OIL & GAS Market Distortion Theory

The Weakening of OPEC's Pricing Power

A new landscape of shadow markets and competition for oil supply

Summary: From Price Setter to Market-Share Defender

CORE INVESTMENT LOGIC

Geopolitical fragmentation is fundamentally altering global oil pricing mechanisms. A shadow trading system running parallel to the traditional market has stripped OPEC of the information advantage its monopoly rested on, turning it from price setter into market-share defender.

THE TRADE

SHORT TERM
Price pressure
Three-way share competition outruns demand growth

3–5 YEARS
Supply gap
Rigs and well completions are falling while output is held high

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FRAMEWORK

Market Distortion Theory

Data as of October 2025

KEY FIGURES

Global demand, 2026F
106.5 mb/d
New high, above 2019

Fossil share of power, 2023
60.6%
Still dominant a decade on

Oil-powered new cars, Q1 2025
78%
Incl. hybrids, 84%

US rigs, 2023 → Aug 2025
688 → 538
Output held high regardless

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01 Foreword and Core Investment Logic

This article explores current investment opportunities in the oil market. The core investment logic is based on the "Market Distortion Theory": geopolitical fragmentation is fundamentally altering global oil pricing mechanisms.

01 Formation of a dual-track market system

The Russia–Ukraine conflict and Middle East tensions have spawned a "shadow trading system" parallel to traditional markets. Russia and Iran are delivering substantial crude volumes to Asia at discounted prices through shadow fleets and non-dollar settlement systems. This dual-track system not only suppresses apparent prices but also, more importantly, undermines market information transparency.

02 Structural weakening of OPEC's pricing power

OPEC's monopolistic power has historically relied on two pillars: production capacity control and information advantage. Now, with significant oil transactions occurring in opaque parallel markets, OPEC has lost its ability to accurately gauge true supply and demand. Unable to precisely track competitors' actual production and sales data, OPEC's market adjustment mechanisms are failing. This information asymmetry is forcing OPEC to shift from "price setter" to "market share defender."

03 Systematically underestimated demand resilience

Markets are overly focused on EV penetration rates while overlooking three key facts: first, oil demand in developing countries continues to accelerate; second, even in China, where EVs are rapidly expanding, oil demand is still hitting new highs; third, subsidy rollbacks under global fiscal pressure could significantly slow the electrification process. Fossil fuels still account for over 60% of global energy supply, a structure unlikely to change in the near term.

04 Unsustainability of current supply dynamics

On the surface, all three major supply sources (OPEC, North America, and Russia–Iran) are increasing production to compete for market share. However, deeper data reveals an overlooked contradiction: rig counts are continuously declining, well completions are hitting new lows, and capital expenditure has been slashed dramatically. Current high production levels are essentially depleting existing capacity. This "drain the pond to catch fish" production model foreshadows a potential supply gap in the next 3–5 years.

INVESTMENT IMPLICATIONS

In the short term, oversupply from three-way competition will suppress oil prices. But this is precisely creating positioning opportunities for forward-thinking investors. When markets realize the supply gap, new projects will require 3–10 years from initiation to production, potentially creating upside beyond current expectations.

02 The Russia–Ukraine War, Market Imbalance, and the Challenge to OPEC's Monopoly

OPEC's oil pricing power rests on two pillars: **production control**, meaning command over oil resources and rapid policy execution within the cartel; and **information advantage**, leveraging transparent market information systems for precise production adjustments.

2.1 The operating logic of traditional monopoly mechanisms

Under the traditional global trading system, OPEC maintains its monopoly through "price wars." For example, when competitors (like Malaysia) attempt to capture market share at $60/barrel, this information quickly reflects in Western-dominated futures markets. OPEC can immediately increase production to drive prices down to $55/barrel, forcing competitors to exit due to cost disadvantages. This capability for "rapid detection and precision strike" is fundamentally built on market information transparency.

2.2 How information asymmetry dismantles monopoly power

However, when market information transmission mechanisms fail, OPEC's monopoly advantages become systematically weakened:

- Unable to accurately identify competitors' real prices and production volumes
- Loss of timing for precise production adjustments
- Forced to "blindly increase production" to counter invisible opponents
- Degradation from active "price setter" to passive "market follower"

Geopolitical conflicts are reshaping market structure. The Russia–Ukraine war and Middle East tensions are accelerating this process. Western sanctions have forced Russia, Iran, and others to establish parallel trading systems:

SHADOW FLEETS	NON-DOLLAR SETTLEMENT	DISCOUNT PRICING
Untraceable transportation networks	Financial channels bypassing the SWIFT system	Trading volume for price to rapidly penetrate Asian markets

This "shadow market" lacks transparency in both scale and pricing, but its very existence erodes OPEC's information advantage. When a significant proportion of oil transactions occur "in the dark," OPEC's market adjustment mechanisms, essential to its survival, are failing.

> **KEY IMPLICATION: THE END OF INFORMATION-BASED MONOPOLY**
>
> The emergence of opaque parallel markets represents more than temporary market disruption: it signals the structural erosion of OPEC's traditional price-setting mechanisms. This information asymmetry is a critical component of the broader market distortion currently reshaping global oil markets.

