



OIL STORY: GROWING OIL DEFICIT

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WHY IS OIL BACK TO \$90 A BARREL?

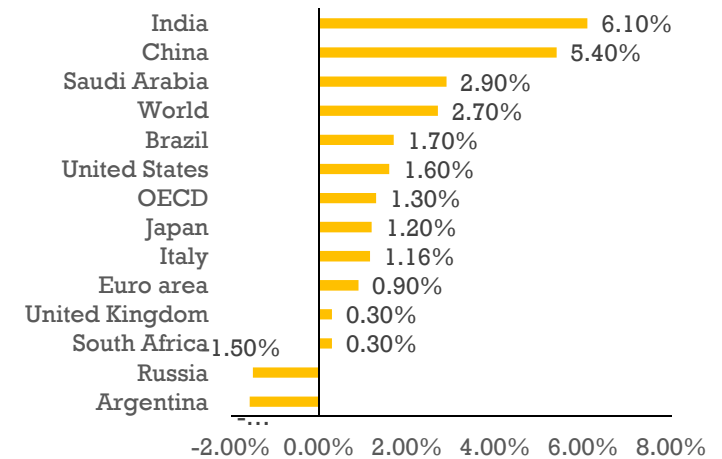
- WTI Crude oil prices surge to a 10 month high and are back to above \$90 a barrel
- Push by Saudi Arabia and Russia to restrict supply has also removed barrels from the market, depleting oil stocks
- Saudi Arabia's oil output likely to remain at 9Mbpd until end of December, 25% lower than its maximum capacity of 12mbpd
- World oil demand is expected to grow by a healthy 2.2Mbpd, unchanged from previous assessment, during 2024
- Resurgence in Chinese consumption, along with rise in jet fuel demand and petrochemical feedstock's is fuelling growth
- World supply in 2023 is forecasted to rise moderately by 1.5 mb/d, with the US, Iran and Brazil top sources of growth
- OPEC+ output has fallen by 2 mb/d with overall losses moderated by sharply higher Iranian flows
- Global oil inventories are expected to fall by 0.2 Mb/d in Q42023, on back of recent production cuts
- Refinery margins hit an eight-month high, as refiners struggled to keep up with oil demand growth, especially for middle distillates
- Product cracks and margins reached near-record levels due to unplanned outages, feedstock quality issues, supply chain bottlenecks and low stocks



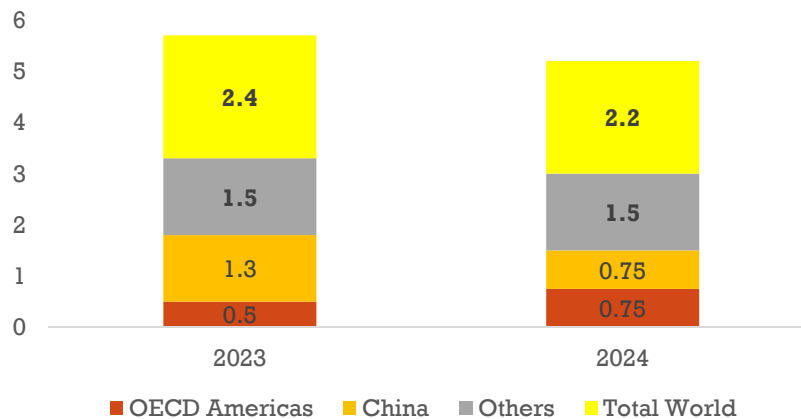
WORLD ECONOMY

- Various Challenges still ahead of us: High inflation, elevated interest rates and geo-political tensions
- China – disappointment still there yet stronger-than-anticipated growth trend in China, supported by further fiscal and monetary stimulus, may provide additional support to global economic growth
- The ongoing global economic growth is forecast to drive oil demand, especially given the recovery in tourism, air travel and steady driving mobility
- Euro-zone’s economy continues to be impacted by ongoing high inflation, fallout from the ECB’s consequent monetary policy and the recent decline in industrial activity.

