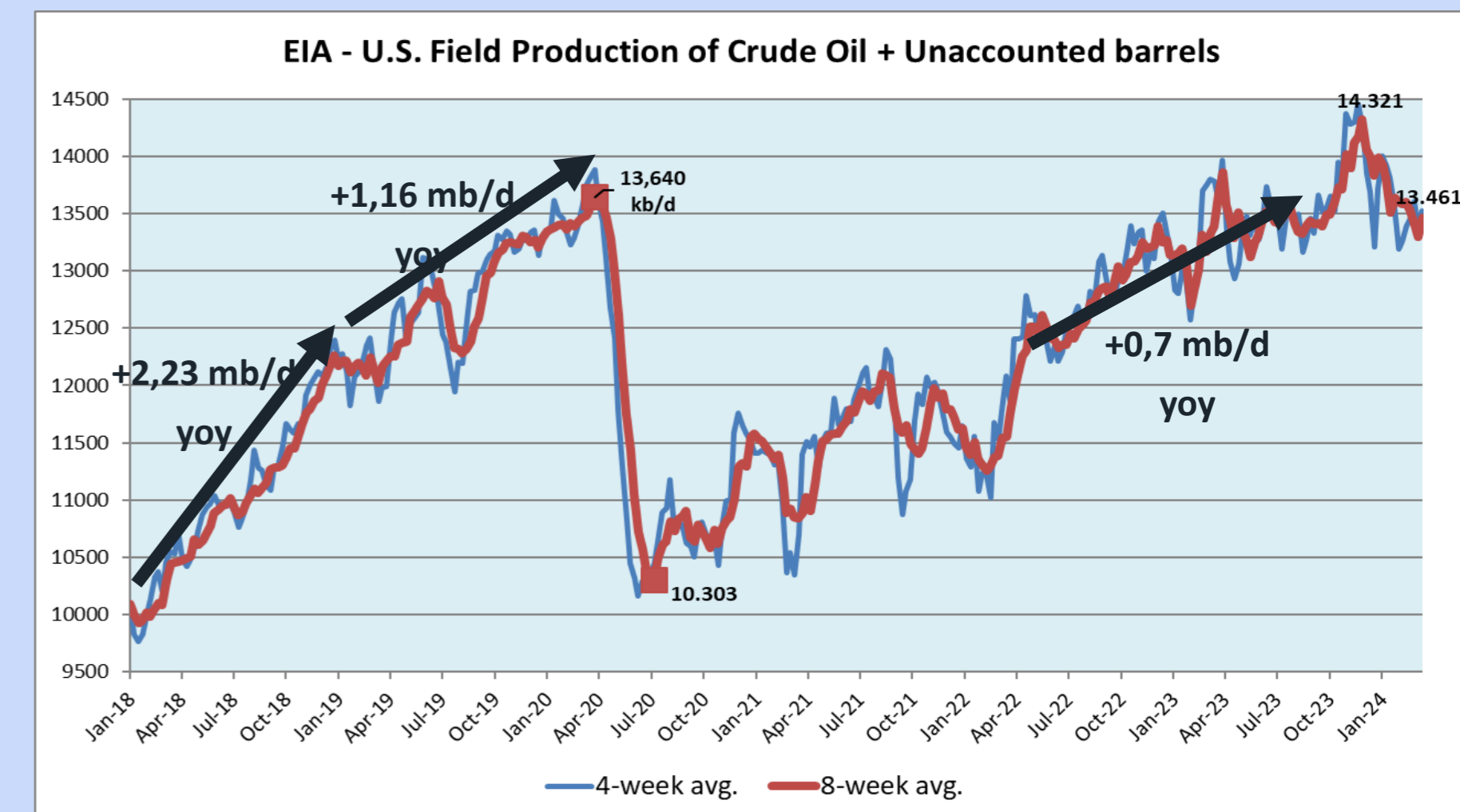
Which companies have driven U.S. oil production growth?

Shale production from **Majors**, **Public Independents**, and **Private** companies have taken very different trajectories since the pandemic



Data sources: Oil production data collected from state agencies and proprietary sources in the "big four" oil plays: Permian, Eagle Ford, Bakken, DJ via Novi Labs. Percent change is indexed to January 1, 2020 for the aggregate oil per day produced by each operator class. Data through August, 2023 (99% complete reporting from states).

5. La producción de EEUU está disparada



Source: EIA, vía Jorge Arjona

6. El vehículo eléctrico es el futuro

AUTOS

Ford cuts production of F-150 Lightning EV, adds jobs at Bronco and Ranger plant

PUBLISHED FRI, JAN 19 2024 8:31 AM EST | UPDATED FRI, JAN 19 2024 10:54 AM EST

EV Inventories Hit Record High in US as Cars Pile Up on Dealer Lots

- Now 114 days' worth of supplies in US, twice last year's level
- Both Ford and GM are pulling back on production plans

Focus: Toyota looks to overhaul EV strategy as new CEO takes charge


By Norihiko Shirouzu, Joseph White and Maki Shiraki

April 7, 2023 1:00 AM GMT+2 - Updated a year ago



Honda, GM scrap \$5 bln plan to co-develop cheaper EVs

Toyota cuts 2023 EV sales forecast by nearly 40% in latest questionable strategy shift

 Peter Johnson | Nov 1 2023 - 7:27 am PT | [123 Comments](#)

Tesla warns of 'notably lower' sales growth in 2024

25 January 2024

By Natalie Sherman, Business reporter, New York

TRANSPORTATION

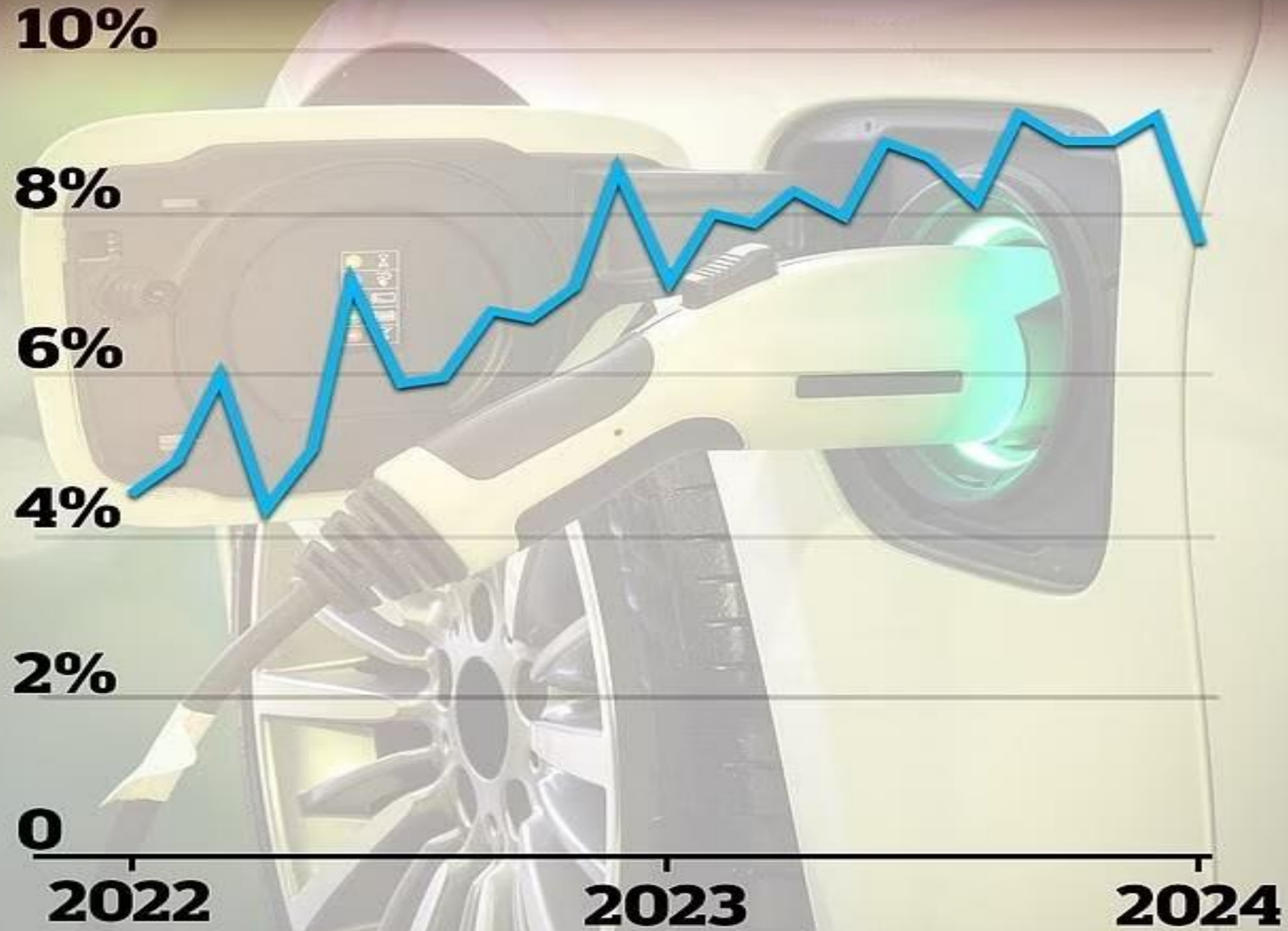
Mercedes Benz ditches plan to sell only EVs by 2030

[Jordan Hart](#) Feb 23, 2024, 6:46 PM CET

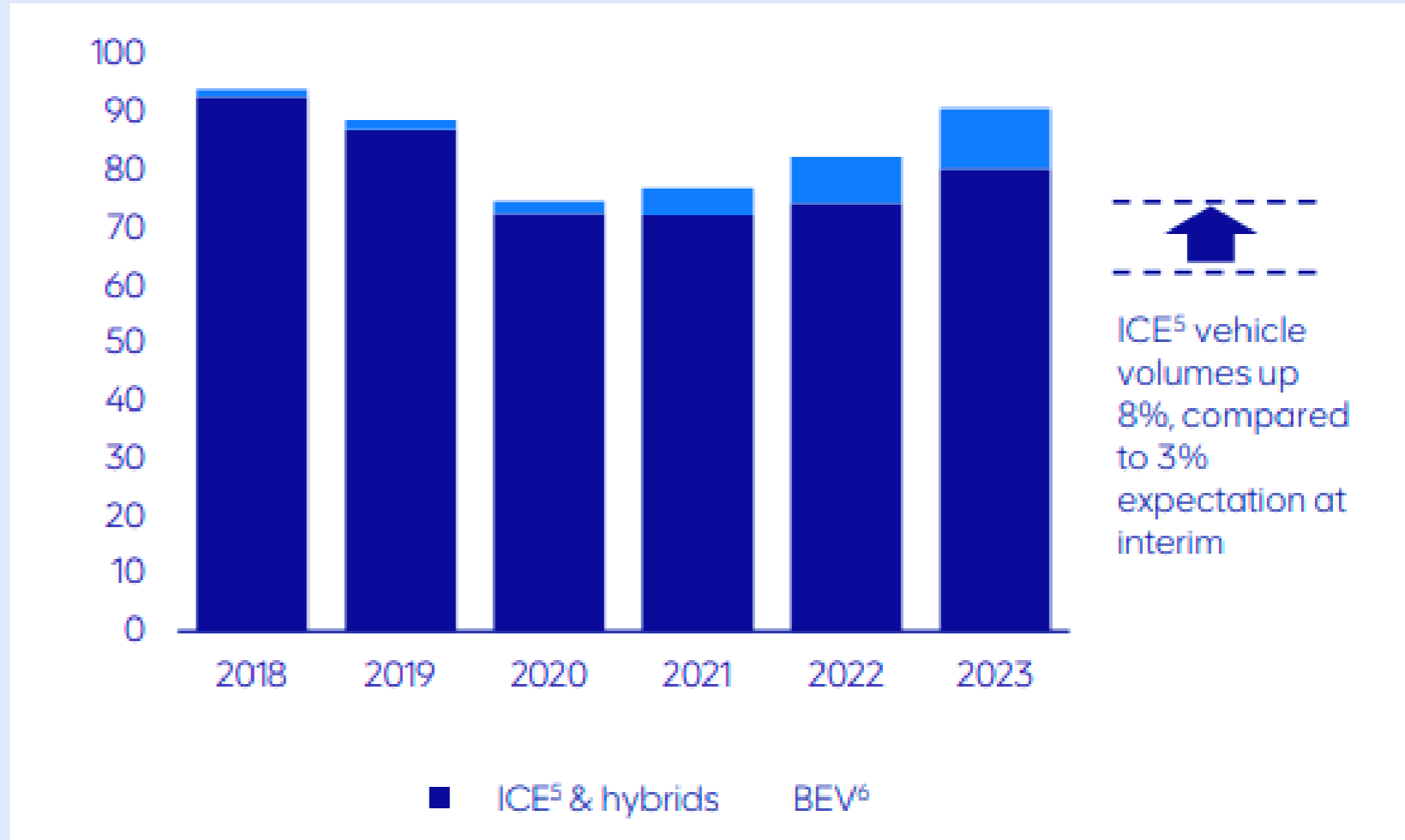
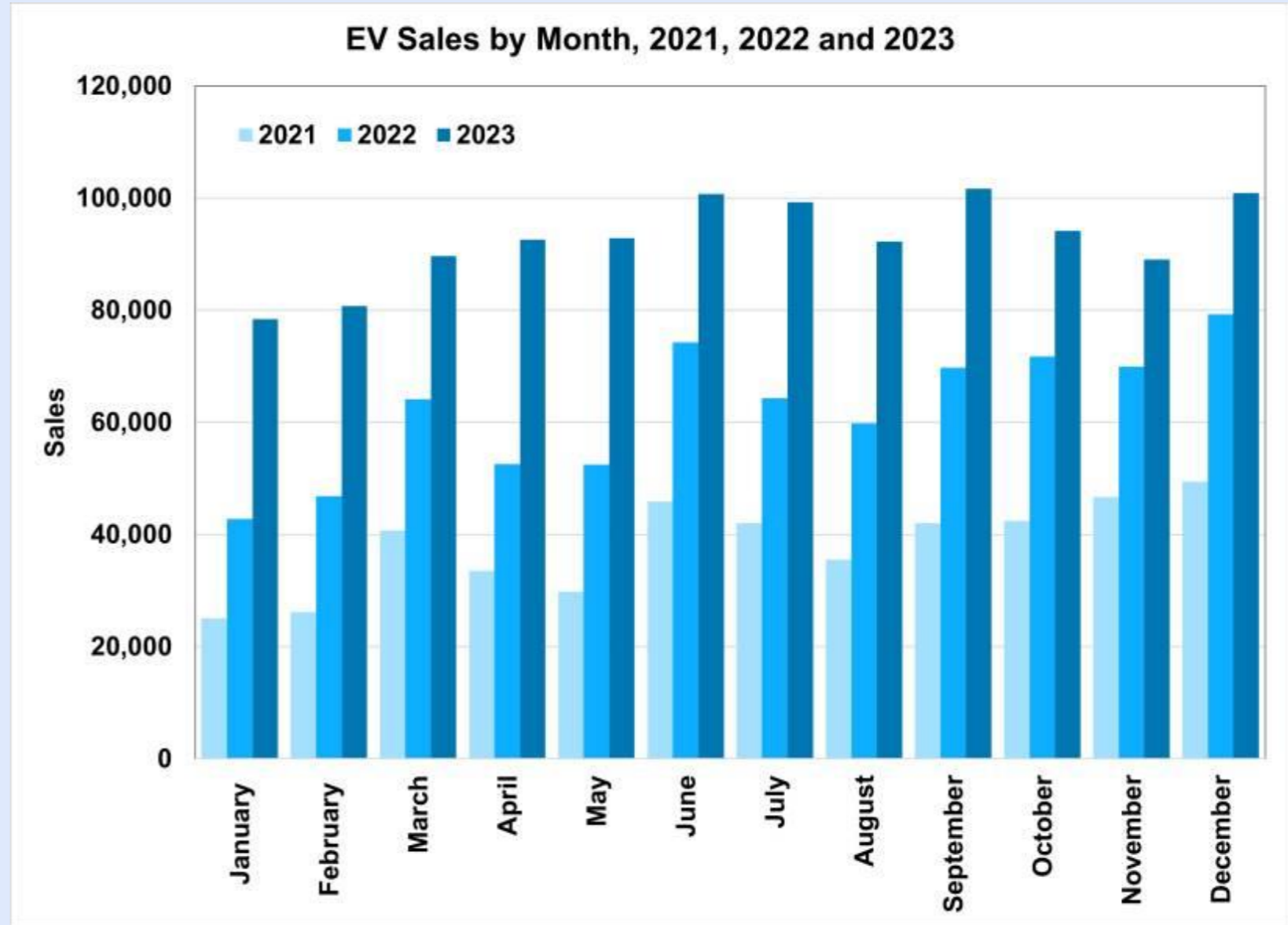
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Volkswagen Cuts EV Production, Cancels New Wolfsburg Factory