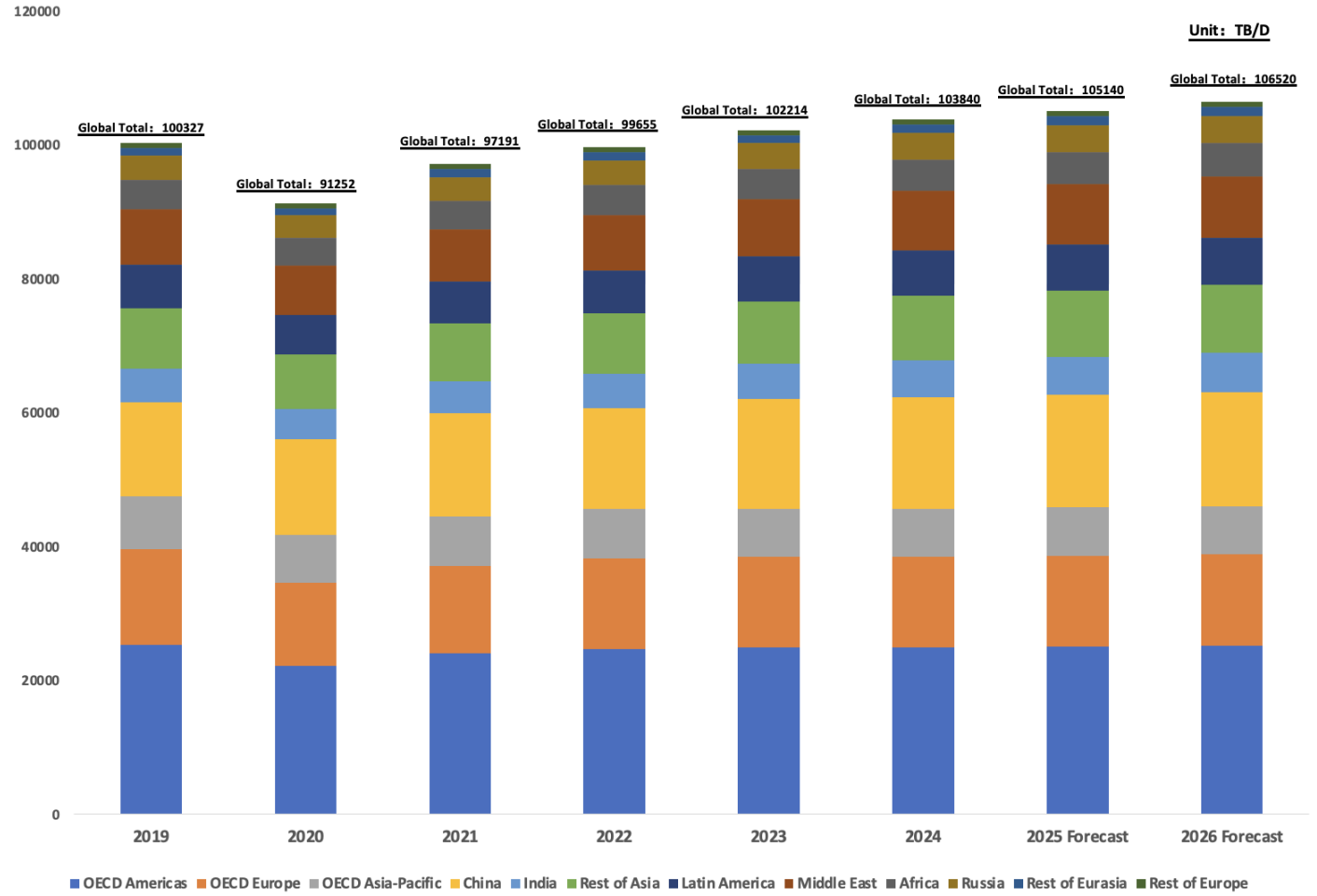
03 Demand Side: Oil Demand Demonstrates Resilience

Market pessimism about oil demand may reflect systematic bias. The mainstream view suggests OPEC's production increases will lead to severe oversupply, but this judgment rests on potentially distorted data foundations.

As analyzed earlier, current market information transmission mechanisms have been severely disrupted by geopolitics and parallel trading systems. Traditional market data may not accurately reflect true supply and demand: when substantial oil transactions occur in opaque "shadow markets," apparent demand decline may merely be an illusion of trading channel shifts. Buyers aren't reducing purchases; they're redirecting to discounted suppliers in data blind spots.

Therefore, assessing real demand requires stepping outside traditional frameworks and cross-validating from multiple dimensions.

Exhibit 1. Total oil demand by region, 2019–2026



Unit: thousand barrels per day. Source: OPEC 2024 ASB, OPEC 2025 August MOMR. Chart created by Sonny Xi.

Exhibit 2. Total oil demand by region: underlying data

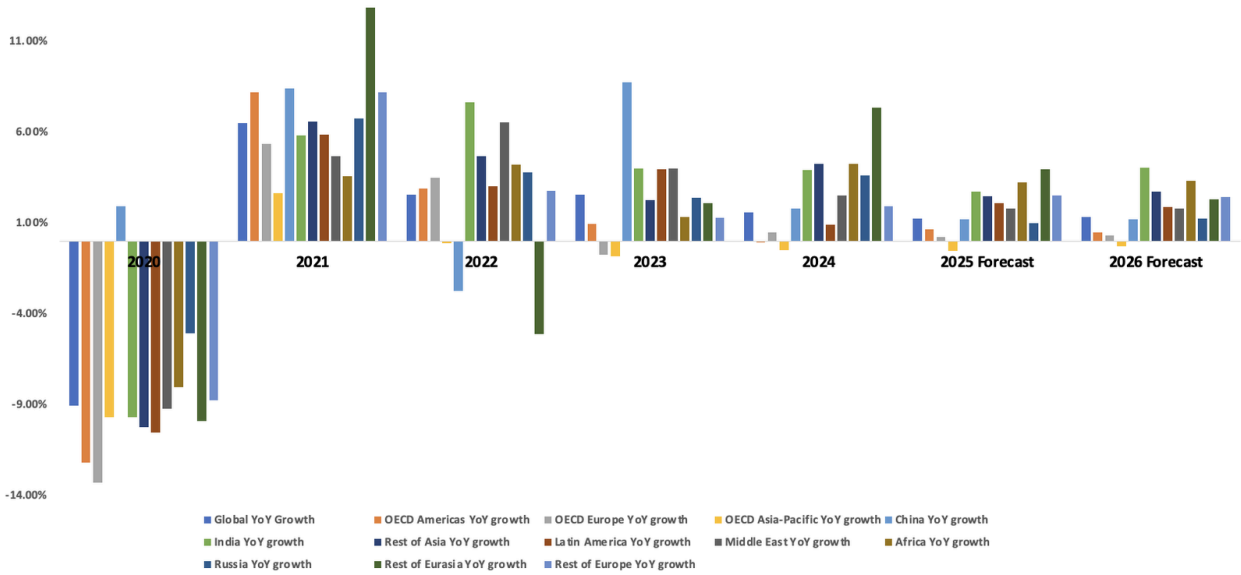
Region	2019	2020	2021	2022	2023	2024	2025F	2026F
OECD Americas	25,289	22,206	24,027	24,724	24,957	24,940	25,100	25,220
OECD Europe	14,333	12,425	13,092	13,551	13,448	13,510	13,540	13,580
OECD Asia-Pacific	7,895	7,130	7,318	7,308	7,246	7,210	7,170	7,150
China	14,002	14,269	15,471	15,047	16,360	16,650	16,850	17,050
India	4,994	4,510	4,772	5,137	5,342	5,550	5,700	5,930
Rest of Asia	9,060	8,131	8,667	9,072	9,277	9,670	9,910	10,180
Latin America	6,594	5,900	6,246	6,435	6,690	6,750	6,890	7,020
Middle East	8,201	7,445	7,794	8,303	8,634	8,850	9,010	9,170
Africa	4,435	4,078	4,223	4,401	4,460	4,650	4,800	4,960
Russia	3,568	3,387	3,615	3,752	3,841	3,980	4,020	4,070
Rest of Eurasia	1,192	1,074	1,212	1,150	1,174	1,260	1,310	1,340
Rest of Europe	764	697	754	775	785	800	820	840
Global total	**100,327**	**91,252**	**97,191**	**99,655**	**102,214**	**103,840**	**105,140**	**106,520**

Unit: thousand barrels per day. Source: OPEC 2024 ASB, OPEC 2025 August MOMR.