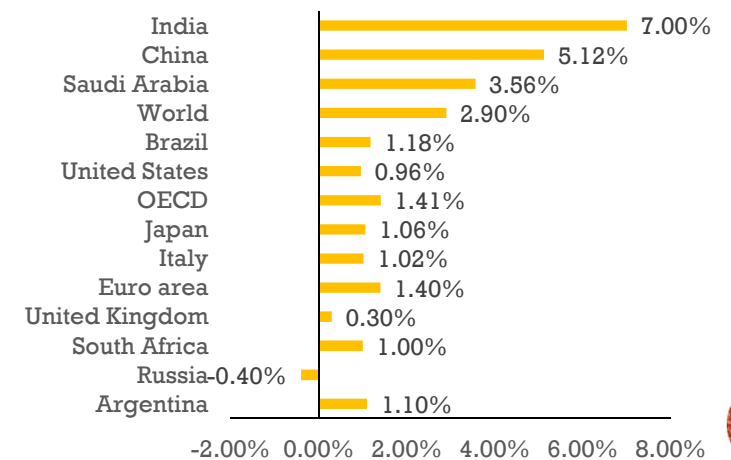
Real GDP growth for 2023



World Oil demand growth in 2023(mb/d)



Real GDP growth for 2024



Source: OPEC monthly report



WORLD DEMAND- LARGE DEFICIT

- World oil demand remains on track to grow by 2.2mbpd in 2023 to 101.8mbpd, led by resurgent Chinese consumption, strong summer air travel along with increased oil use in power generation and surging Chinese petrochemical activity.
- In 2024, solid global economic growth, amid continued improvements in China, is expected to further boost oil consumption
- Pre-COVID-19 levels of total global oil demand will be surpassed in 2023 to average at 102.1 mb/d and rise further to 104.3 mb/d in 2024, 2.4 mb/d y-o-y in 2023 to 104.3Mb/d and 2.2 mb/d in 2024
- In OECD, oil demand is expected to rise by 0.26 mb/d to average 46.4 mb/d. US oil demand is forecast to exceed pre-pandemic levels at 20.7 mb/d, mainly due to recovery in jet fuel and improvements in gasoline and light distillate demand
- This is due to expectations for slower economic activity in the two regions and ongoing supply chain bottlenecks that would weigh on industrial activity, particularly in OECD Europe
- In the non-OECD, oil demand in 2024 is forecast to increase by almost 2.0 mb/d YoY to average 57.9 mb/d. China and India are expected to see the largest growth
- Refinery margins hit an eight-month high as refiners struggled to keep up with oil demand growth, especially for middle distillates
- Global refinery runs are forecast to rise by 1.7 mb/d to 82.4 mb/d in 2023 and by 1.2 mb/d to 83.6 mb/d next year
- Other regions, particularly Middle East and Other Asia, are also set to see considerable gains, supported by positive economic outlook.
- In terms of fuels, jet kerosene, gasoline and diesel are assumed to lead non-OECD oil demand growth in 2024



World Oil demand(Mbpd)									
World oil demand and supply balance	2020	2021	2022	1Q23	2Q23	3Q23	4Q23	2023	1Q24
World demand									
Americas	22.45	24.32	25.11	24.71	25.42	25.68	25.19	25.25	24.90
of which US	18.35	20.03	20.43	20.11	20.72	20.83	20.37	20.51	20.25
Europe	12.41	13.19	13.52	13.10	13.40	13.99	13.39	13.47	13.15
Asia Pacific	7.16	7.34	7.38	7.81	6.93	7.22	7.65	7.40	7.84
Total OECD	42.03	44.85	46.00	45.62	45.75	46.89	46.22	46.12	45.89
China	13.94	15.00	14.85	15.63	15.96	15.57	16.11	15.82	16.20
India	4.51	4.77	5.14	5.40	5.40	5.21	5.50	5.38	5.63
Other Asia	8.13	8.67	9.02	9.40	9.44	8.99	9.14	9.24	9.66
Latin America	5.90	6.25	6.44	6.60	6.70	6.73	6.68	6.68	6.79
Middle East	7.45	7.79	8.30	8.63	8.32	8.86	8.73	8.64	8.91
Africa	4.08	4.22	4.40	4.69	4.27	4.43	4.88	4.57	4.80
Russia	3.39	3.62	3.56	3.69	3.45	3.60	3.87	3.65	3.75
Other Eurasia	1.07	1.21	1.15	1.24	1.21	1.02	1.23	1.17	1.27
Other Europe	0.70	0.75	0.77	0.84	0.77	0.75	0.83	0.80	0.86
Total Non-OECD	49.16	52.28	53.62	56.12	55.51	55.17	56.96	55.94	57.88