ELECTRIC-VEHICLE RETAIL SALES AS A SHARE OF OVERALL U.S. VEHICLE SALES



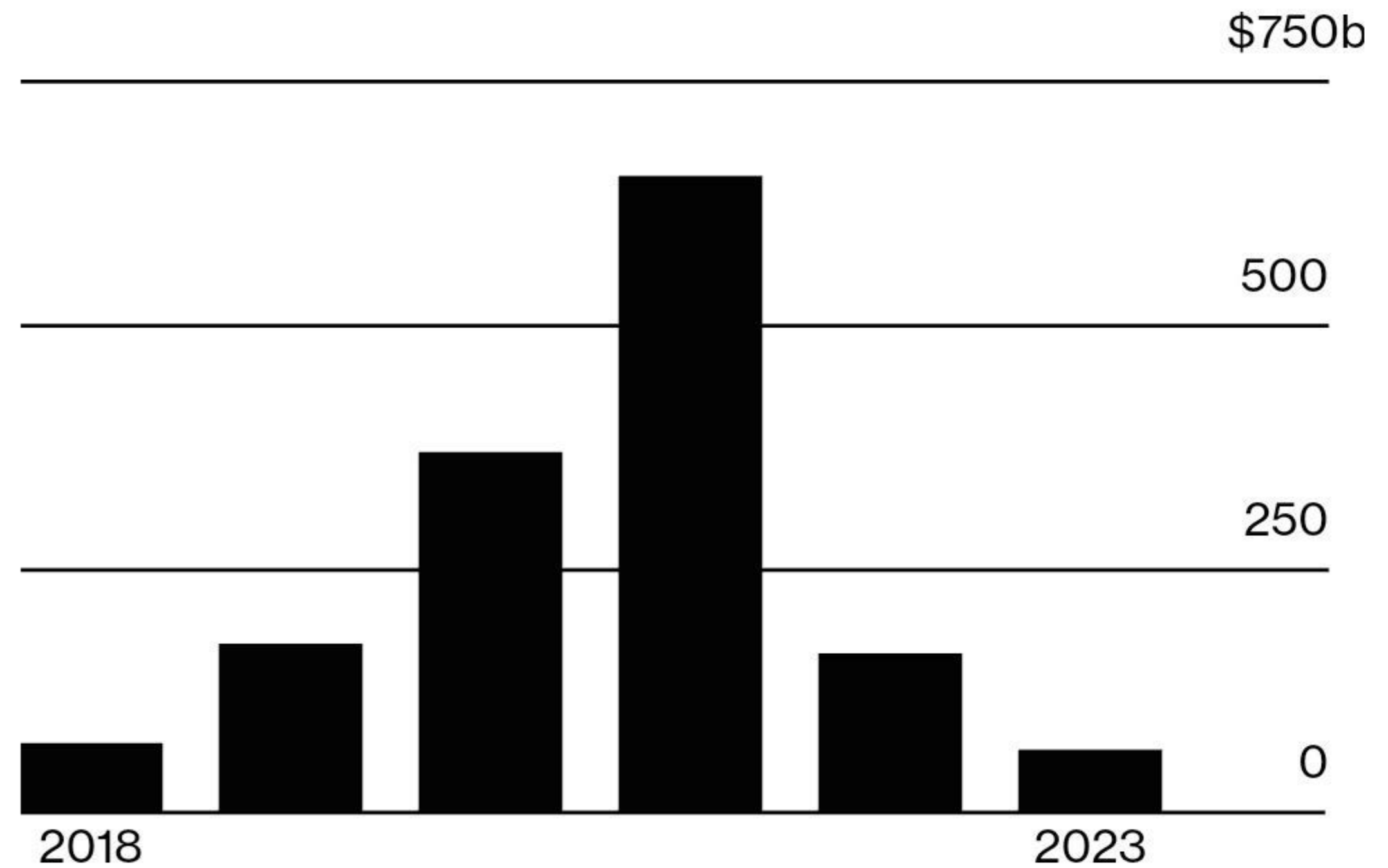
SOURCE: JD POWER



6. El vehículo eléctrico es el futuro

7. El ESG es el futuro

Net Flows to ESG Funds



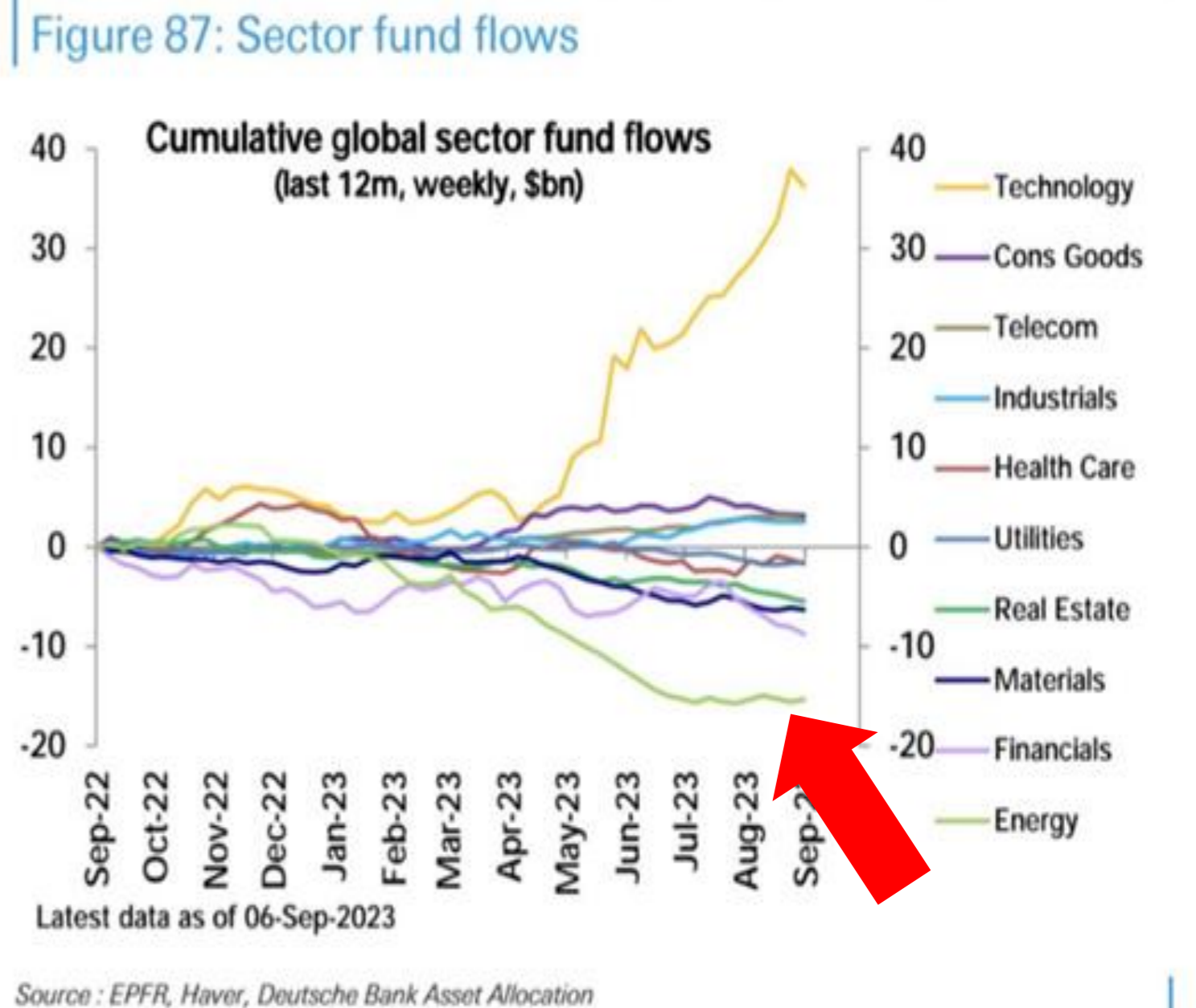
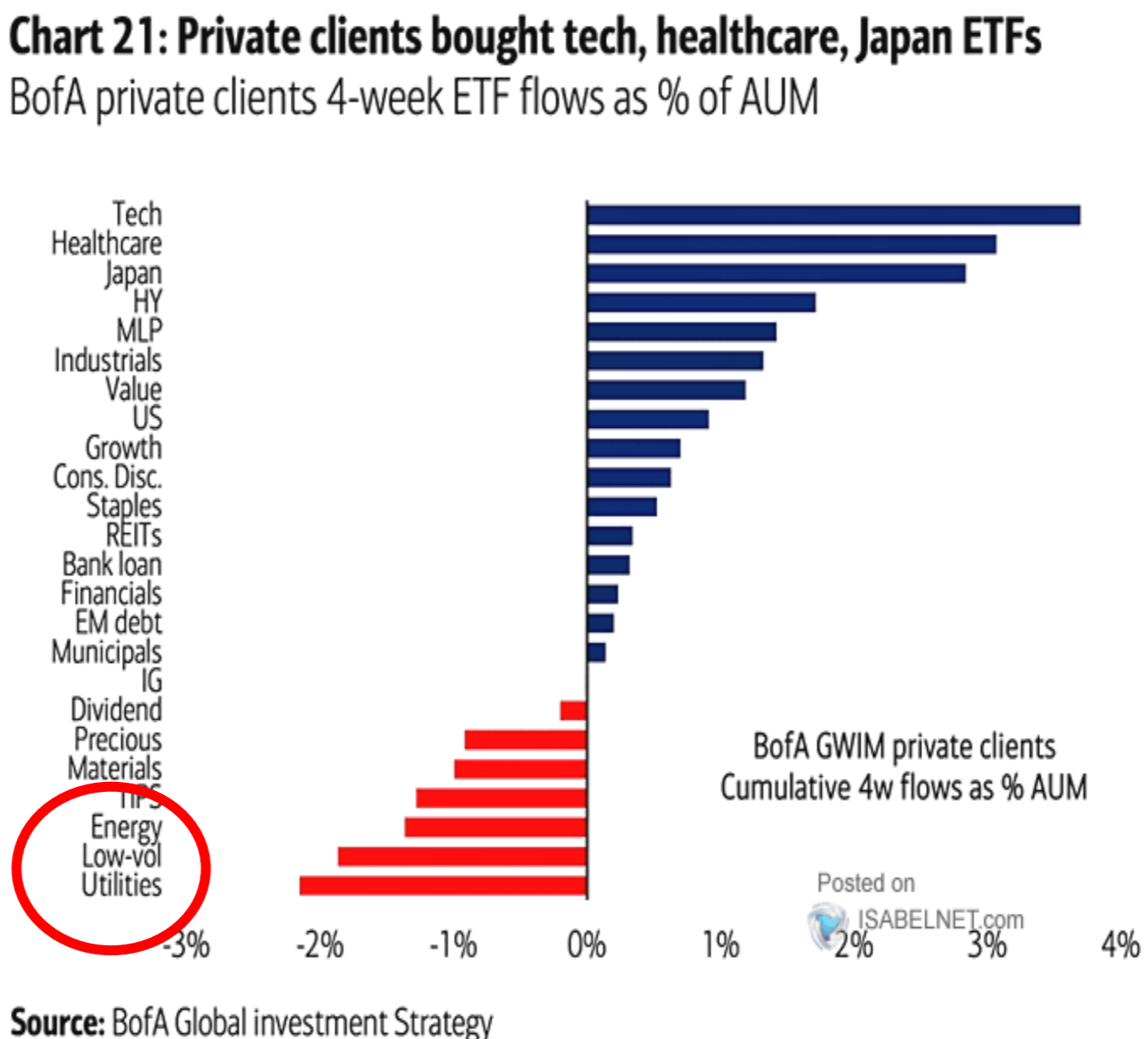
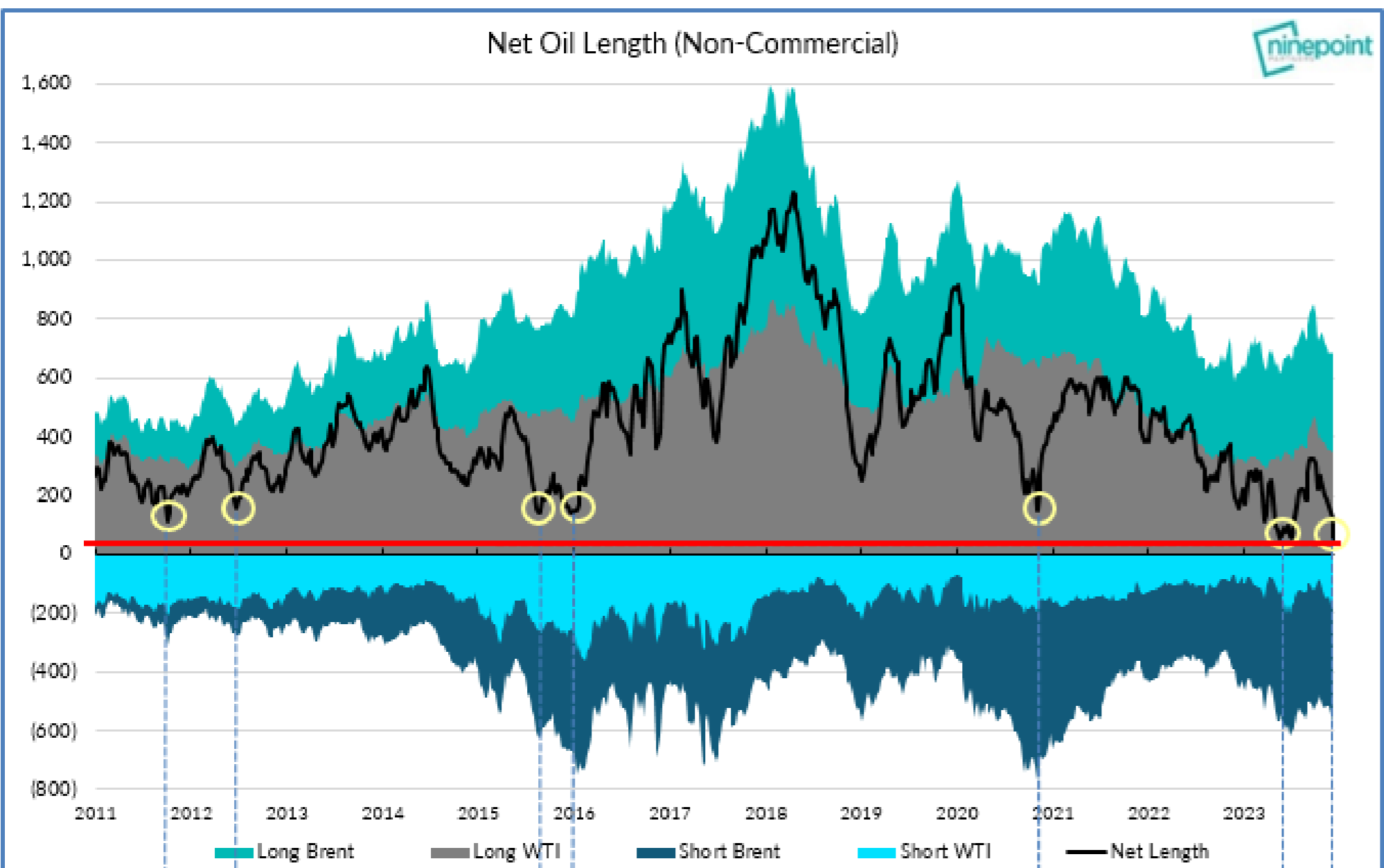
Source: Morningstar

Figures are estimated net flows into global sustainable funds. They include open-end funds and ETFs.