According to OPEC's 2024 Annual Statistical Bulletin (ASB) and August Monthly Oil Market Report (MOMR), global oil demand shows strong resilience. Despite the economic recession caused by the COVID-19 pandemic in 2020, demand has continued to recover and grow, exceeding 2019 levels by 2024. Oil demand in developing countries such as China and India is showing rapid growth trends.

It's worth noting that even against the backdrop of rapid EV adoption, China's oil demand in 2024 still reached 16,650 thousand barrels per day. According to OPEC forecasts, global oil demand will continue to grow in 2025–2026, with 2026 expected to reach 106,520 thousand barrels per day.

Exhibit 3. Annual growth rate of oil demand by region, 2020–2026



Source: OPEC 2024 ASB, OPEC 2025 August MOMR. Chart created by Sonny Xi.

Exhibit 4. Year-on-year demand growth by region (%)

Region	2020	2021	2022	2023	2024	2025F	2026F
Global total	**−9.05**	6.51	2.54	2.57	1.59	1.25	1.31
OECD Americas	**−12.19**	8.20	2.90	0.94	**−0.07**	0.64	0.48
OECD Europe	**−13.31**	5.37	3.51	**−0.76**	0.46	0.22	0.30
OECD Asia-Pacific	**−9.69**	2.64	**−0.14**	**−0.85**	**−0.50**	**−0.55**	**−0.28**
China	1.91	8.42	**−2.74**	8.73	1.77	1.20	1.19
India	**−9.69**	5.81	7.65	3.99	3.89	2.70	4.04
Rest of Asia	**−10.25**	6.59	4.67	2.26	4.24	2.48	2.72
Latin America	**−10.52**	5.86	3.03	3.96	0.90	2.07	1.89
Middle East	**−9.22**	4.69	6.53	3.99	2.50	1.81	1.78
Africa	**−8.05**	3.56	4.22	1.34	4.26	3.23	3.33
Russia	**−5.07**	6.73	3.79	2.37	3.62	1.01	1.24
Rest of Eurasia	**−9.90**	12.85	**−5.12**	2.09	7.33	3.97	2.29
Rest of Europe	**−8.77**	8.18	2.79	1.29	1.91	2.50	2.44

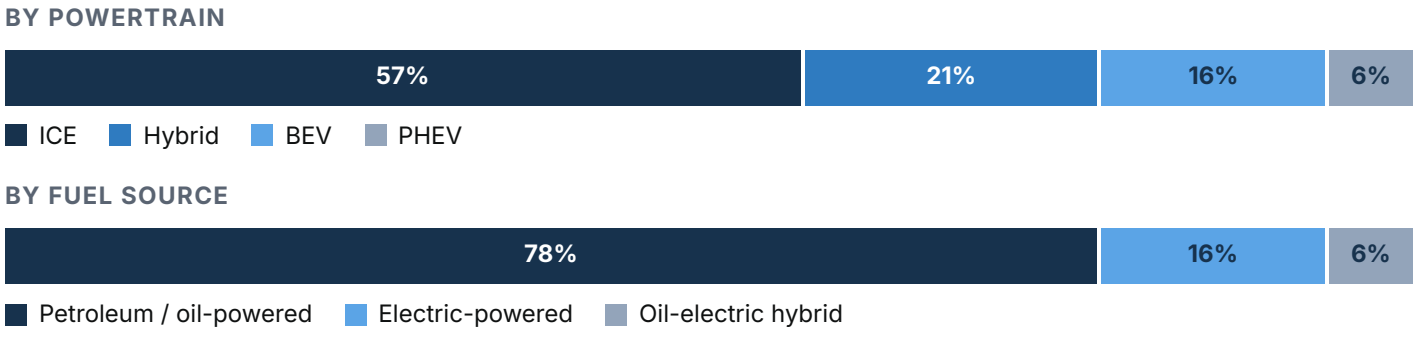
Shading tracks growth intensity; grey marks contraction. Source: OPEC 2024 ASB, OPEC 2025 August MOMR.

From the year-on-year growth rate perspective, developing countries have shown stronger demand growth momentum after 2020. Among them, growth in China, India, and other Asian regions is particularly notable. China's oil demand year-on-year growth rates exceeded 8% in both 2021 and 2023; India reached a high growth rate of 7.65% in 2022 and maintained sustained growth of about 4% in 2023–2024.

Other developing regions similarly maintain stable growth. Africa maintained an average annual growth rate of about 3% during 2021–2024, and according to OPEC forecasts, will maintain this growth rate in 2025–2026. The Middle East region (except for the 2020 pandemic impact) has consistently shown positive growth, with annual growth rates stable in the 2.5%–6.5% range.