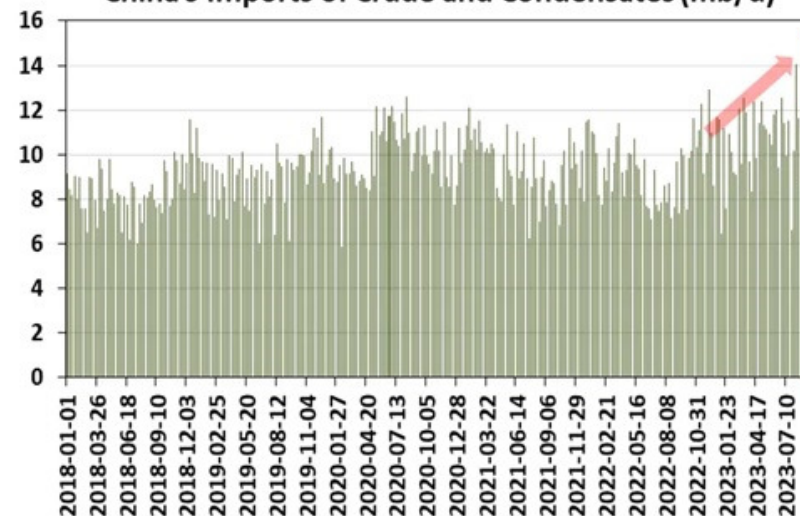
Source: OPEC monthly report



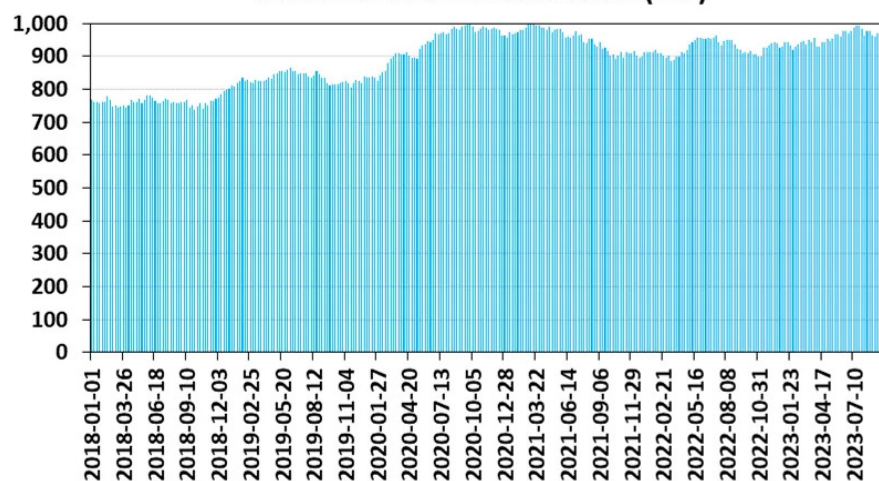
CHINA : IMPORTS DECENT, BUT QUESTIONS REMAIN!

- China's crude imports shown some volatility in recent months, although with robust performance so far this year.
- Crude inflows fell to 10.3 mbpd in July, following 2 Months above 12 mbpd, as refiners leaned on inventories
- China's crude imports are expected to remain supported by new round of export quotas, amid uncertainties regarding the pace of China's oil demand recovery
- The new quotas will increase product exports and provide export revenue at a time when govt. is seeking to stimulate economy
- Chinese oil consumption is recovering = Increase in Chinese oil "demand" might mean an increase in inventories and exports, thus supporting prices

China's Imports of Crude and Condensates (mb/d)



China's Crude Oil Inventories (mb)



Source: KPLER Image

Particulars	China's crude and product net imports, mb/d			
China	May-23	Jun-23	Jul-23	Change Jul 23/June 23
Crude oil	12.11	12.67	10.26	-2.41
Total Products	1.23	1.25	1.01	-0.24
Total Crude and Products	13.34	13.92	11.27	-2.65