Bloomberg Businessweek

La Oportunidad

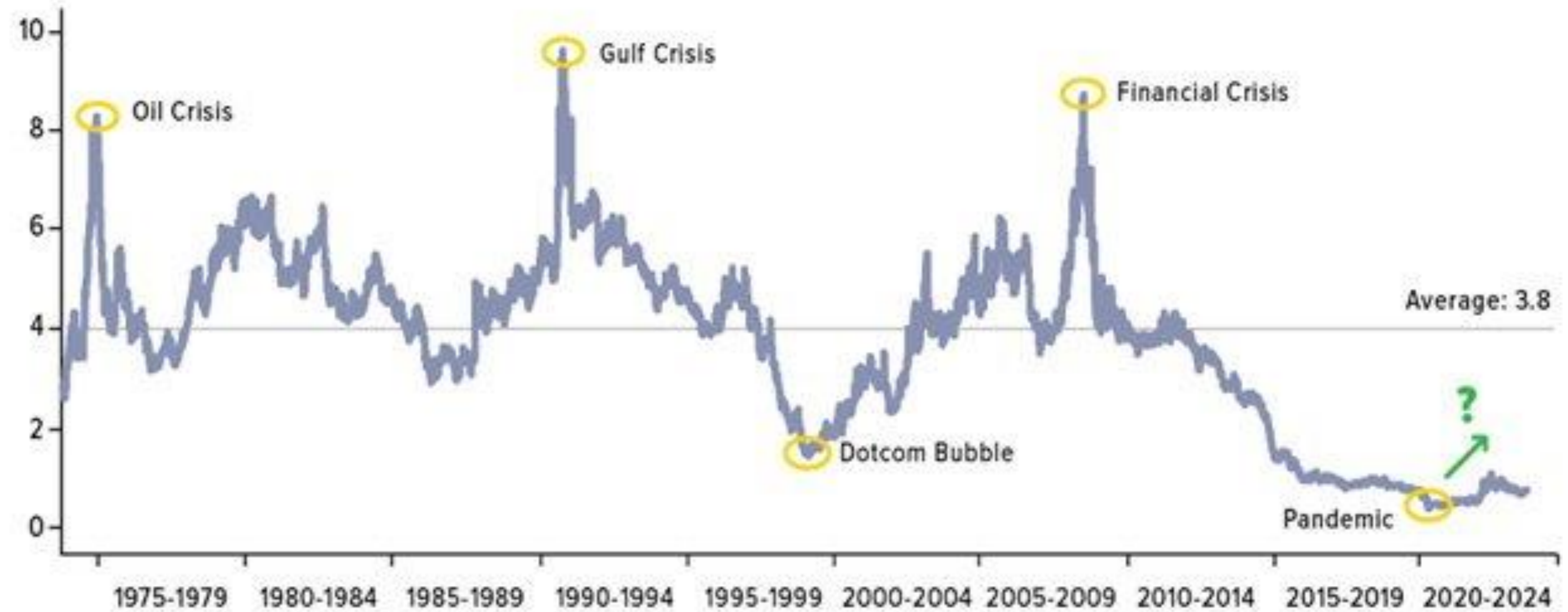
“Buy when there’s blood in the streets”



Ni durante el COVID o la burbuja de las Puntocom había tanto pesimismo

Commodity Prices Relative to Equities

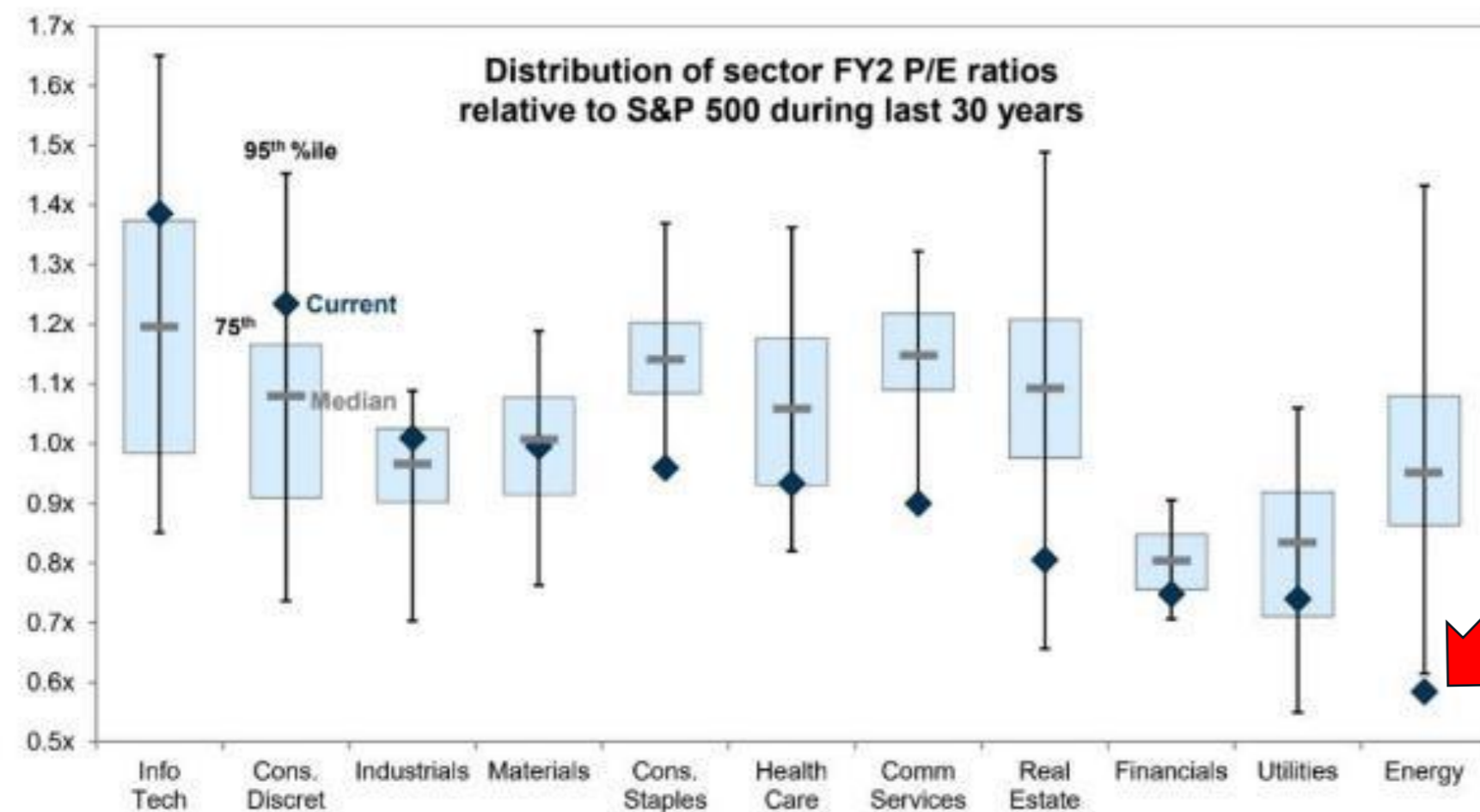
S&P GSCI / S&P 500, 50-Year Period Through August 2023



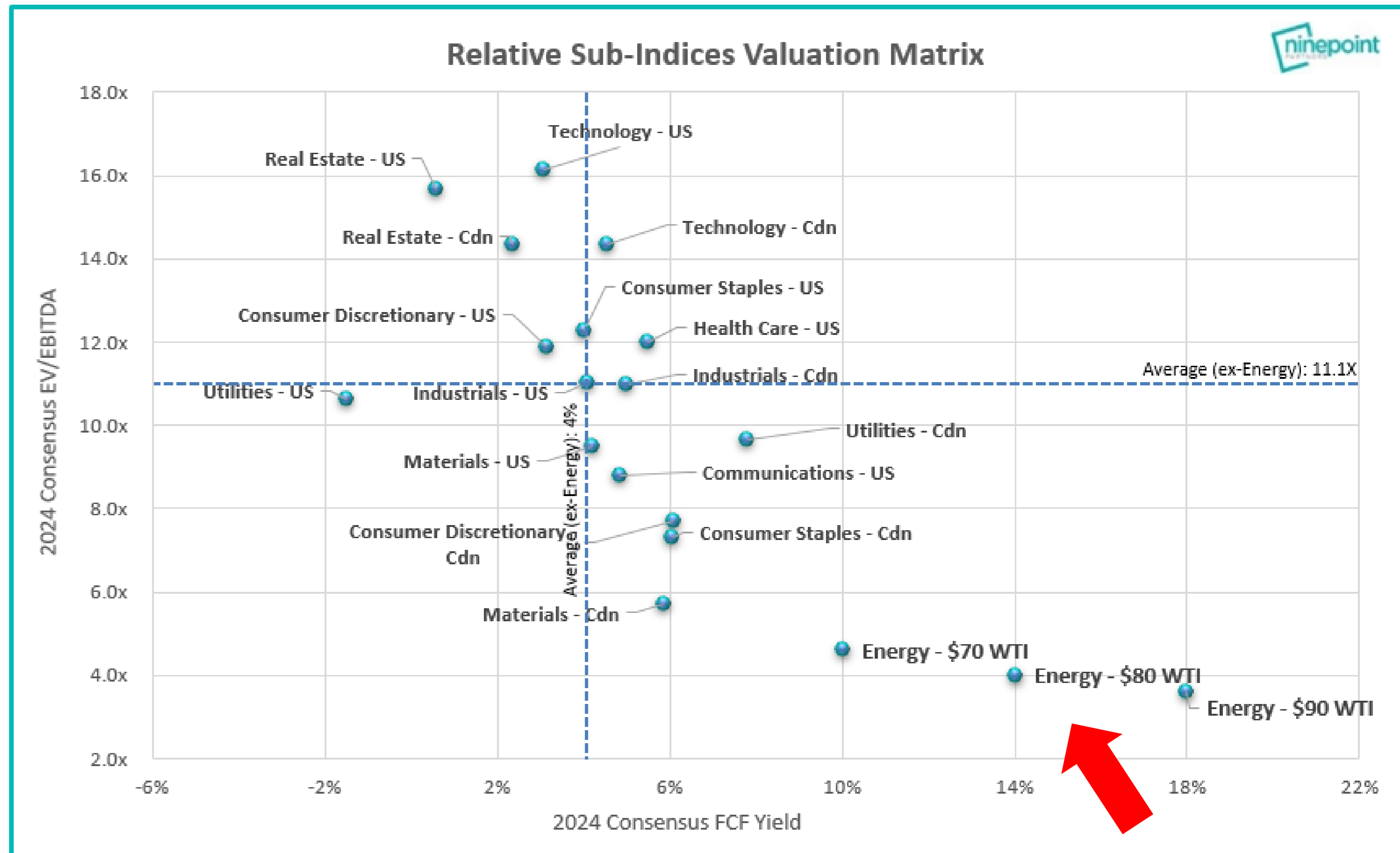
Source: Bloomberg, U.S. Global Investors

La energía es el sector más barato y que más caja va a generar

Energy is incredibly cheap looking in this context.



Source: Goldman Sachs

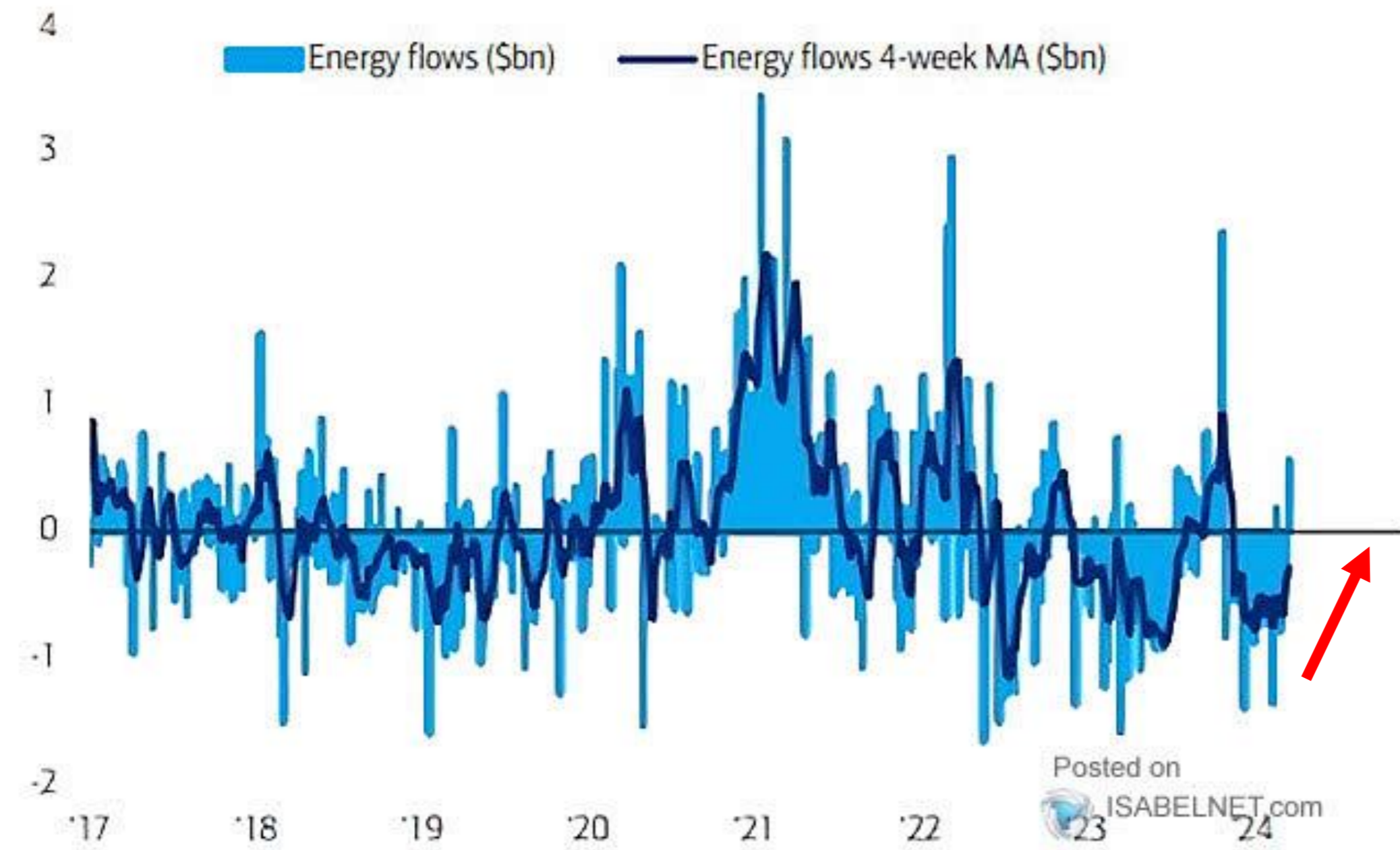


Source: Bloomberg, Ninepoint Partners

Energy sub-index uses Ninepoint estimates and EV/CF vs. EV/EBITDA for other sub-indices