3.1 Electric vehicle expansion and replacement data

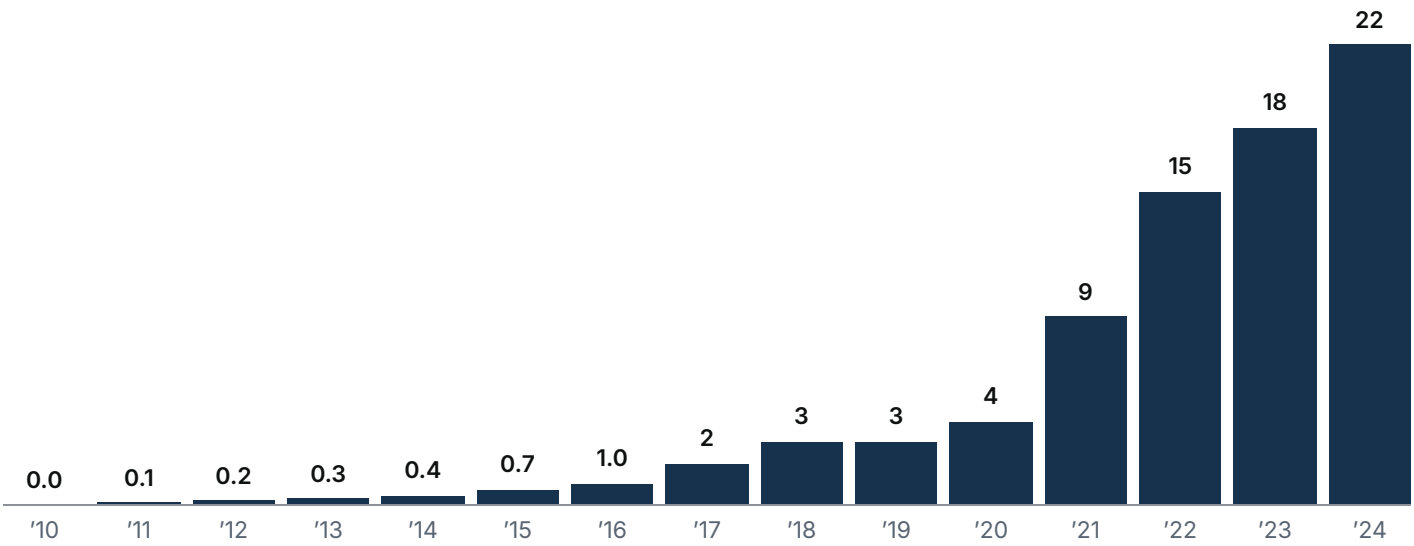
Exhibit 5. Global new car sales by powertrain, Q1 2025



Source: Visual Capitalist, IEA. Chart created by Sonny Xi.

Electric vehicle substitution process. The market is generally concerned that rapid new energy vehicle development will significantly reduce oil demand. However, current data show this transition process may be slower than some expectations in the short to medium term. According to Visual Capitalist and IEA statistics, in Q1 2025, 78%–80% of global new car sales are still internal combustion vehicles (including hybrid models). Considering the massive existing stock of ICE vehicles and their dominance in new vehicle additions, oil's dominant position in the transportation sector may be difficult to shake in the short term.

Exhibit 6. EV share of global new car sales, 2010–2024



EV (PHEV + BEV) share of global new car sales, %. In 2024, 17.5 m of 79.5 m new cars sold were electric; 78% of the market still ran on oil.

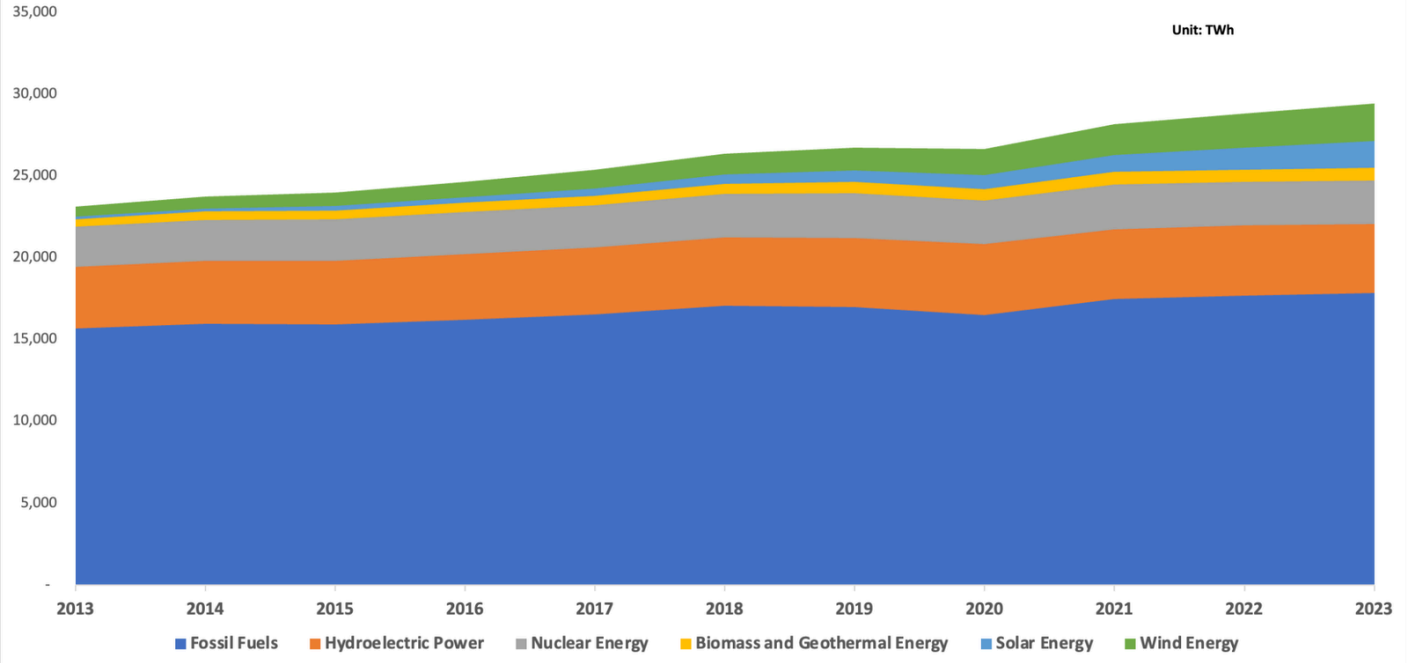
PHEV + BEV as a share of total global new car sales. Source: Visual Capitalist, IEA. Chart created by Sonny Xi.

Impact of subsidy rollbacks. Current global fiscal pressures are increasing, and EV subsidy policies may face systematic withdrawal. The U.S. already eliminated the $7,500 EV tax credit in September 2025, and other countries may follow suit in reducing subsidies. Given the EV industry's high dependence on government support (for example, Tesla's profits heavily rely on carbon credit trading), subsidy rollbacks may lead to slower EV growth, which could, to some extent, support the resilience of ICE vehicle demand and oil consumption. However, continued cost reductions in EV technology may partially offset the impact of subsidy rollbacks, and the specific evolution of this trend requires continued observation.