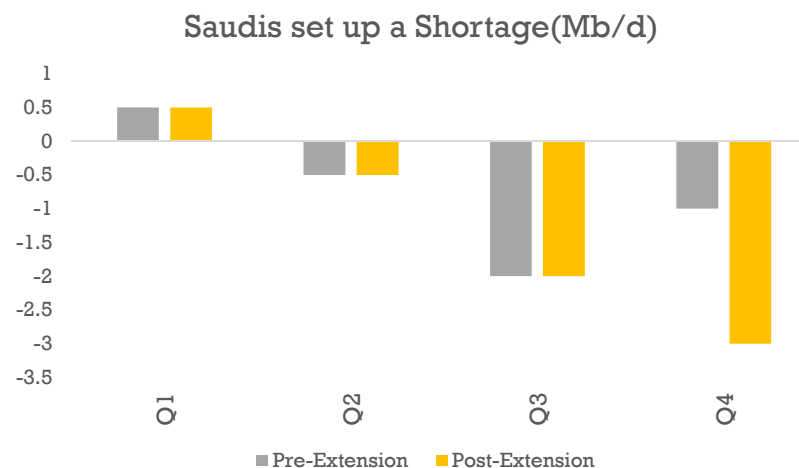
Source: OPEC monthly report

WORLD SUPPLY : SUPPORT TO PRICES

- World crude oil supply in 2023 will rise by 1.5 mbpd, with US, Iran and Brazil top sources of growth
- Global oil inventories are expected to fall by 0.2 Mbpd in Q423, on back of recent production cuts
- Fourth-quarter deficit may be biggest in more than decade
- Saudis, Russia have extended extra supply curbs to end of 2023
- OPEC+ cuts set to remove a total of 245Mbs by end of Dec if implemented in full
- OPEC's 13 members have pumped average of 27.4Mbpd, roughly 1.8 million less than it believes consumers needed
- If OPEC+ keeps output unchanged, as group leader Saudi Arabia has signalled it plans to do, gap between supply and demand will almost double in final 3 months of year
- Non-OPEC liquids production in 2023 is expected to grow by 1.6 Mbpd YoY, reaching 67.4 mbpd
- Upward revisions in Russia, US and Brazil more than offset downward revisions to OECD Europe, Canada and Africa
- Slow and steady growth is currently expected for US shale oil production throughout year
- US liquids supply growth for 2023 is forecast at 1.2 mbpd. The main growth drivers for 2023 are anticipated to be US, Brazil, Norway, Kazakhstan, Guyana and China.



WORLD SUPPLY : SUPPORT TO PRICES



Source: RTRS

Source: OPEC monthly report

Particulars	2022	1Q 23	2Q 23	3Q 23	4Q 23	2023	2023/22
(a) World Oil demand	99.62	101.74	101.26	102.06	103.18	102.06	2.44
Non-Opec Liquids Production	65.81	67.72	67.43	67.39	67.04	67.39	1.58
OPEC NGL and Non-Conventional	5.39	5.44	5.47	5.43	5.43	5.44	0.05
(b) Total	71.2	73.16	72.9	72.82	72.47	72.83	1.63
Difference (a-b)	28.41	28.58	28.36	29.24	30.71	29.23	0.82
OPEC Crude oil Production	28.86	28.85	28.28	27.41	27.45	27.99	-0.87
Total World Supply	100.06	102.01	101.18	100.23	99.92	100.82	0.76
Balance	0.45	0.27	-0.08	-1.83	-3.26	-1.24	-1.69