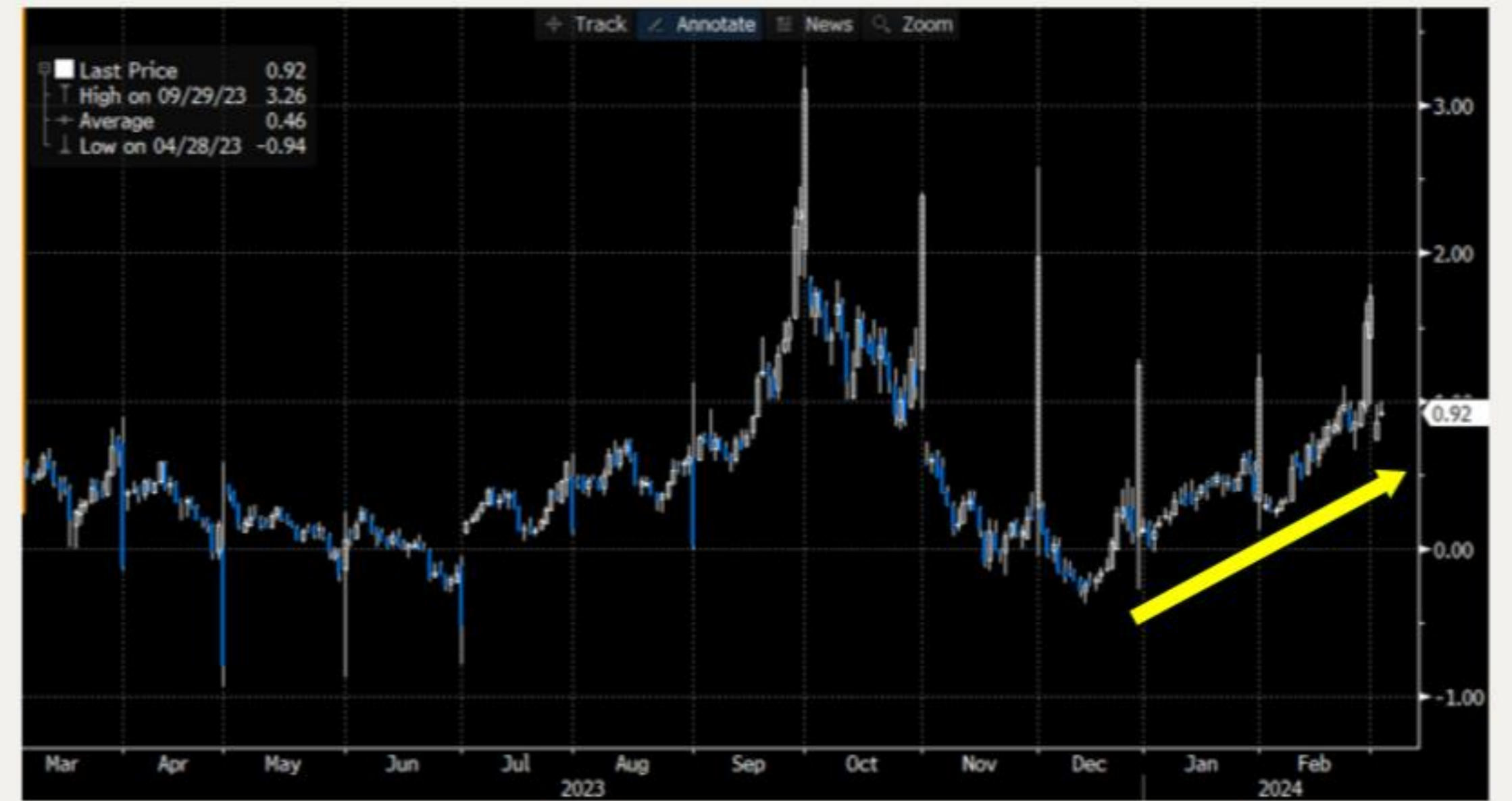
Chart 10: Largest inflow to energy since Oct'23

Energy fund flows (weekly & 4-week MA, \$bn)



Source: BofA Global Investment Strategy, EPFR

Brent 1-2 Time spread

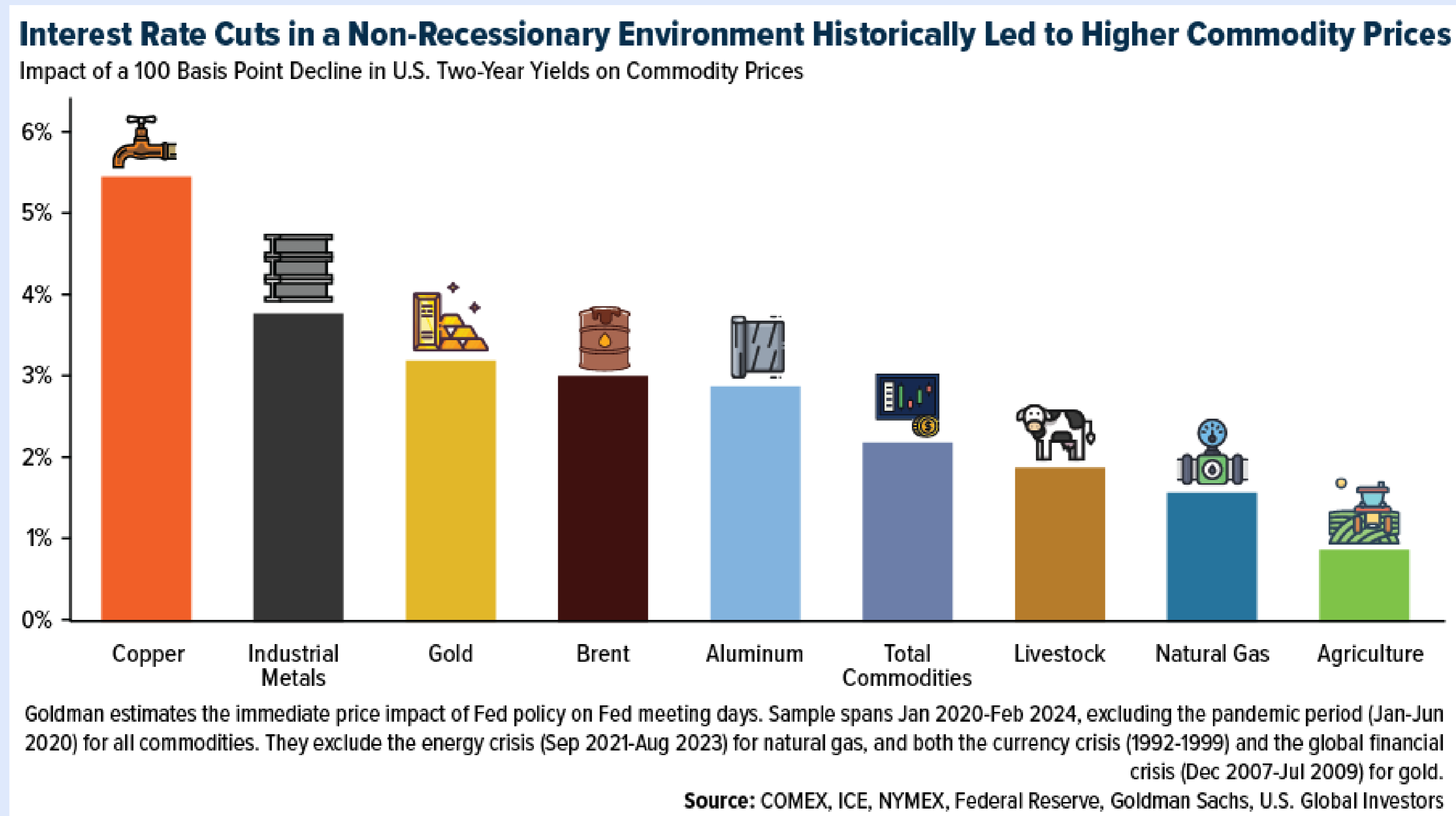


Source: Bloomberg

Empezamos a ver un cambio



“Las industrias más intensivas en capital son las que más se van a beneficiar de las bajadas de tipos.” GS

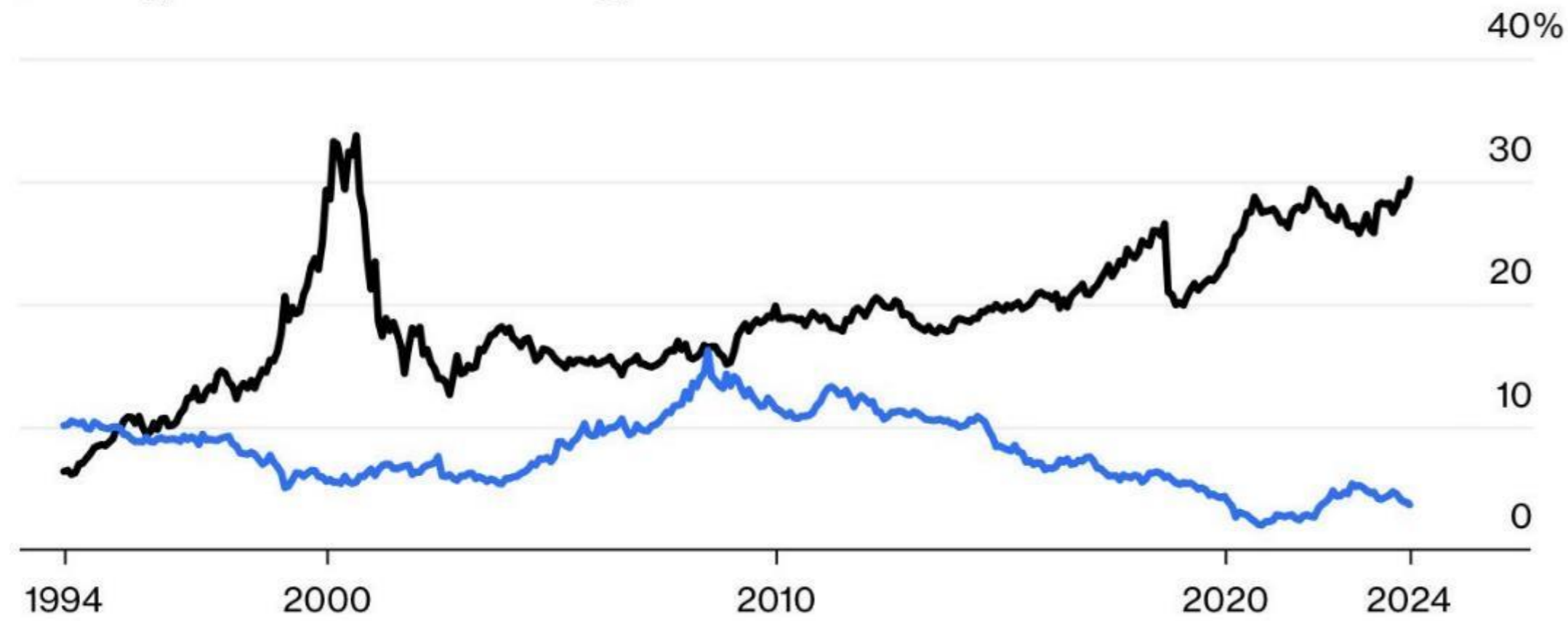


Es el momento

Turn Of The Century

Sector weights in the S&P 500 Index

Energy Information Technology



Source: Bloomberg

Best Time to Invest is When Industry Isn't CapEx in "New" Economy vs. "Old" Economy



Source: Topdown Charts, Refinitiv Datastream, I/B/E/S, Bloomberg
Tech Stock performance S&P Information Technology Index, Commodity Stock performance 2/3 S&P Energy 1/3 S&P Metals and Mining, data begins 9/29/90

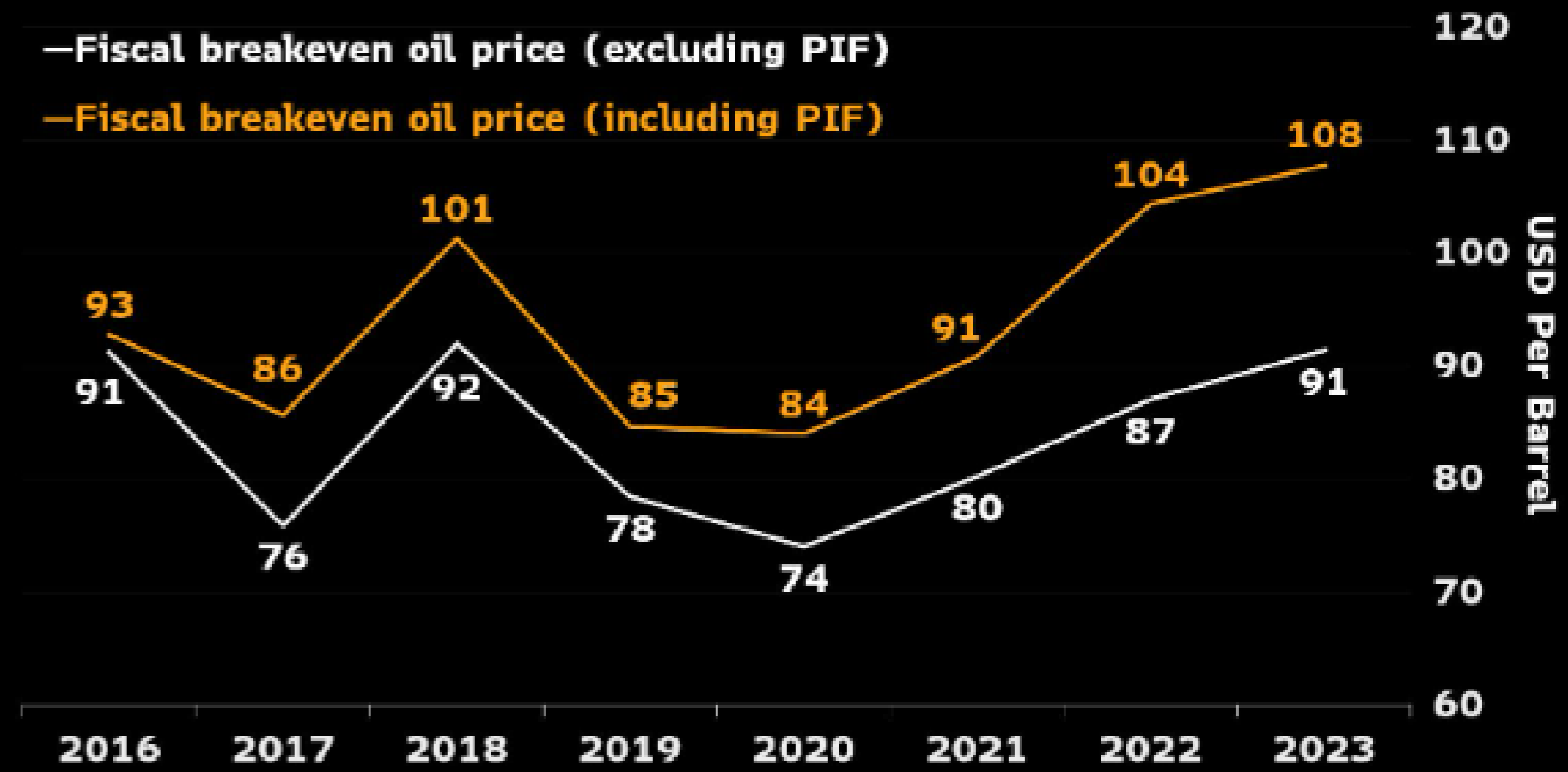
Distribution of inflation-adjusted oil prices

Based on Brent crude oil over last 15 years (in 2023 US\$/bbl)



Source: Platts, Bloomberg, Morgan Stanley Research

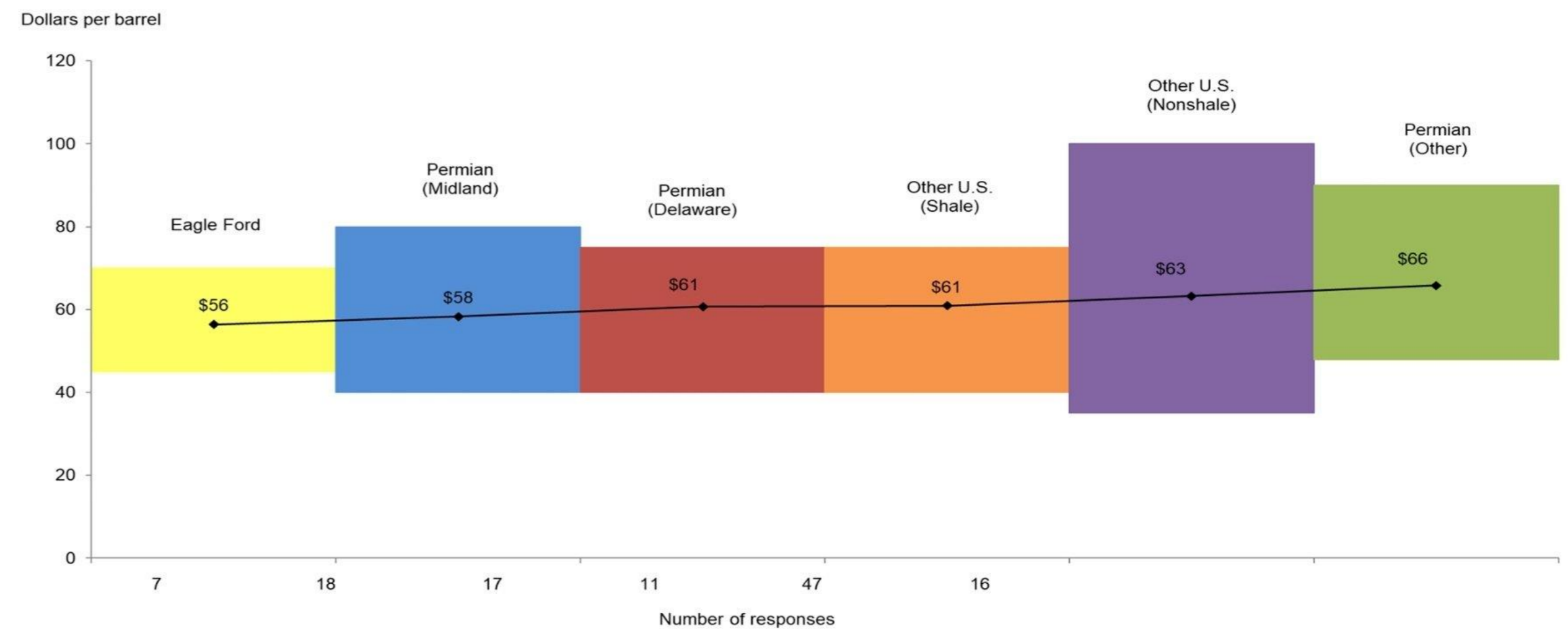
Saudi Fiscal Breakeven Highest Since Vision 2030 Inception



Source: International Monetary Fund, Ministry of Finance, Bloomberg Economics. Note: The fiscal breakeven is the price of oil needed to balance the budget. The PIF is the Public Investment Fund, Saudi Arabia's main sovereign wealth fund.