3.2 Energy transition process: fossil fuels still dominate

Exhibit 7. Global electricity generation by source, 2013–2023

Unit: TWh	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2023 - Compostion%
Fossil Fuels	15,681	15,965	15,954	16,233	16,574	17,094	17,007	16,523	17,481	17,719	17,854	60.6%
Hydroelectric Power	3,791	3,874	3,884	4,013	4,058	4,178	4,226	4,344	4,276	4,298	4,210	14.3%
Nuclear Energy	2,449	2,499	2,533	2,571	2,594	2,659	2,754	2,648	2,762	2,640	2,686	9.1%
Biomass and Geothermal Energy	468	508	550	558	592	626	659	696	746	765	787	2.7%
Solar Energy	132	198	256	328	445	575	706	853	1,056	1,323	1,631	5.5%
Wind Energy	634	706	830	960	1,139	1,268	1,420	1,591	1,849	2,099	2,304	7.8%



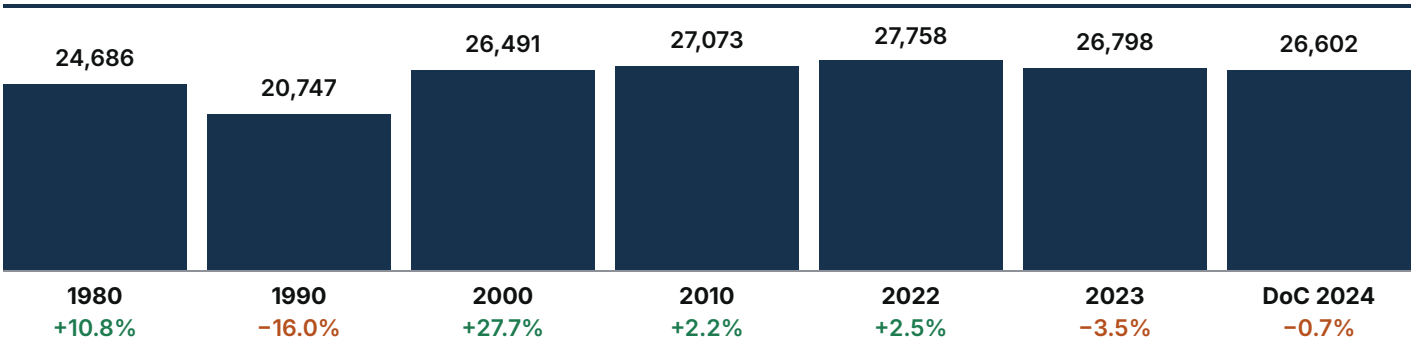
Unit: TWh. Source: REN21 RenewableNow. Chart created by Sonny Xi.

As the global economy develops, energy demand continues to grow. According to RenewableNow data, between 2013–2023, global electricity generation increased 27.3% to reach 29,472 TWh. Fossil fuel generation increased from 15,681 TWh to 17,854 TWh, consistently maintaining a dominant share (60.6% in 2023). Although solar and wind power showed astonishing growth rates (increasing 12.4 times and 3.6 times respectively), due to their low base levels, they combined only accounted for 13.3% of global electricity generation in 2023. The absolute increase in fossil fuels during this period (2,173 TWh) even exceeded total solar power generation, demonstrating strong demand resilience.

From the chart, it's clear that the blue area representing fossil fuels has not shrunk but rather continued to expand. This reflects an important contradiction facing the energy transition: renewable energy's rapid growth is mainly meeting new demand rather than replacing existing fossil energy stock. From the data perspective, the current energy transition to some degree presents characteristics of "energy addition." The growth rate of global electricity demand exceeds the deployment speed of clean energy, causing the absolute consumption of fossil fuels (oil, natural gas, coal) to rise rather than fall. This helps explain why the actual energy transition process may be slower than some policy expectations. However, continued cost declines and technological progress in renewable energy may accelerate this process, and long-term trends still require continued observation.

04 Supply Side: OPEC Production Increases, Extraction Technology, and Geopolitical Competition

Exhibit 8. Total crude oil production of OPEC members



Unit: thousand barrels per day; figures below each bar are period-on-period growth. DoC 2024 is forecast data; 2024 Iranian data is not yet confirmed. Source: OPEC 2024 ASB, OPEC 2025 August MOMR.

From the overall production trend, OPEC experienced its most significant capacity expansion between 1990 and 2000, with production jumping from 20,747 thousand barrels/day to 26,491 thousand barrels/day, an increase of 27.7%. However, OPEC production growth stagnated after 2000, increasing only from 26,491 to 26,602 thousand barrels/day over 24 years, a net growth of less than 1%. 2022–2024 saw two consecutive years of negative growth, with production falling from 27,758 back to 26,602 thousand barrels/day.

Exhibit 9. OPEC member crude oil production by decade

	Algeria	Congo	Eq. Guinea	Gabon	Iran	Iraq	Kuwait	Libya	Nigeria	Saudi Arabia	UAE	Venezuela	OPEC total
1980	1,020	56	0	175	1,467	2,646	1,664	1,832	2,058	**9,901**	1,702	2,165	**24,686**
1990	783	156	0	274	3,135	2,113	859	1,389	1,727	6,413	1,763	2,135	**20,747**
2000	796	269	116	281	3,661	2,810	1,996	1,347	2,054	**8,095**	2,175	2,891	**26,491**
2010	1,190	308	241	241	3,544	2,358	2,312	1,487	2,048	**8,166**	2,324	2,854	**27,073**
2022	1,020	262	81	191	2,554	4,453	2,707	981	1,138	**10,591**	3,064	716	**27,758**
2023	973	271	55	223	2,859	4,118	2,590	1,189	1,187	**9,606**	2,944	783	**26,798**
DoC 2024	905	254	57	224	3,257	4,163	2,429	1,092	1,426	**8,978**	2,950	867	**26,602**

Unit: thousand barrels per day. Shaded cells mark output above 8,000 kb/d. Source: OPEC 2024 ASB.