WORLD SUPPLY : SUPPORT TO PRICES

Non-OPEC liquids production in 2024*, mb/d							Change 2024/23	
Non-OPEC liquids production	2023	1Q24	2Q24	3Q24	4Q24	2024	Growth	%
Americas	28.24	28.71	28.75	29.21	29.52	29.05	0.81	2.85
of which U.S.	20.48	20.74	20.96	21.23	21.39	21.08	0.61	2.96
Europe	3.71	3.92	3.8	3.75	3.89	3.84	0.13	3.39
Asia Pacific	0.46	0.47	0.44	0.45	0.44	0.45	-0.01	-2.87
Total OECD	24.65	25.13	25.2	25.43	25.72	25.37	0.73	3.48
China	4.56	4.58	4.57	4.54	4.54	4.56	-0.01	-0.11
India	0.78	0.79	0.79	0.79	0.78	0.79	0.01	1.69
Other Asia	2.31	2.29	2.27	2.25	2.25	2.26	-0.05	-2.18
Latin America	6.78	6.95	7.02	7.15	7.23	7.09	0.31	4.5
Middle East	3.28	3.33	3.32	3.31	3.31	3.32	0.04	1.3
Africa	1.27	1.28	1.31	1.34	1.35	1.32	0.05	3.92
Russia	10.45	10.27	10.39	10.52	10.63	10.45	0	-0.02
Other Eurasia	2.96	3.02	3.02	3	3.04	3.02	0.06	2.1
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-1.15
Total Non-OECD	32.49	32.61	32.79	33	33.23	32.91	0.51	10.05
Total Non-OECD Production	64.92	65.73	65.79	66.41	67.09	66.26	1.33	2.05
Processing gains	2.47	2.52	2.52	2.52	2.52	2.52	0.05	2.03
Total Non-OECD Liquids Production	67.39	68.25	68.31	68.93	69.61	68.78	1.38	2.05

- For 2024, the key drivers of non-OPEC supply growth are forecast to be the US, Canada, Guyana, Brazil, Norway and Kazakhstan, while oil production is projected to see the largest declines in Mexico and Malaysia.

Source: OPEC monthly report



IT'S CLEAR WHO CONTROL OVER MARKET NOW #OPEC

- Output curbs by OPEC+ members of more than 2.5 mbpd since the start of 2023 have so far been offset by higher supplies from producers outside the alliance.
- Record US and Brazilian supply underpin a 1.9 mbpd increase in non-OPEC+ production from January to August, while Iran, still under sanctions, boosted output by around 600 kbpd
- Russia's tax revenues from oil bottomed early in 2023 and are now rising, thanks to OPEC+ production cuts
- This means more cash for Putin's war machine, a longer war and is only possible because we let it happen. Russia depends on western oil tankers to ship its oil to the world

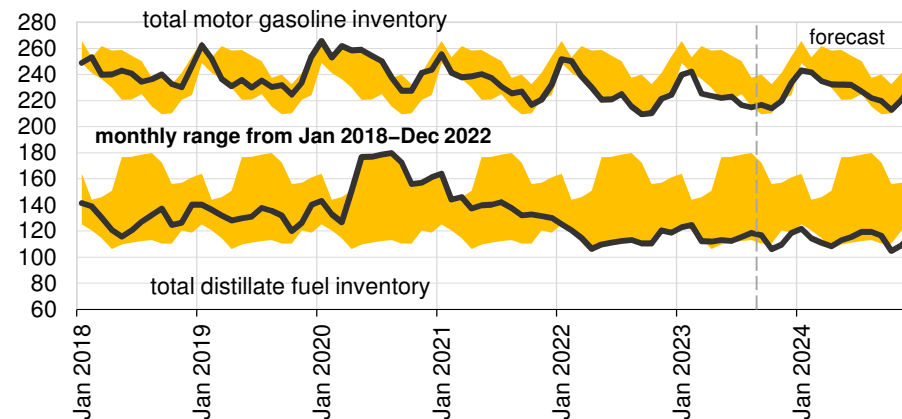
OPEC+ crude oil production(Mbpd)						
	Jul-23	Aug-23	Aug Prod vs	Aug-23	Sustainable	Eff Spare Cap
	Supply	Supply	Target	Target	Capacity2	vs Aug3
Algeria	0.96	0.93	-0.08	1.01	1.00	0.07
Angola	1.15	1.13	-0.33	1.46	1.11	-0.02
Congo	0.28	0.27	-0.04	0.31	0.27	0.00
Equatorial Guinea	0.06	0.07	-0.05	0.12	0.06	-0.01
Gabon	0.22	0.22	0.04	0.18	0.19	-0.03
Iraq	4.27	4.32	-0.11	4.43	4.75	0.43
Kuwait	2.55	2.55	-0.13	2.68	2.83	0.28
Nigeria	1.10	1.18	-0.56	1.74	1.33	0.15
Saudi Arabia	9.08	8.98	-1.50	10.48	12.25	3.27
UAE	3.22	3.22	0.20	3.02	4.20	0.98
Total OPEC-10	22.89	22.87	-2.55	25.42	28.00	5.19
Iran ⁴	3.04	3.14			3.80	
Libya ⁴	1.13	1.16			1.22	0.06
Venezuela ⁴	0.81	0.79			0.80	0.01
Total OPEC	27.87	27.96			33.82	5.26
Azerbaijan	0.50	0.50	-0.18	0.68	0.54	0.04
Kazakhstan	1.52	1.46	-0.17	1.63	1.67	0.21
Mexico ⁵	1.64	1.67		1.75	1.68	0.01
Oman	0.80	0.80	-0.04	0.84	0.85	0.05
Russia	9.48	9.48	-0.47	9.95	9.98	
Others ⁶	0.82	0.87	-0.18	1.06	0.87	0.01
Total Non-OPEC	14.75	14.79	-1.04	15.91	15.58	0.31
OPEC+ 19 in cut deal ⁴	36.01	35.99	-3.59	39.57	41.90	5.49
Total OPEC+	42.62	42.75			49.41	5.57