Breakeven Prices for New Wells

In the top two areas in which your firm is active:
What WTI oil price does your firm need to profitably drill a new well?



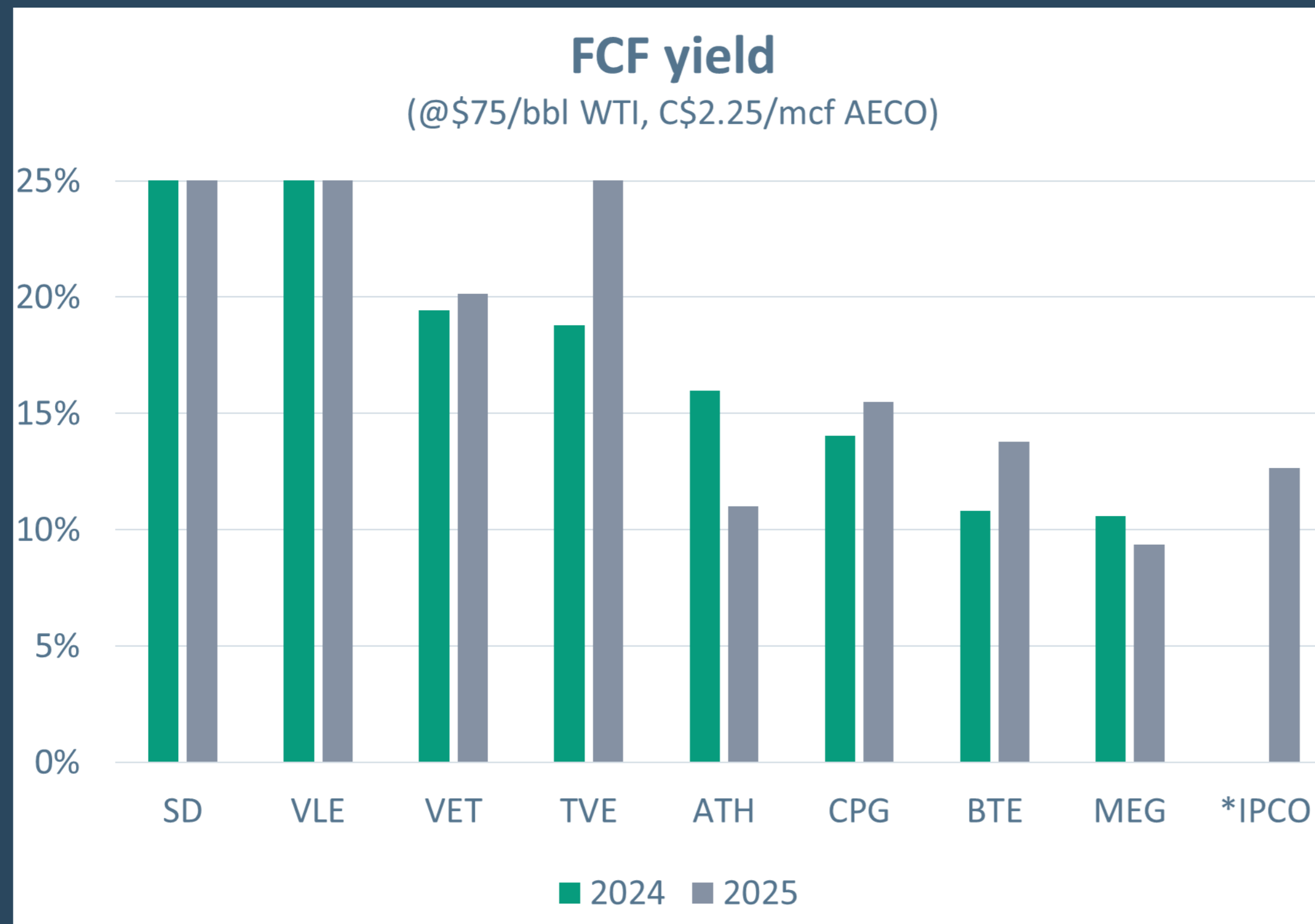
Federal Reserve Bank of Dallas

NOTES: Line shows the average, and bars show the range of responses. 84 E&P firms answered this question from March 15-23, 2023. SOURCE: Federal Reserve Bank of Dallas.

Encontrando el equilibrio

En **Castañar** invertimos en compañías con:

1. Alta generación de caja
2. Baja deuda
3. Alto retorno al accionista
4. Ciclo a nuestro favor
5. Narrativa en contra
6. Valoración atractiva

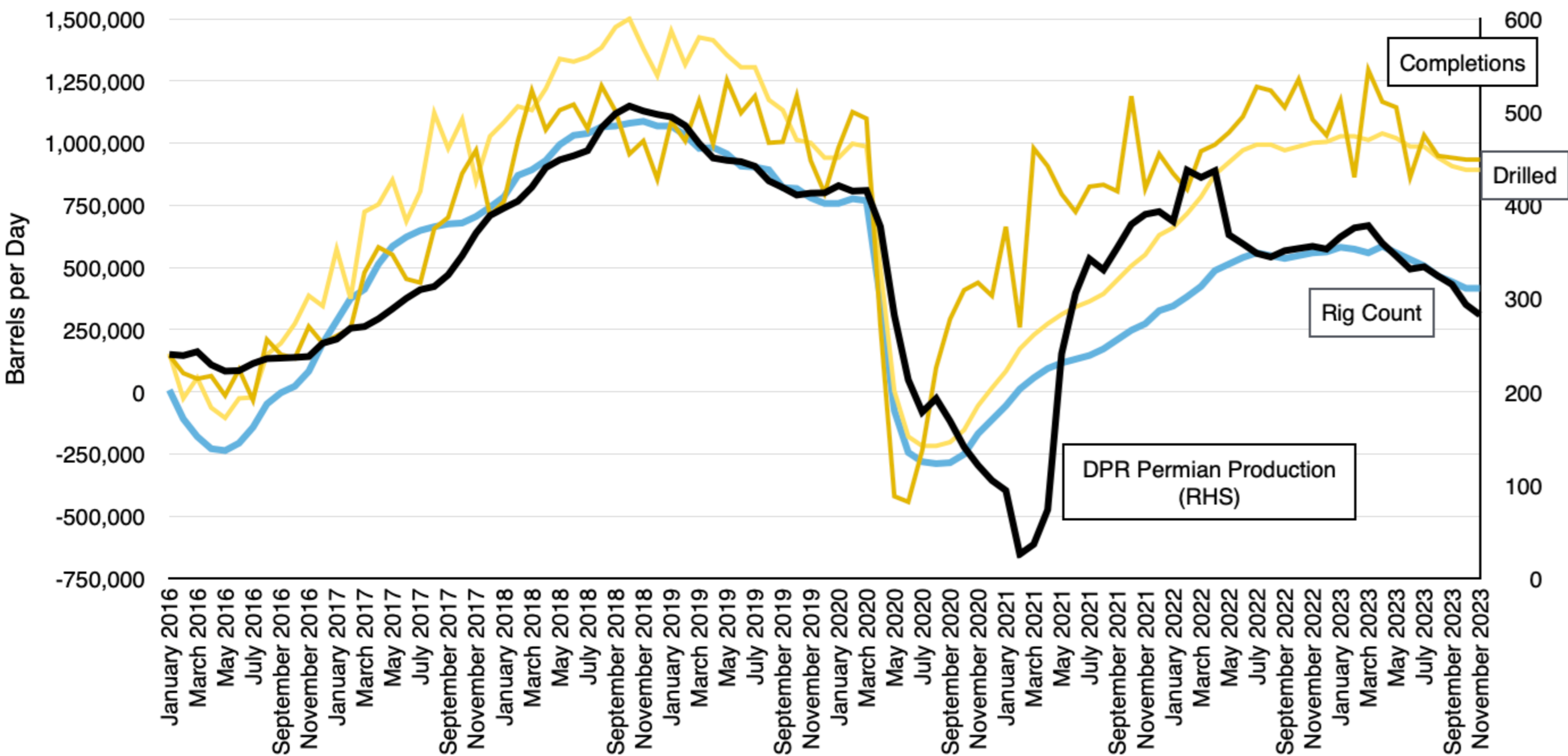


	%FCF devuelto a los accionistas
ATH	100%
SD	60%
CPG	60%
VET	50%
BTE	50%
MEG	50%
*IPCO	40%
TVE	40%
VLE	0%



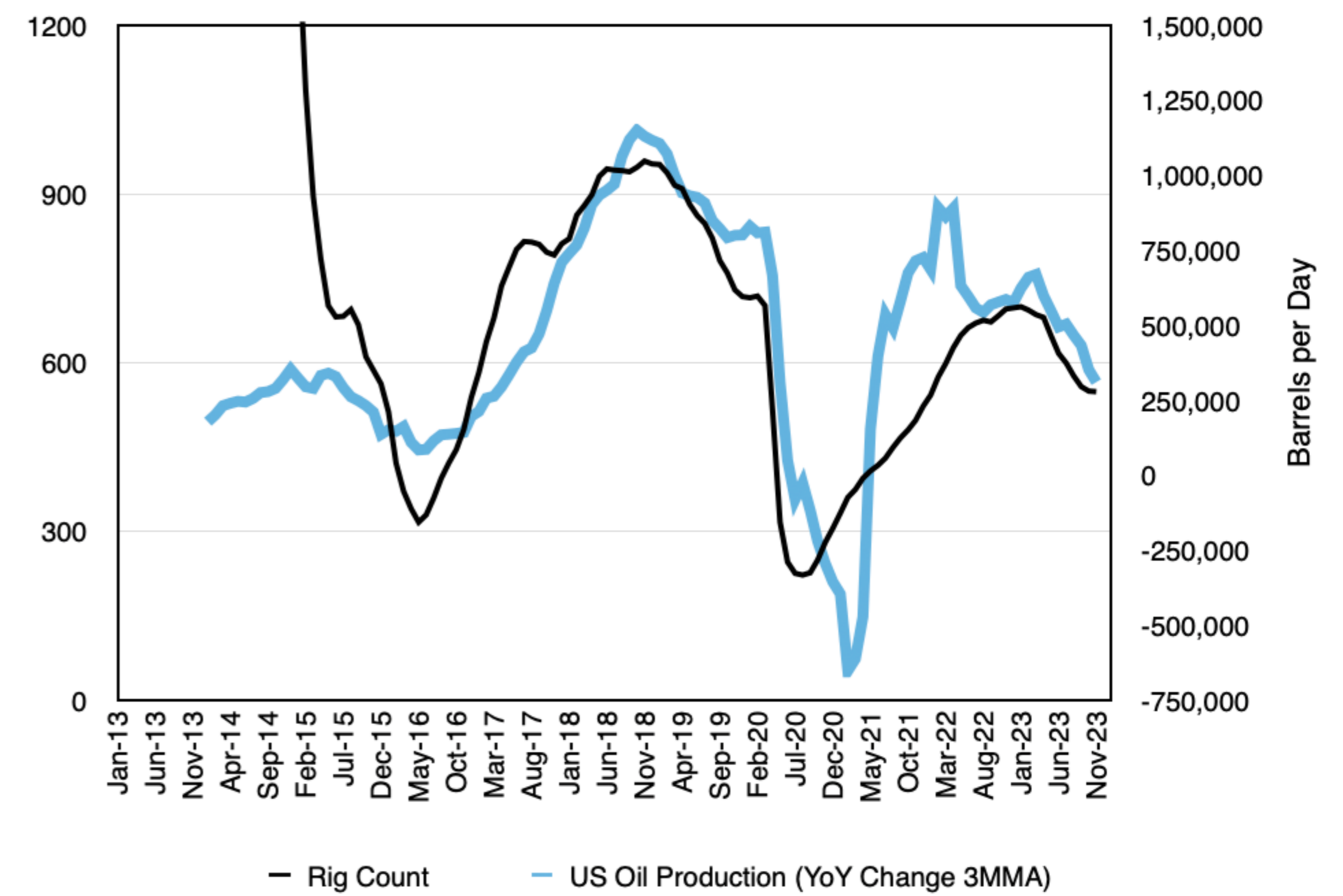
Appendix

Permian Production YoY 3MMA / Wells Drilled / Wells Completed / Rig Count Comparison