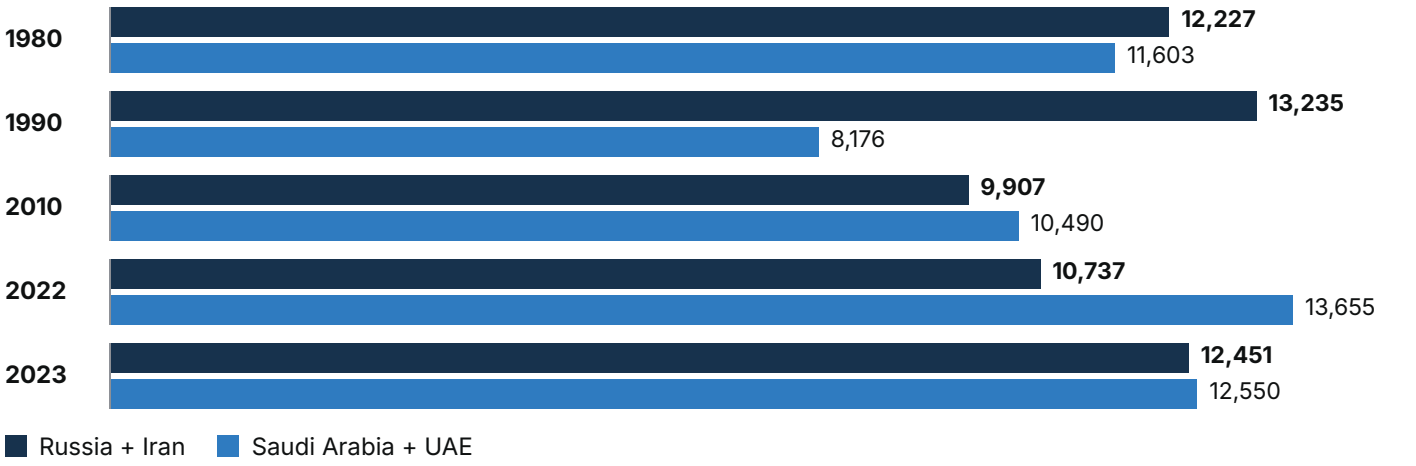
From member country contributions, OPEC presents a pattern of "Saudi dominance with several countries providing stability":

- **Saudi Arabia:** has consistently maintained 8,000–10,000 thousand barrels/day production over 44 years, accounting for approximately 35–40% of OPEC's total production, serving as the main production pillar
- **Iran, Kuwait, UAE:** each maintains a stable production of 3,000–4,000 thousand barrels/day, forming the second tier
- **Other member countries:** production fluctuates significantly with a limited contribution to total production

It's worth noting that OPEC's core oil-producing countries generally face geopolitical risks. Iran has been under long-term Western sanctions, Iraq has experienced multiple wars, Libya faces political instability, and Venezuela has suffered economic collapse; these uncertainties may to some extent constrain OPEC's ability to increase production.

4.1 Potential scale of shadow market suppliers: Iran + Russia vs Saudi Arabia + UAE

Exhibit 10. Russia + Iran vs Saudi Arabia + UAE crude oil production



Unit: thousand barrels per day. This data is OPEC's forecast; Russian and Iranian crude oil production information is not publicly available. Source: OPEC 2024 ASB. Chart created by Sonny Xi.

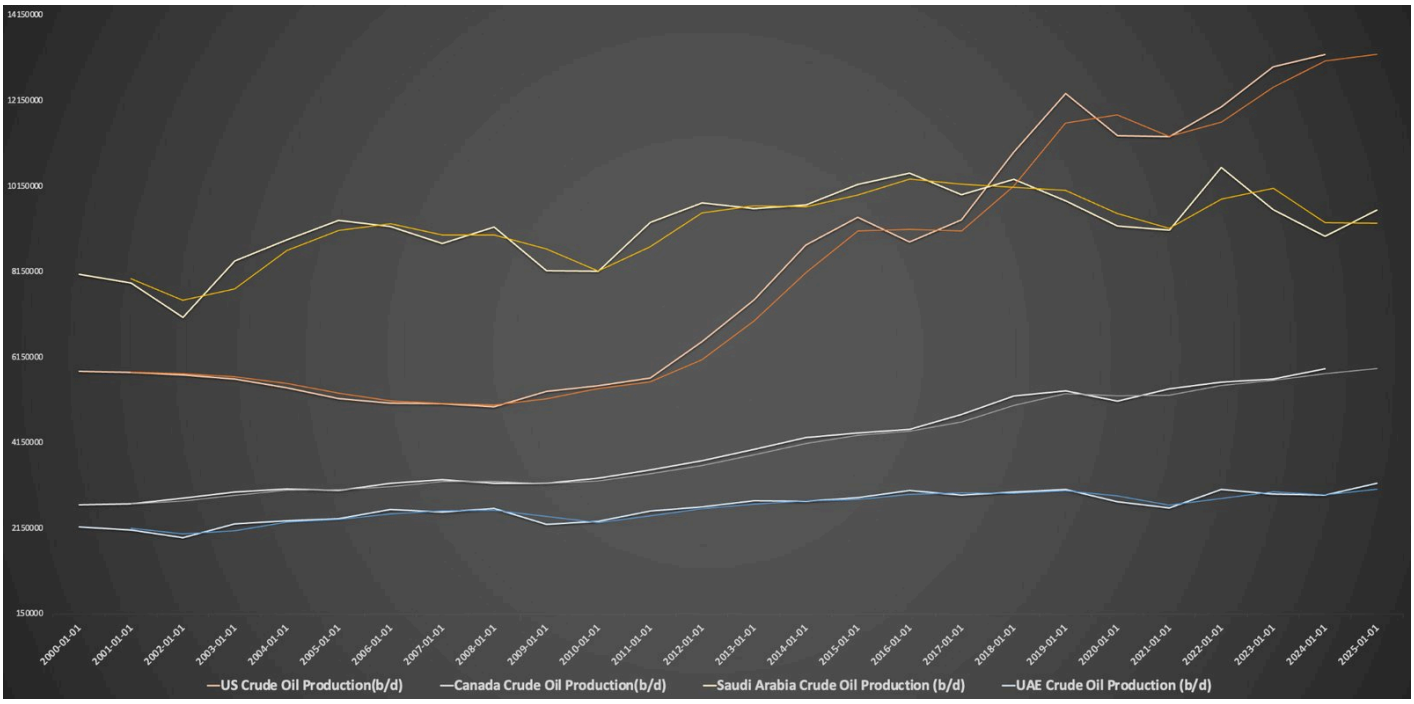
As shown in the chart, in 2023, production from Russia + Iran (12,451 thousand barrels/day) is nearly equal to Saudi Arabia + UAE (12,550 thousand barrels/day), with a difference of only 99 thousand barrels/day.

The previously mentioned "shadow market" is one of the important sources of current global crude oil supply, primarily composed of Russia and Iran, two countries sanctioned by the West. In terms of crude oil production, Russia and Iran occupy important positions globally: Russia's production is comparable to Saudi Arabia, maintaining 8,000–10,000 thousand barrels/day; Iran, as a rapidly growing oil producer within OPEC, has production that can match or even exceed the UAE. The combination of Russia and Iran is comparable in production scale to the core production combination of Saudi Arabia and the UAE within OPEC, which is one of the important foundations enabling these two countries to establish the "shadow market."

From this perspective, OPEC faces challenges of weakening its monopoly position on the supply side. It doesn't have an absolute advantage in key production volumes while also facing information uncertainty issues, which may weaken OPEC's position as a price setter. This also means OPEC may face pressure to increase production to maintain market share, which is one of the reasons why oil supply-demand relationships in the market may need reassessment.