Source: OPEC monthly report

INVENTORIES: BELOW 5 YEAR AVERAGE

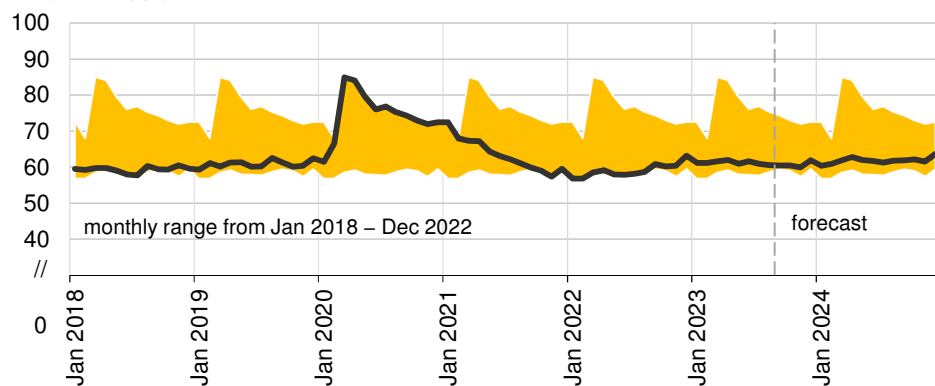
- World oil inventories, having depleted sharply this quarter, are set for an even steeper drop of roughly 3.3 Mbpd in the next three months.
- This could be biggest inventory drawdown since at least 2007
- Crude inventories around the NYMEX WTI delivery point at Cushing in Oklahoma had fallen to 14 million barrels below the long-term average on Sept. 1.
- U.S. commercial crude oil inventories had fallen to 4 Mbs below prior 10-year seasonal average by start of Sept, down from a surplus of 25 Mbs in mid-July.
- Rapid depletion of stocks at Cushing explains why the NYMEX WTI contract has moved into a sharp backwardation and drawn such strong interest from hedge fund managers