EIA, Baker Hughes and Open Square Capital

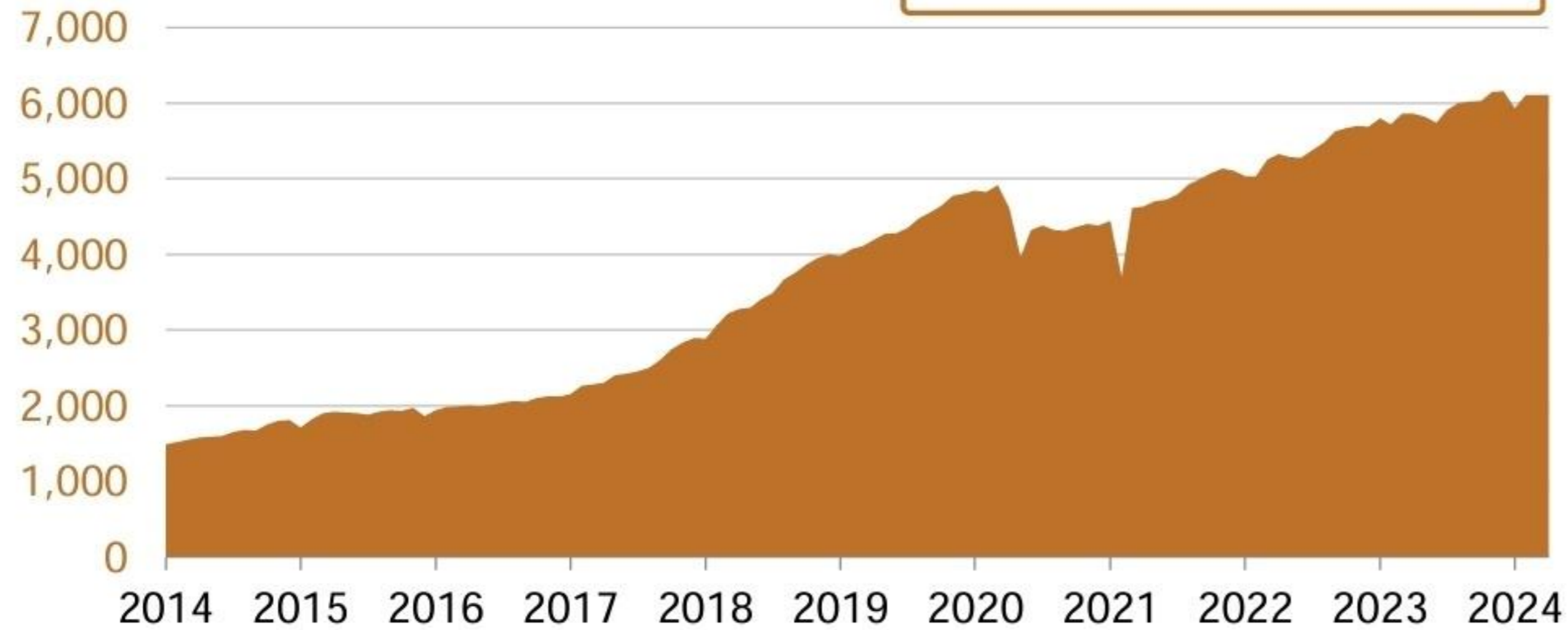
US Production 3MMA YoY & Rig Counts



EIA, Baker Hughes and Open Square Capital

Permian Region Oil production

thousand barrels/day

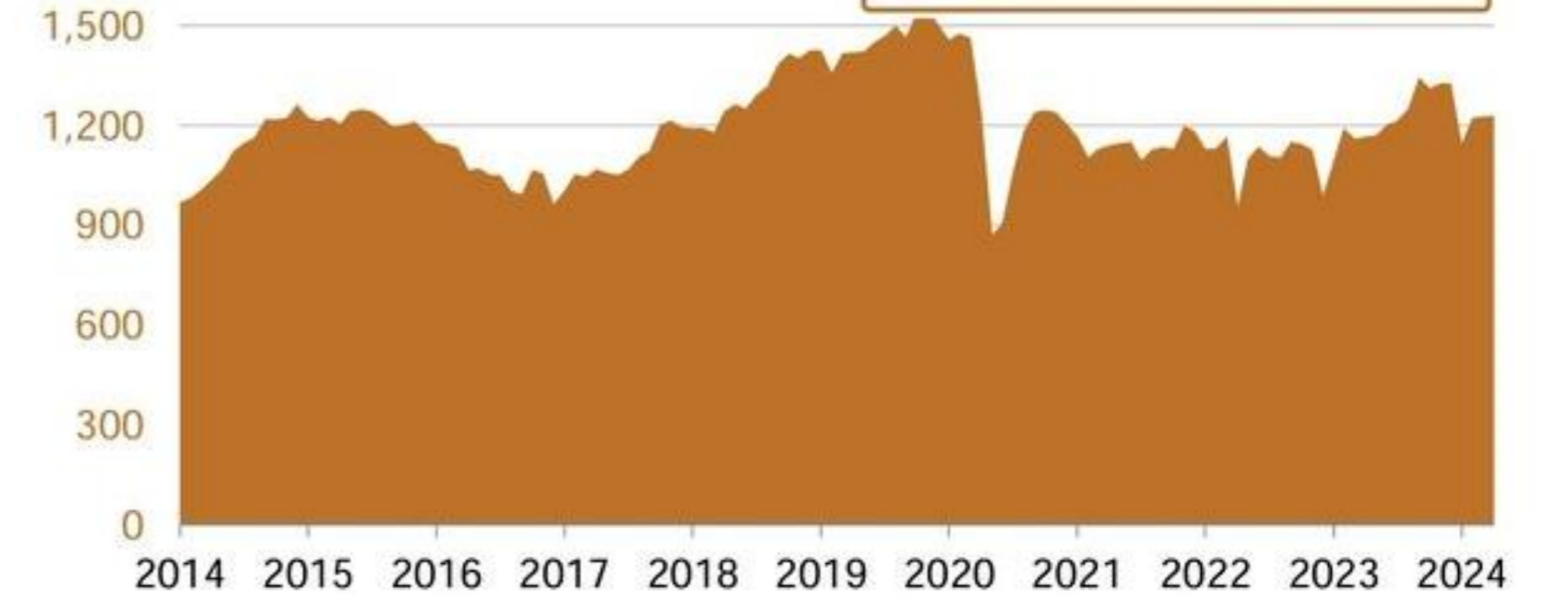


Oil +8
thousand barrels/day
month over month

U. S. Energy Information Administration | Drilling Productivity Report

Bakken Region Oil production

thousand barrels/day



Oil +4
thousand barrels/day
month over month

U. S. Energy Information Administration | Drilling Productivity Report

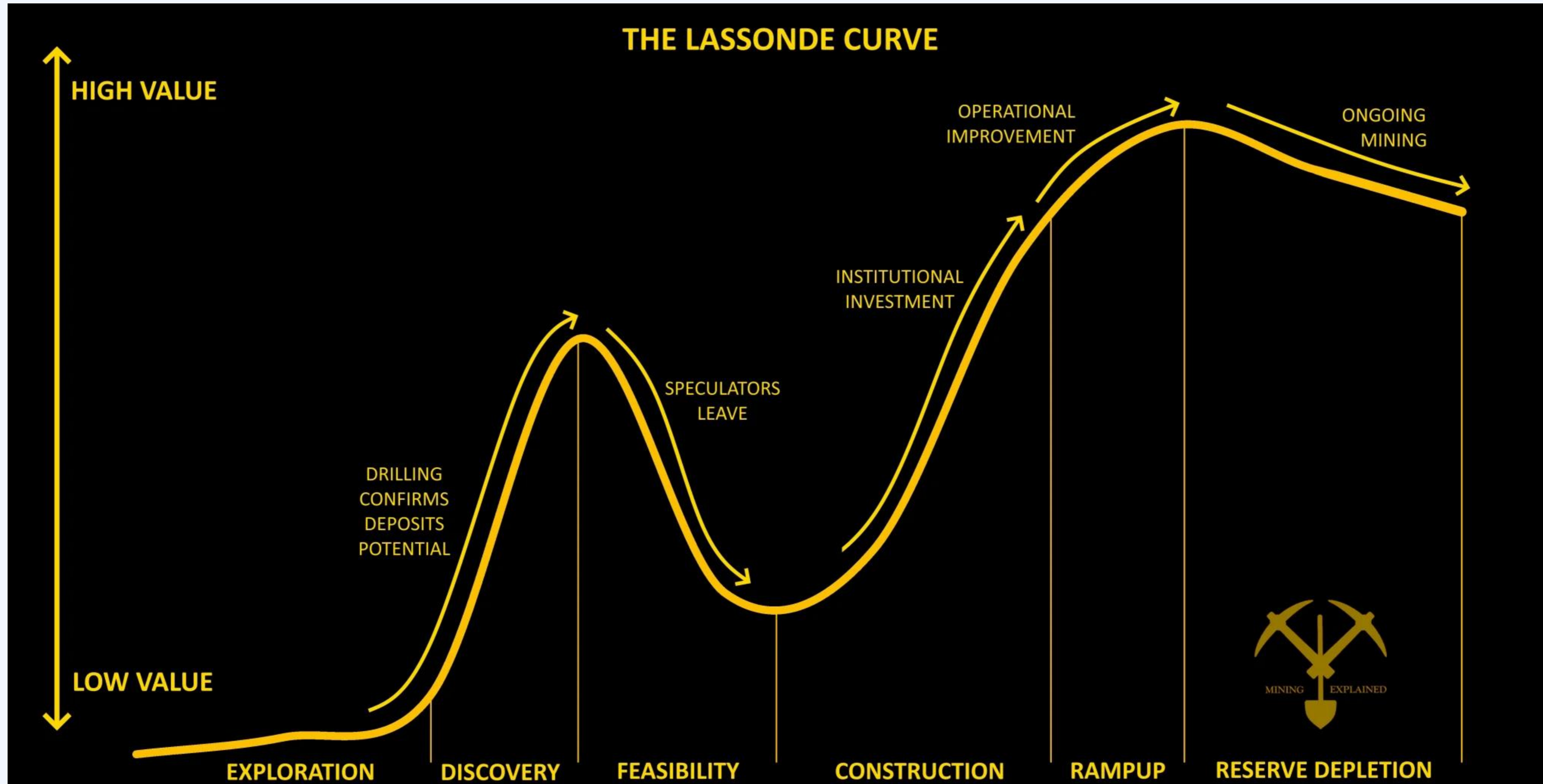
Eagle Ford Region Oil production

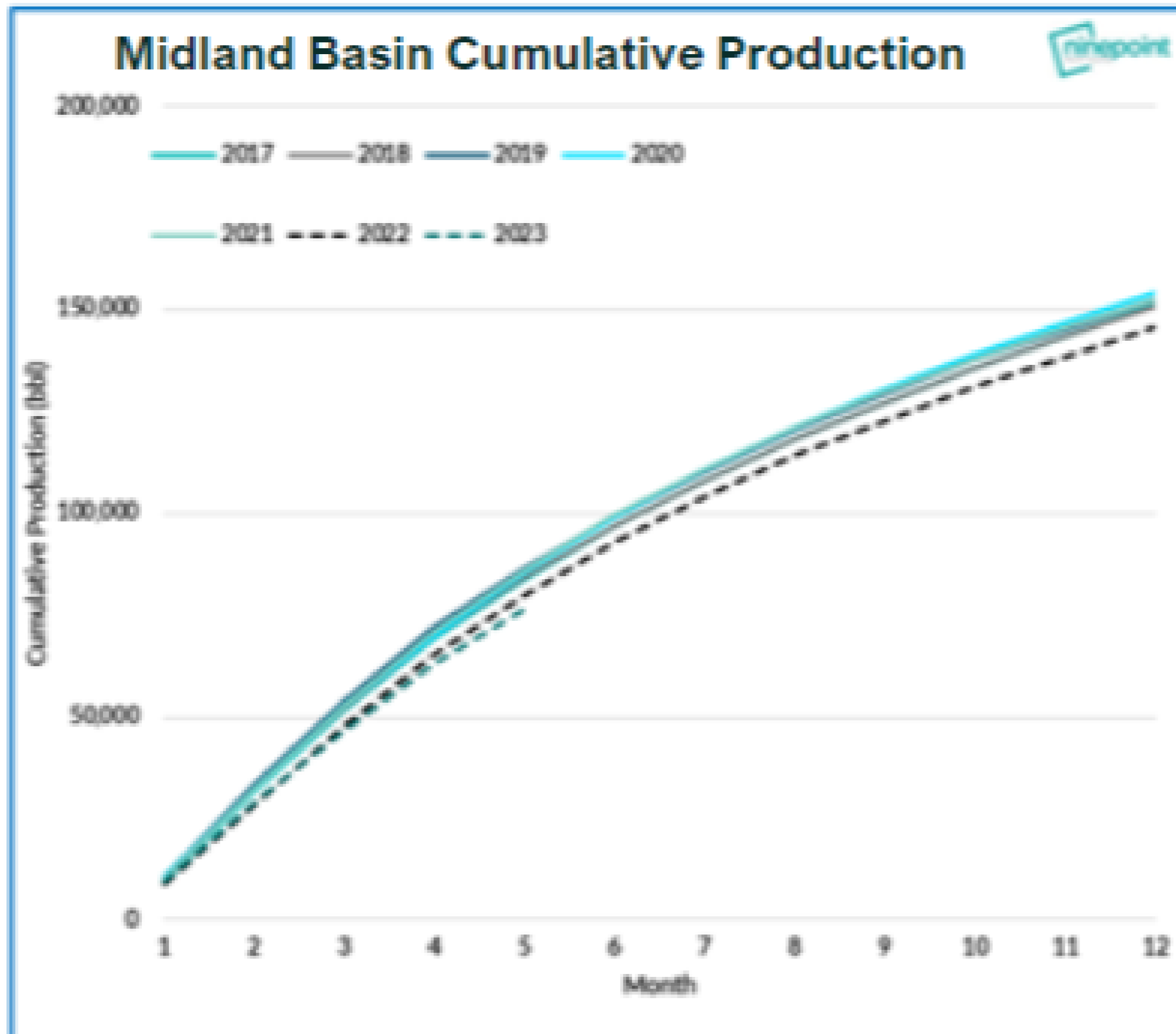
thousand barrels/day



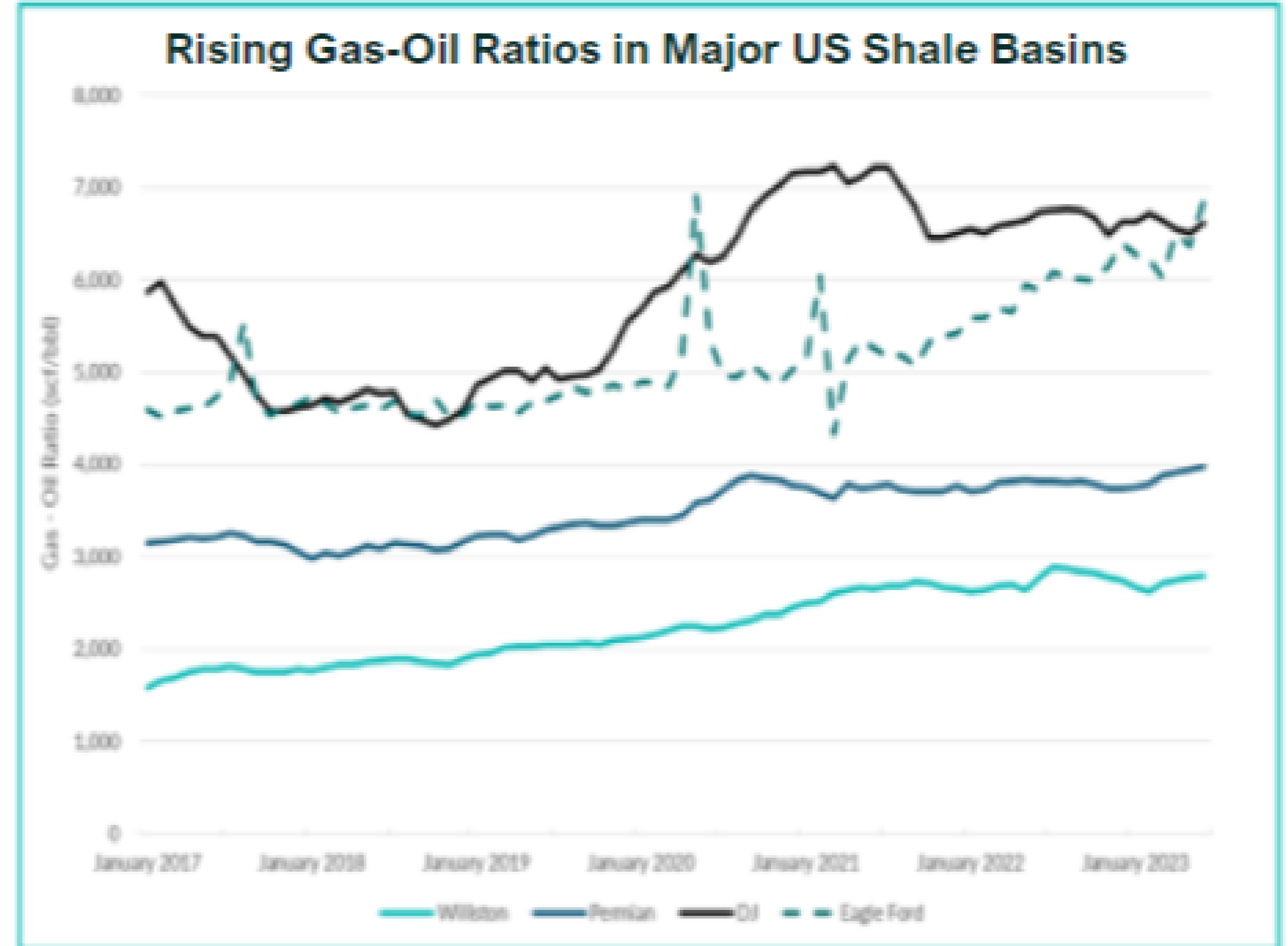
Oil +2
thousand barrels/day
month over month