4.2 Shale oil technology: the US becomes the world's largest crude producer

Exhibit 11. Crude oil production: US, Canada, Saudi Arabia, UAE



Source: FRED. Chart created by Sonny Xi.

Besides Russia and Iran pressuring OPEC in the crude oil market, we also need to note the significant production increases and market share expansion by North American countries like the US and Canada in the oil sector. The chart above shows crude oil production trends for the US, Canada, Saudi Arabia, and the UAE. We can see that the US underwent massive crude oil production increases after 2008. Benefiting from shale oil technology breakthroughs and improved financing conditions, the US officially surpassed Saudi Arabia to become the largest crude oil producer in 2017 and has continued expanding production since then. Meanwhile, Canada's crude oil production has steadily risen, continuously widening the gap with the UAE.

This trend illustrates:

1. The US and Canada have transformed from crude oil consumers to important oil suppliers
2. The US has reestablished its energy leadership position in North America and globally through technological upgrades and advantages
3. Rapid production increases by North American countries are one of the important factors in recent global oil supply growth
4. OPEC may face greater market competition, not only from the "shadow market" but also from North American allies

4.3 OPEC recent production data

Exhibit 12. OPEC crude oil production, 2023 – August 2025

Member	2023	2024	4Q24	1Q25	2Q25	May 25	Jun 25	Jul 25	Aug 25	Q4 24 → Aug 25
Algeria	973	907	908	909	920	920	927	937	947	4.30%
Congo	271	260	265	260	267	268	263	271	271	2.26%
Equatorial Guinea	55	57	58	56	46	45	46	48	..	..
Gabon	223	..	..	..	..	..	..	..	..	..
Iran	..	..	..	..	..	..	..	..	..	..
Iraq	4,118	3,862	3,731	3,667	3,632	3,605	3,627	3,692	3,742	0.29%
Kuwait	2,590	2,411	2,404	2,406	2,418	2,420	2,420	2,445	2,489	3.54%
Libya	1,189	1,136	1,252	1,386	1,367	1,366	1,367	1,377	1,380	**10.22%**
Nigeria	1,187	1,345	1,435	1,468	1,481	1,453	1,505	1,507	1,434	**−0.07%**
Saudi Arabia	9,606	8,955	8,935	8,941	9,183	9,184	9,360	9,525	9,722	**8.81%**
UAE	2,944	2,916	2,884	2,906	2,958	2,930	3,033	3,141	3,240	**12.34%**
Venezuela	783	921	982	1,035	1,062	1,066	1,069	1,084	1,098	**11.81%**

Unit: thousand barrels per day. ".." indicates missing data: due to geopolitical and other factors, data for Iran, Gabon, and Equatorial Guinea are incomplete. Source: OPEC September 2025 MOMR.

The table shows OPEC's recent crude oil production data. Starting from Q4 2024, OPEC began production increase actions. Data from August 2025 shows some member countries' production has risen significantly, but some members show weak production increase capacity. Countries with higher production increase rates include Libya (10.22%), Saudi Arabia (8.81%), UAE (12.34%), and Venezuela (11.81%). Algeria, Congo, Kuwait, and Iraq all had production increase rates below 5%, while Nigeria showed negative growth. The data indicate OPEC's production increase actions are on the agenda, and oil supply-side competition may be entering a new phase.

05 Supply and Demand Summary

DEMAND SIDE

From a global demand perspective, oil demand shows strong resilience. According to OPEC data, future oil demand may show an upward trend, mainly driven by continued economic development in developing countries. Meanwhile, oil and petrochemical fuels will continue to maintain their important position in world energy, and the rapid development of electric vehicles and new energy may have a limited substitution effect on the oil-dominated energy system in the short to medium term.

SUPPLY SIDE

From the supply perspective, OPEC faces the problem of relatively stagnant production capacity after 2000. Affected by the rise of "shadow markets" and information asymmetry, OPEC may be in a relatively weak position in price control capability, and its role as price setter may be weakened. The competition OPEC faces comes not only from the "shadow market" composed of Russia and Iran, but also from the North American market led by the US with shale oil technology. Currently, all three major supply sources maintain high production levels.

Recent OPEC production increases mean supply-side competition may intensify, with OPEC inclined to compete for market share and pricing power through production increases.

06 Future Outlook: Short-Term Supply Pressure and Long-Term Structural Changes

Based on current supply-demand pattern analysis, oil prices may face downward pressure in the short term, mainly due to the supply side entering an intense market share competition phase. Although global oil demand continues to grow (expected to reach 106,520 thousand barrels/day in 2026), the production increase speed from three major supply sources may exceed demand growth in the short term, leading to temporary market oversupply. In this game, OPEC, Russia+Iran, and the US each have their considerations, and currently, all tend to maintain or increase production, potentially forming a typical oligopolistic competition pattern. However, geopolitical emergencies, demand exceeding expectations, or policy shifts by major oil-producing countries could all change this path.

OPEC faces significant market pressure. 2023 data shows the combined production of Russia+Iran (12,451 thousand barrels/day) has almost caught up with Saudi Arabia+UAE (12,550 thousand barrels/day). If OPEC continues to cut production to maintain prices, market share may be divided by competitors; if they compete through production increases, oil prices will fall, but at least the market position can be maintained. From the data, OPEC tends to choose the production increase strategy: August 2025 data shows Saudi Arabia increased production by 8.81%, UAE by 12.34%, and Libya by 10.22%. This may signal that OPEC's strategic focus is shifting from controlling prices to competing for market share. Based on this trend, OPEC may continue increasing production in the short term, even if oil prices are under pressure.

Russia and Iran, under the current sanctions environment, may view the shadow market as an economic lifeline, tending to maintain high production even if accepting low prices. For Russia, the Ukraine war consumes huge funds monthly, and oil revenue is the key cash source for maintaining economic operations; for Iran, oil exports are the core pillar against 40 years of Western sanctions. The two countries bypass the SWIFT system through shadow fleets, cryptocurrencies, and RMB settlement methods, often needing to accept discounted exports to maintain sales volume and market penetration. Under this model, price may no longer be the primary consideration: maintaining smooth export channels and stable cash flow is the key to survival. This means that under the current structure, the possibility of Russia and Iran voluntarily cutting production in the short term is relatively low.