U.S. gasoline and distillate inventories million barrels



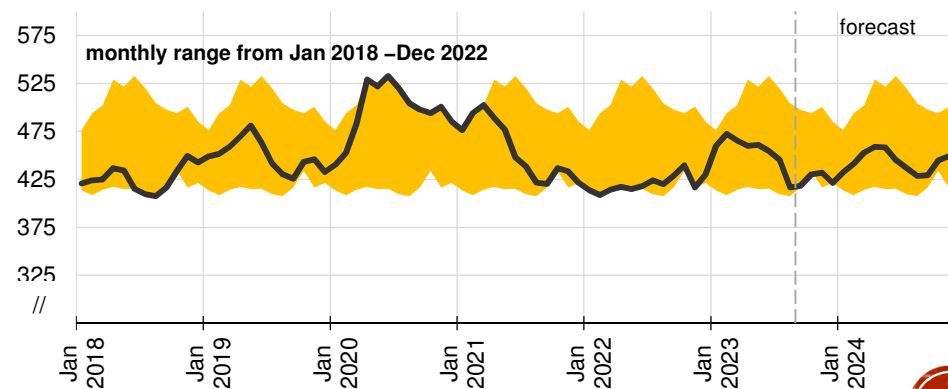
Source: EIA

OECD commercial inventories of crude oil and other liquids
days of supply



Source: EIA

U.S. commercial crude oil inventories

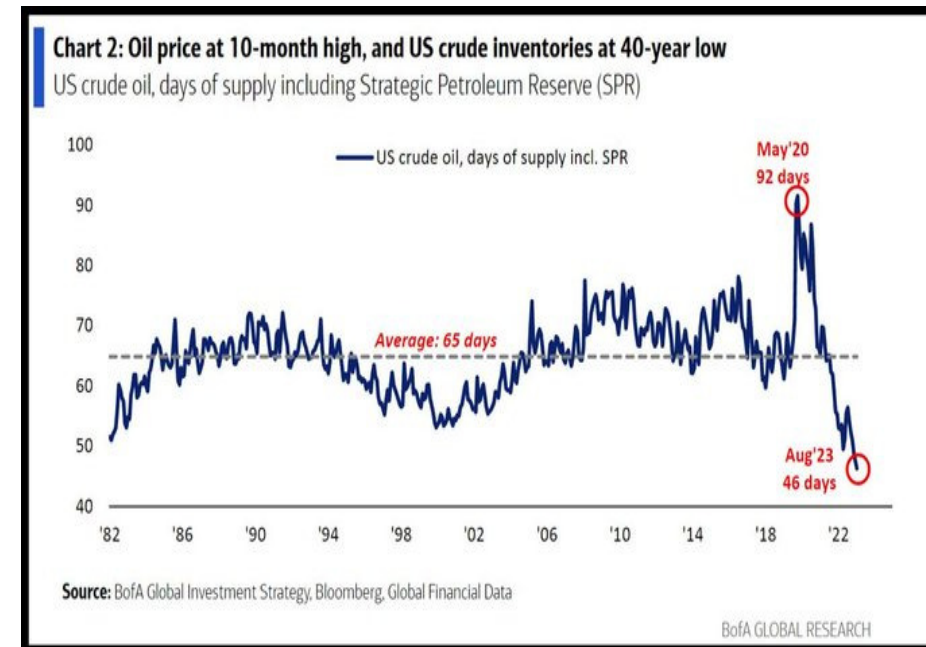


Source: EIA



SPR= TIME TO REFILL!

- Oil prices are now up a massive 35% in just 3 months.
- Elephant in the room is the US SPR. It's gonna be Biden's biggest hurdle because he was looking to fill it at below \$70 after draining half of it since 2020.
- Prices are now at an incredible 29% above the levels that the US was targeting to refill the SPR and there are less than 46 days of supply left in US reserves
- Total US crude oil inventories, including the Strategic Petroleum Reserves (SPR), just fell below 800 million barrels.
- The last time this happened? In 1985, just a few years after the SPR was formed. In other words, the US now has just 46 days worth of supply in total reserves, an all time low. Just 3 years ago, we had a record 92 days of supply in inventories, 100% more than current levels
- Refilling the SPR would involve either buying expensive oil or a large drop in oil prices. Both of which are unlikely to occur anytime soon



Source: BOFA Forecast



WHY SUSTAINABILITY OF \$100 LOOKS DIFFICULT?

- Prices are expected to trade higher and can touch above \$95, but prices sustaining above \$100 is questionable as:
- Markets fear that this trend could spur more cooling in the U.S. economy, potentially denting crude demand. U.S. fuel demand is also expected to cool in the coming months, with the end of the travel-heavy summer season.
- Biden administration is keen to keep pump prices in check ahead of the presidential election next year, where inflation and fuel costs have already become areas of attack for Republican party
- The Fed has vowed to bring inflation back to its long-term target of 2% from the 3%-plus levels the CPI is hovering at. The central bank has already added 5% to interest rates over the past 18 months
- US is likely to be less strict in enforcing sanctions against Iran. Already, in recent months this appears to be the case.
- Even though higher oil prices would help Saudi Arabia balance its budget and Russia fund its war machine, triple-digit oil prices could cause US shale producers to increase their supply to lower prices. Plus, higher prices could drive more investment into clean energy.
- ***However, any surprise cut by OPEC+ once again can bring further positive momentum and push prices higher above \$100.***



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