U. S. Energy Information Administration | Drilling Productivity Report

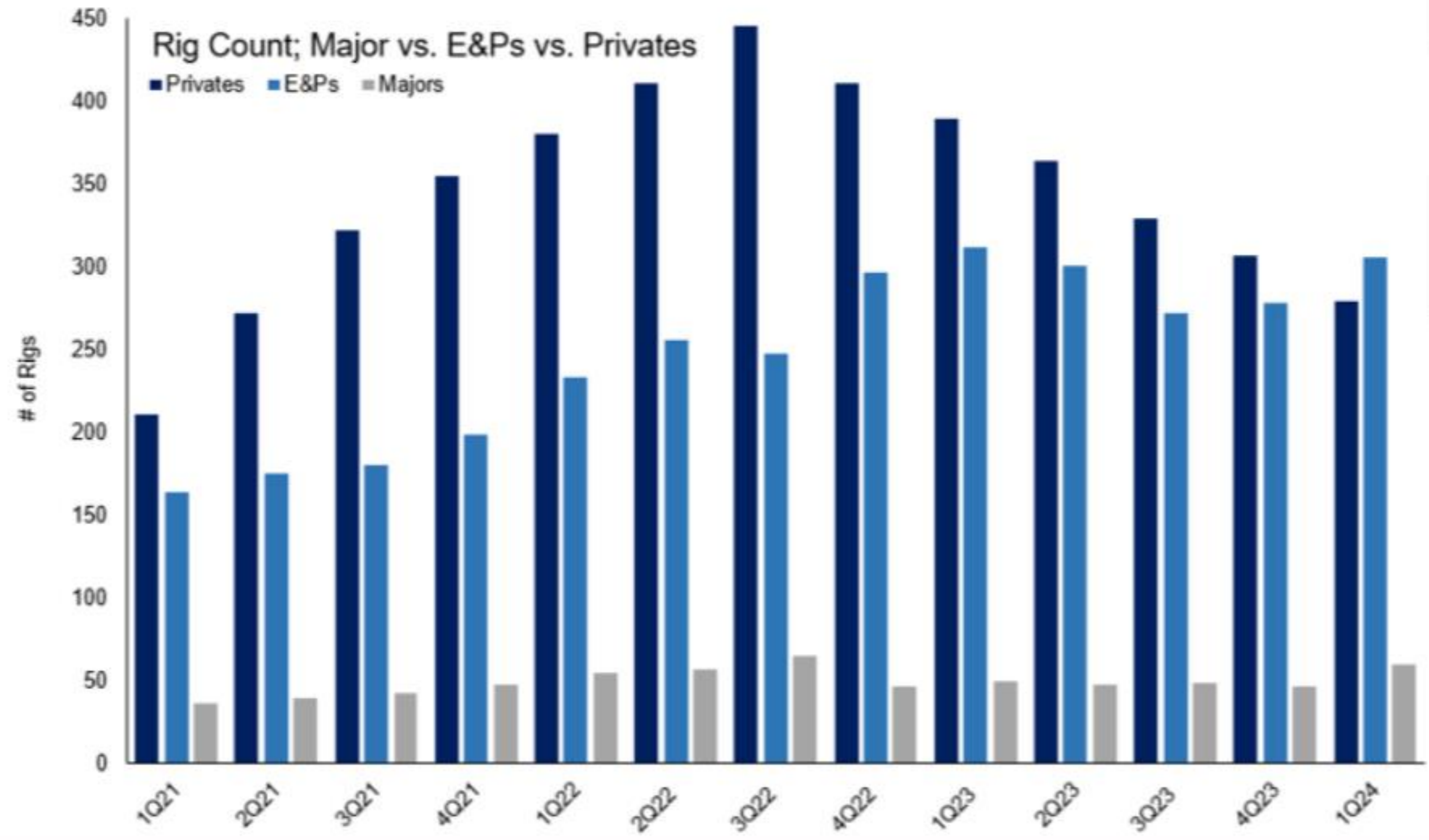




Source: Novi Labs



Source: Novi Labs



Diamondback sets \$26 billion deal for shale oil rival Endeavor Energy

Source: Reuters, February 12, 2024

Occidental Petroleum to expand Permian ops with \$12 billion deal for CrownRock

Source: Reuters, December 11, 2023

Civitas Resources to buy Permian assets for about \$2.1 bln

Source: Reuters, October 4, 2023

Vital Energy to acquire Permian assets in \$540 mln all-cash deal

Source: Reuters, May 12, 2023

Civitas Resources enters Permian basin in \$4.7 billion deal

Source: Reuters, June 20, 2023

Earthstone Energy to buy Delaware Basin-focused Novo Oil & Gas for \$1.5 billion

Source: Reuters, June 15, 2023

Ovintiv to boost Permian oil ops with \$4.3 bln buy from EnCap

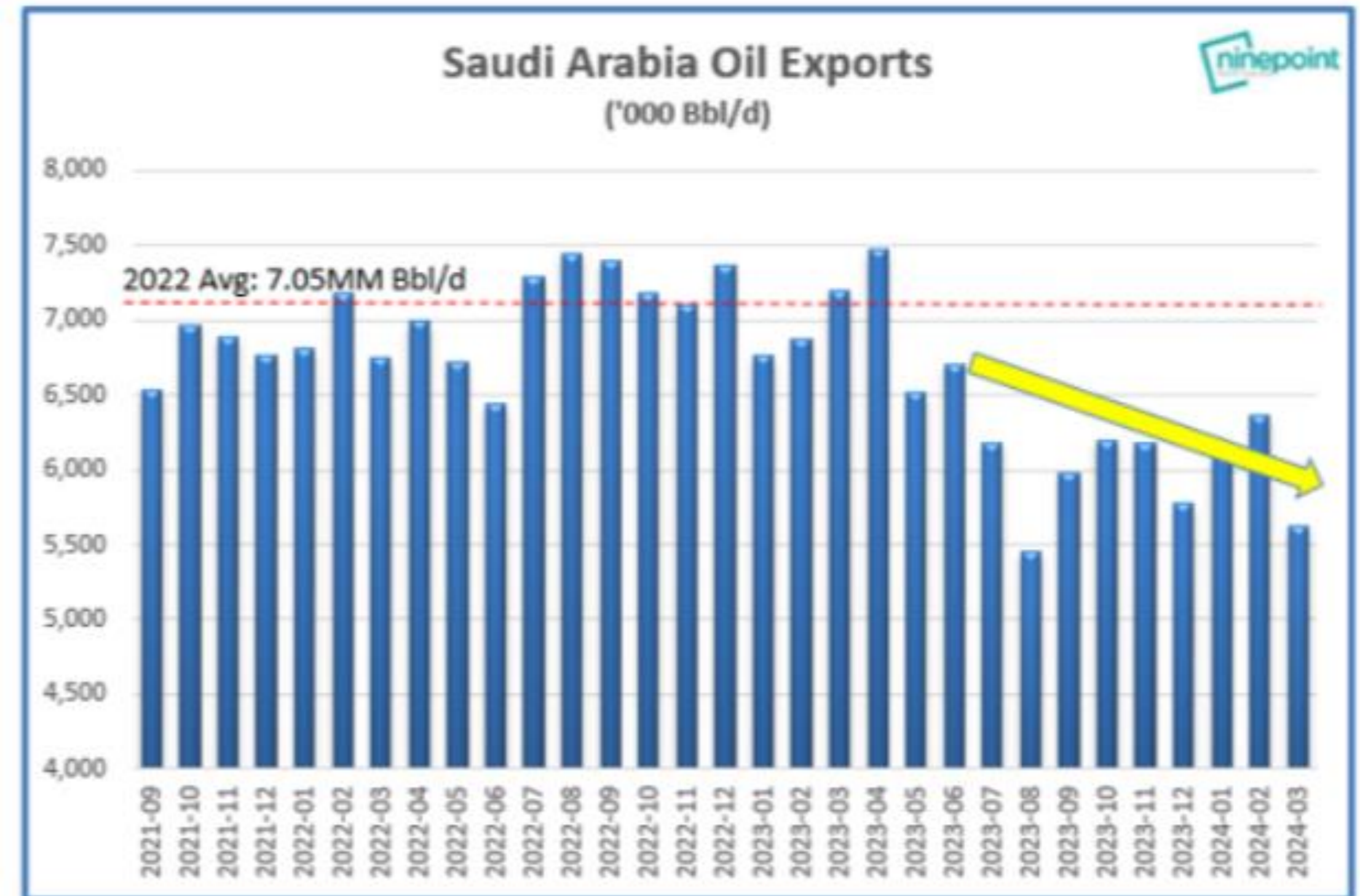
Source: Reuters, April 3, 2023

Source: Raymond James, March 2024

ENERGY

Saudi Arabia's Aramco halts plans to increase maximum oil production capacity

PUBLISHED TUE, JAN 30 2024•1:41 AM EST | UPDATED TUE, JAN 30 2024•2:52 AM EST



Source: Kpler

Demand

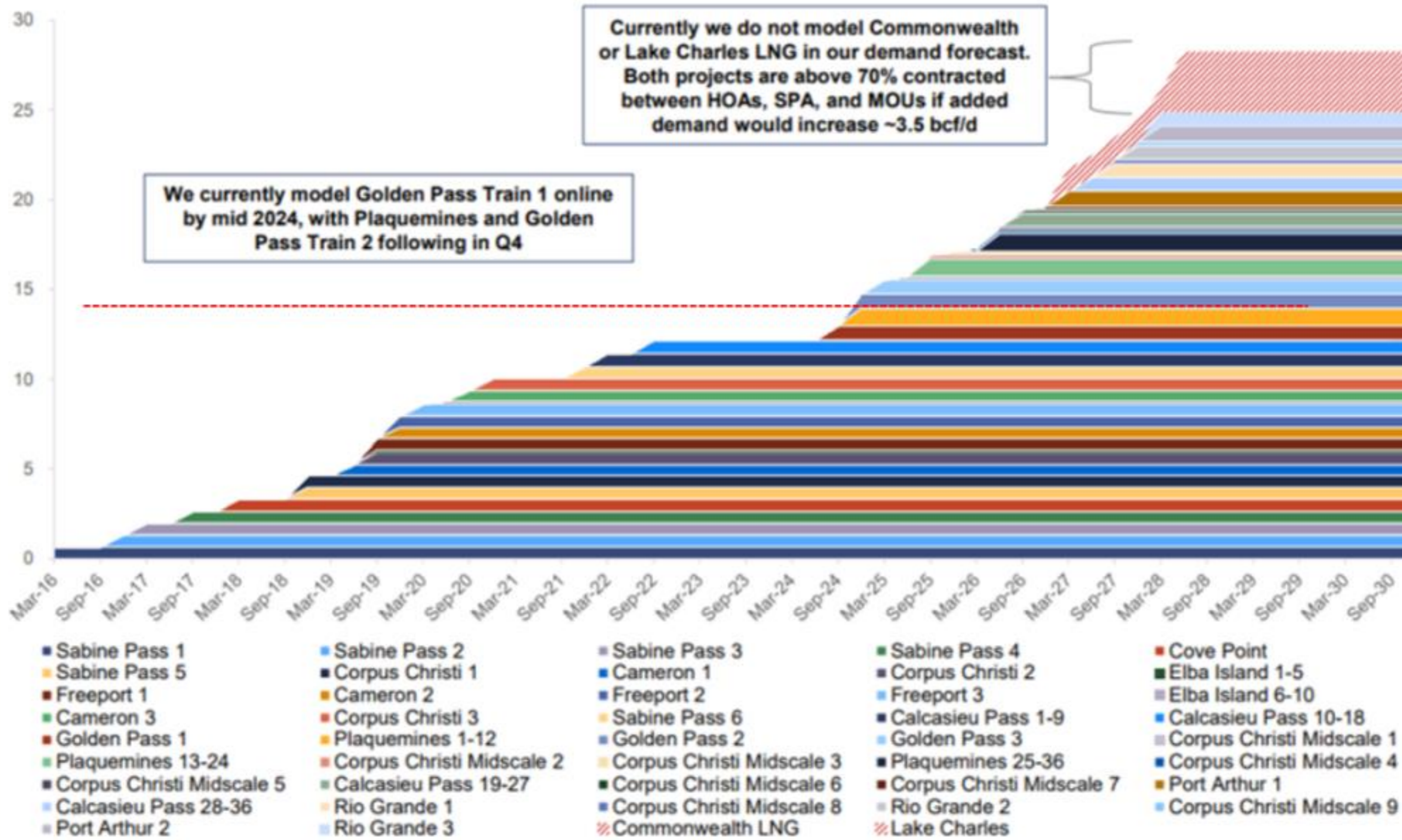
Supply

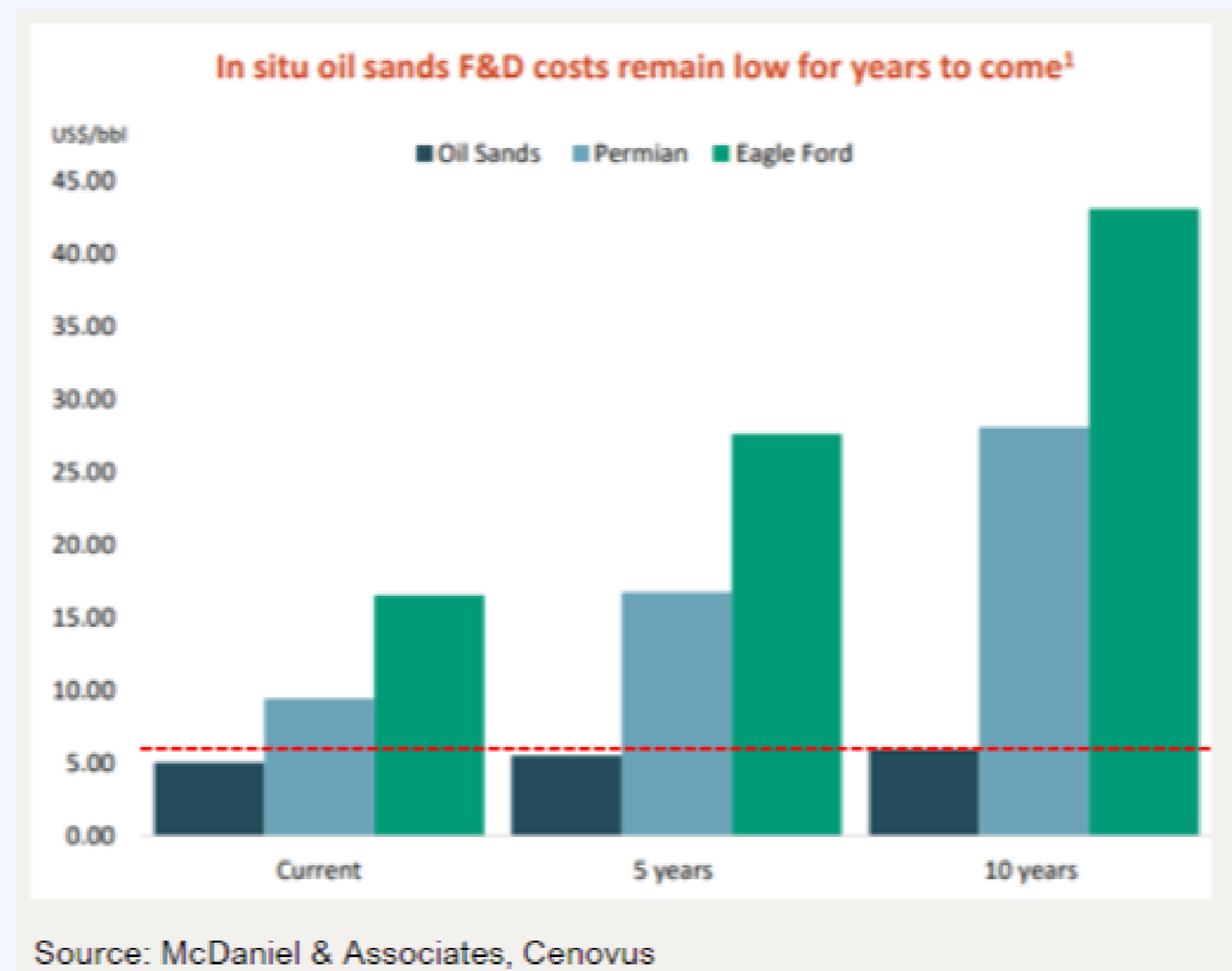
	2024			2024		
	OPEC	EIA	IEA	OPEC	EIA	IEA
OECD	46.03	46.01	45.65	33.59	34.86	31.96
	0.01	(0.05)	(0.08)	0.09	-	0.13
Americas	25.22	24.71	25.03	29.40	30.18	28.29
	0.05	(0.05)	0.09	0.10	-	0.09
Europe	13.44	13.47	13.25	3.75	4.13	3.21
	(0.03)	0.00	(0.05)	(0.01)	-	0.06
Asia-Pacific	7.32	7.88	7.37	0.43	0.40	0.46
	(0.07)	0.06	0.02	(0.01)	-	(0.01)
Non-OECD	58.37	56.41	57.33	36.96	34.46	32.94
	0.03	0.01	50.89	0.06	-	0.10
Americas	6.87	6.58	6.45	13.94	13.75	13.72
	-	0.00	0.01	0.07	-	0.01
Middle East	9.01	9.57	9.02	6.97	7.79	8.71
	-	0.01	(0.02)	0.01	-	1.83
Africa	4.56	4.62	4.36	7.30	7.40	6.72
	-	0.00	0.00	0.06	-	0.08
Other Europe	2.02	0.77	0.80	2.39	1.41	2.41
	-	0.00	(0.00)	-	-	0.01
China	16.82	16.27	17.08	3.27	3.20	3.11
	0.04	-	(0.03)	(0.03)	-	(0.00)
Total	104.40	102.42	102.98	70.55	69.32	70.58
	0.04	(0.04)	(0.12)	0.15	-	0.21

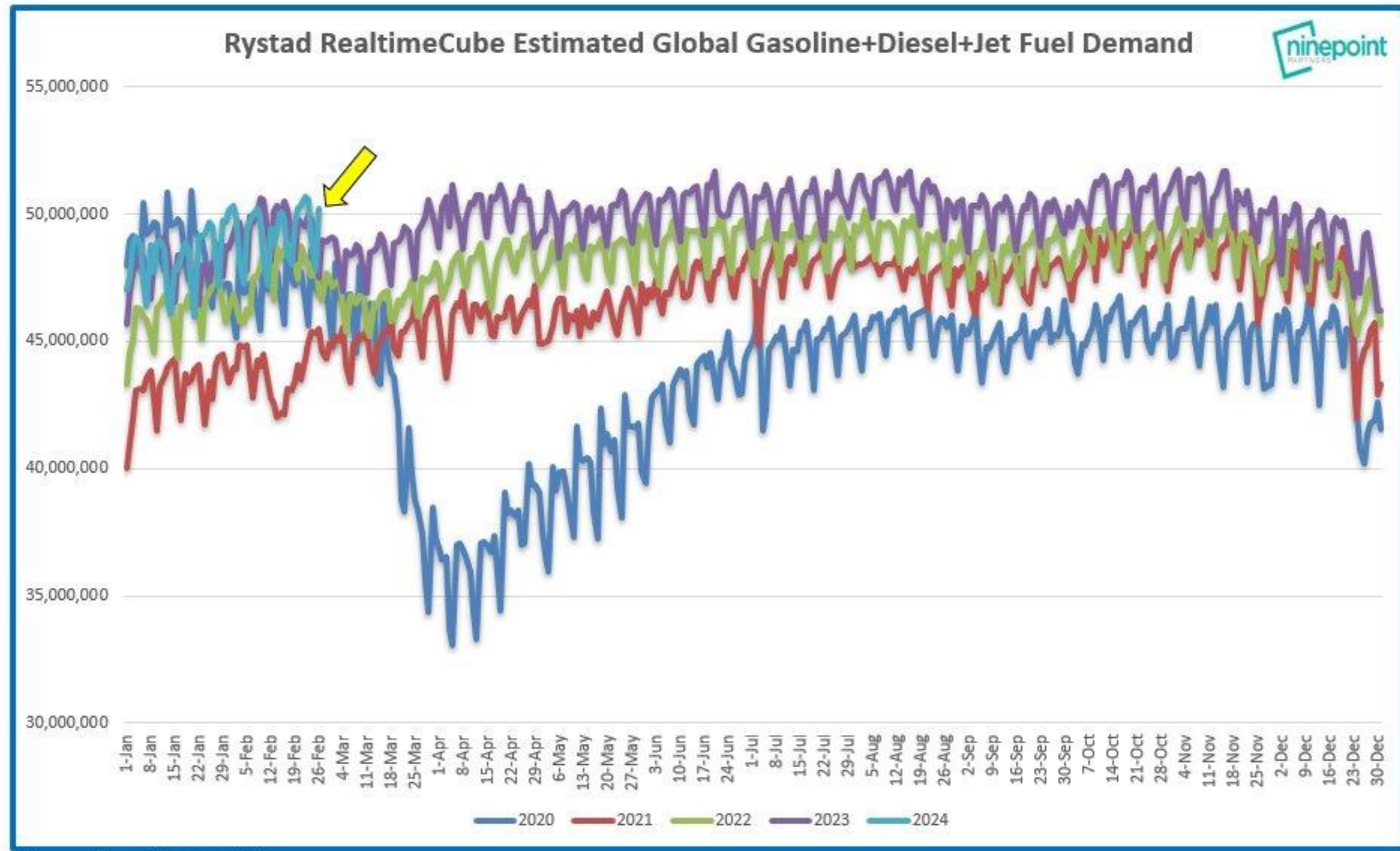
Note: Changes from last month's report shown in red (down) and green (up). Numbers may not match reported numbers due to rounding errors

Source: EIA, OPEC Secretariat, IEA

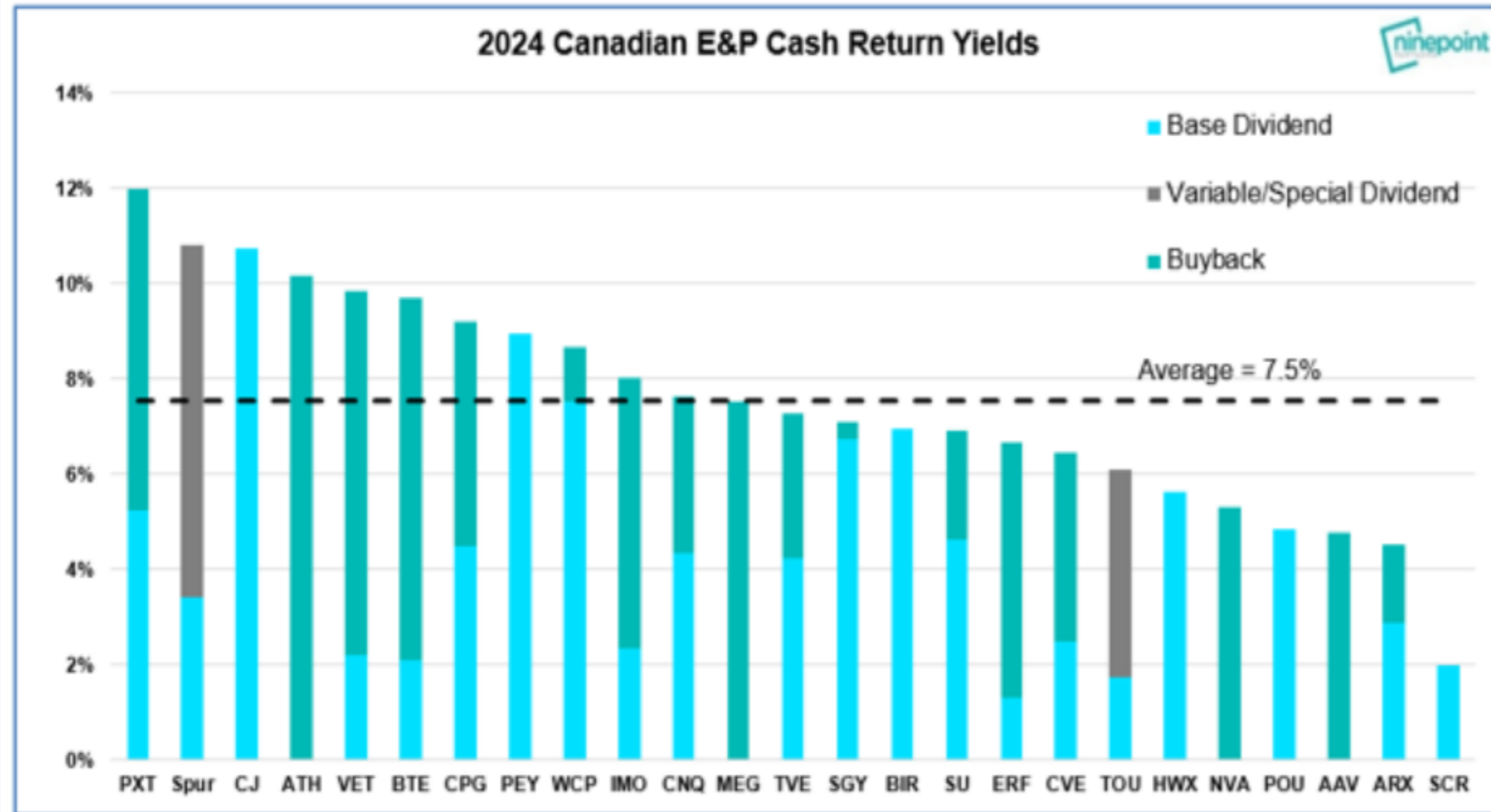
US Expected LNG Capacity



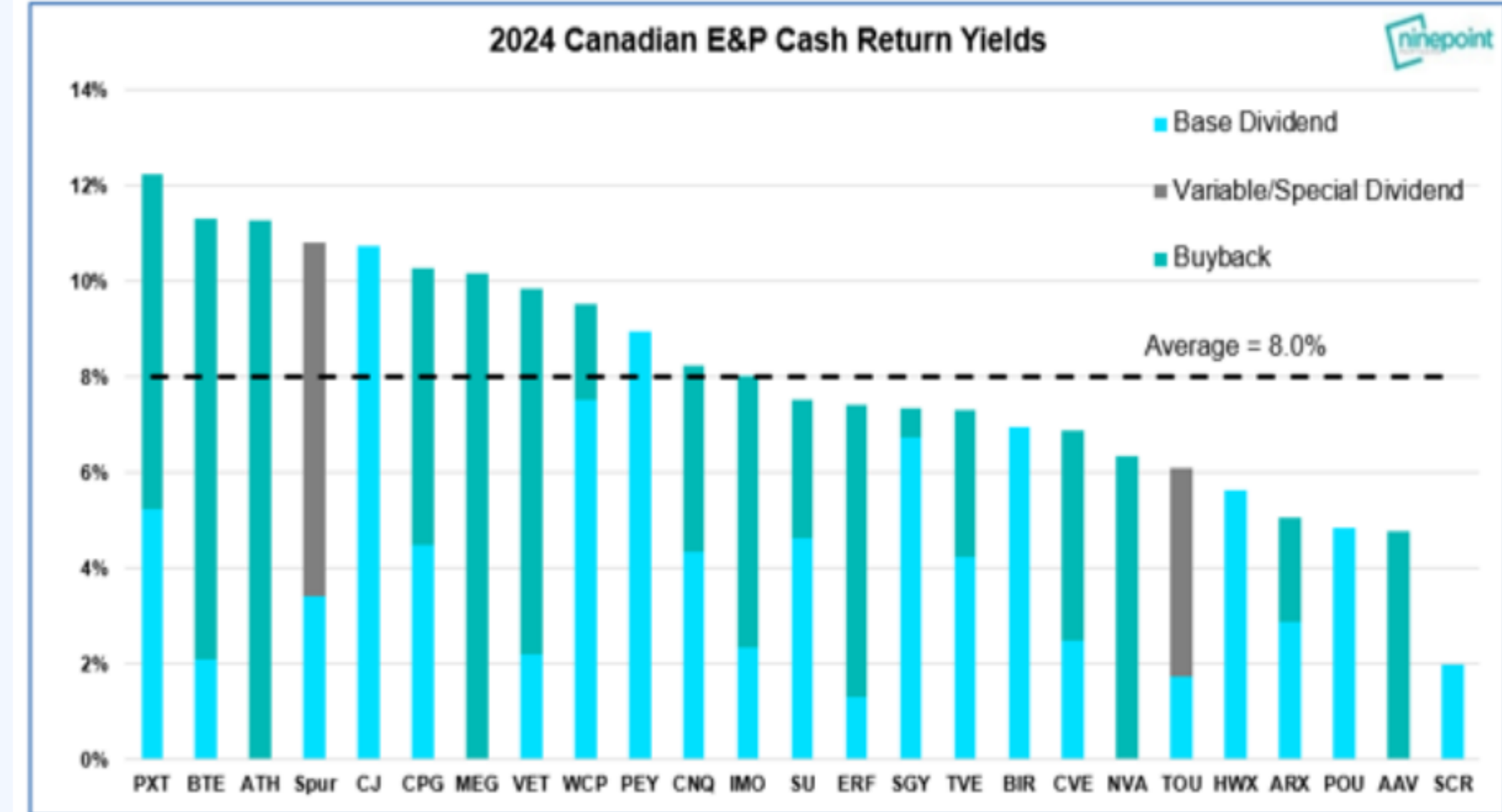




Source: Rystad RealtimeCube

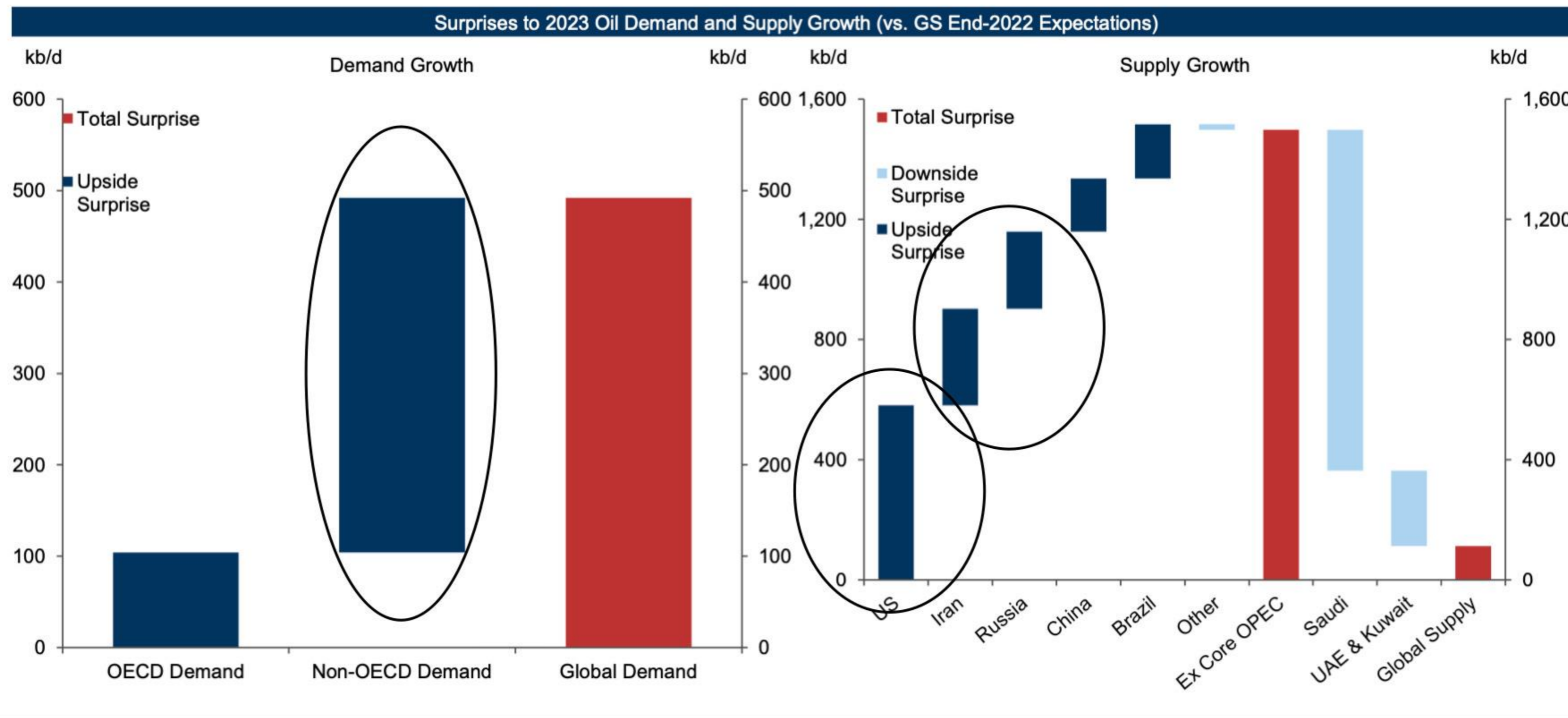


Source: Bloomberg, Ninepoint Partners Estimates
 For illustrative purposes only
 Pricing Assumptions: \$75 WTI, Strip Natural Gas and FX, \$15.00 WCS Differential



Source: Bloomberg, Ninepoint Partners Estimates
 For illustrative purposes only
 Pricing Assumptions: \$80 WTI, Strip Natural Gas and FX, \$14.00 WCS Differential

Exhibit 1: Upside Surprises in 2023 To Oil Demand and Non-OPEC Supply



Source: IEA, Kpler, JODI, EIA, National Sources, Goldman Sachs Global Investment Research

Just step-back and think about what we've done for the past 1.5 years. The oil market has fully absorbed the return of Iranian oil to the market, Russian's relentless growth to fund their Ukrainian war, the unprecedented release of global strategic reserves, and the US's surprise increase in production in 2023.



Castañar

Investment Fund

Jesús Sánchez León

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myinvestor

ANDBANK
Private Bankers



¿Por qué es el momento
de invertir en petróleo?

JESÚS SÁNCHEZ LEÓN
CASTAÑAR INVESTMENT FUND