At the same time, mature US shale oil technology has released enormous production capacity. Wall Street's requirements for investment returns, the geopolitical goal of "energy independence," and shale oil's "production-sustaining-production" business model jointly drove US production to a record 13.2 mb/d in 2024, surpassing Saudi Arabia to become the world's largest oil producer. This competition unfolds simultaneously across three dimensions: production competition (all parties continuously increase production), price competition (Russian discounts, OPEC adjusts price control strategies), and channel competition (shadow market vs traditional market system). Based on current trends, in the next 1–2 years, the production increase speed from three major supply sources may continue to exceed demand growth, and oil prices may face downward pressure in the short term. However, geopolitical escalation, policy shifts by major oil-producing countries, or demand exceeding expectations could all change this pattern.

Exhibit 13. Potential consequences and practical choices of tripartite action

Participant	If production is reduced	If production is increased	Actual choice	Result
OPEC	Loss of market share to competitors; weakened influence	Short-term pressure on oil prices, but maintains market position	**Tend to increase production**	Compete for market share while prices remain low
Shadow market (Russia + Iran)	Exacerbated financial difficulties, economic crisis	Sustain finances, penetrate markets, maintain geopolitical influence	**Increase production and discount prices**	Occupy market share while maintaining cash flow
United States	Lower investment returns, reduced competitiveness	Short-term resource consumption, long-term exploration investment shortage	**Short-term tendency to increase production**	Short-term benefits but long-term production capacity concerns

Author's framework, based on the supply-side analysis in this report.

07 Long-Term Outlook: Sustainability of Supply Competition and Future Opportunities

The three major markets have resumed competition, with supply-side growth likely exceeding demand-side in the short term, maintaining high production. But this high production model may be difficult to sustain long-term, for two main reasons:

01 Time-lag effect of market adjustment mechanisms

Falling oil prices reduce investment returns for oil exploration and extraction, prompting companies to cut or exit new projects. However, oil projects typically require 3–10 years from investment to production, meaning the impact of investment cuts won't manifest until years later. More critically, when supply shortages drive up oil prices and markets realize the problem, new projects may not be able to launch quickly in response: supply may not be able to recover rapidly to match demand growth.

02 Oil's strategic attributes and extraction cycles

Oil is an important strategic asset for OPEC, Russia, the US and other countries. Selling at discounted prices to compete for market share may be detrimental to long-term economic development. Additionally, oil exploration and extraction has long cycles and large investments, and field production capacity naturally declines. Significantly increasing production while reducing exploration and extraction of new fields may accelerate this process.

7.1 Market adjustment mechanism lag: the game between government and business interests

According to Reuters' October 10th report, US drilling companies cut oil and gas rig counts for the first time in six weeks due to falling oil prices. Baker Hughes stated that total rigs fell by 39 this week, down 7% year-over-year. More energy companies are considering reducing expansion projects, instead focusing on shareholder returns and debt repayment. Although the Trump administration hopes to execute a "Drill Baby Drill" policy to consolidate America's energy position and promote shale oil technology development, low oil prices make companies inclined to reduce expansion.

Exhibit 14. Reuters: US drillers cut oil and gas rigs for the first time in six weeks

REUTERS

US drillers cut oil and gas rigs for first time in 6 weeks, Baker Hughes says

By Scott Disavino

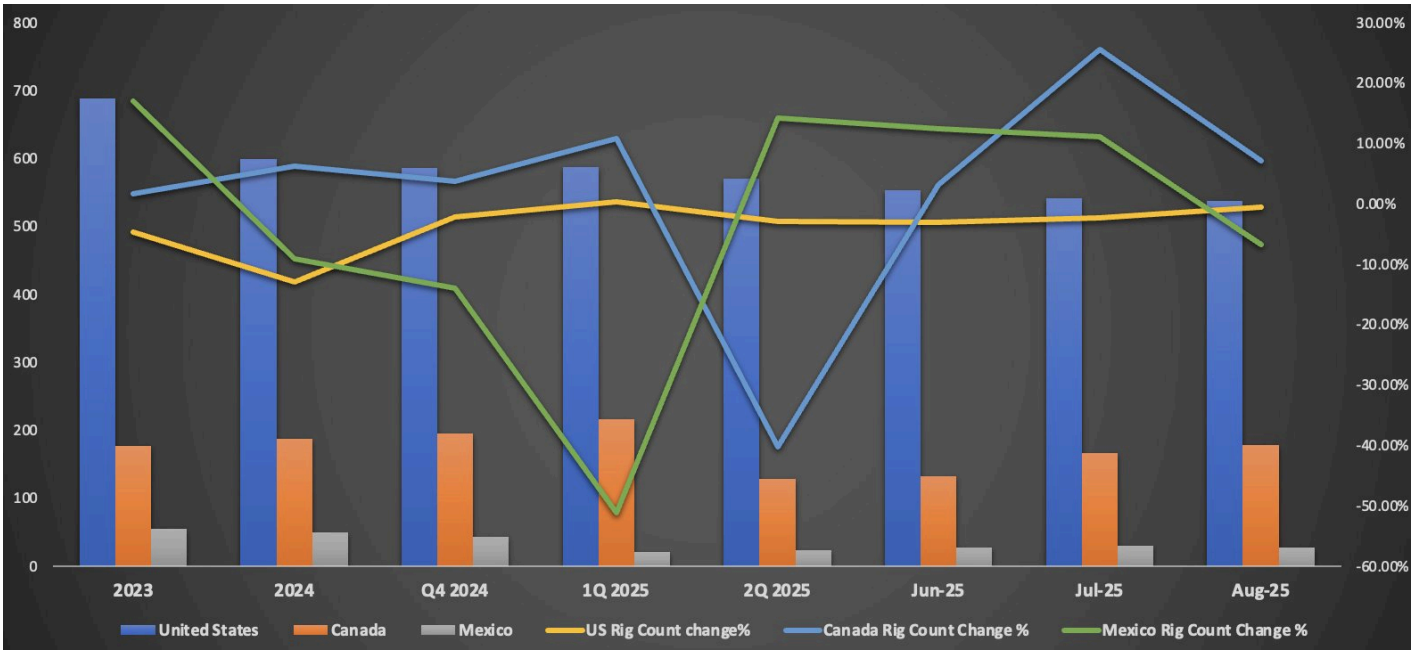
October 10, 2025 12:30 PM CDT · Updated October 10, 2025

Source: Reuters, October 10, 2025.

But at the same time, the U.S. Energy Information Administration (EIA) projects crude production will increase from a record 13.2 million barrels/day in 2024 to approximately 13.5 million barrels/day in 2025. This aligns with our analysis above about maintaining market share trends.

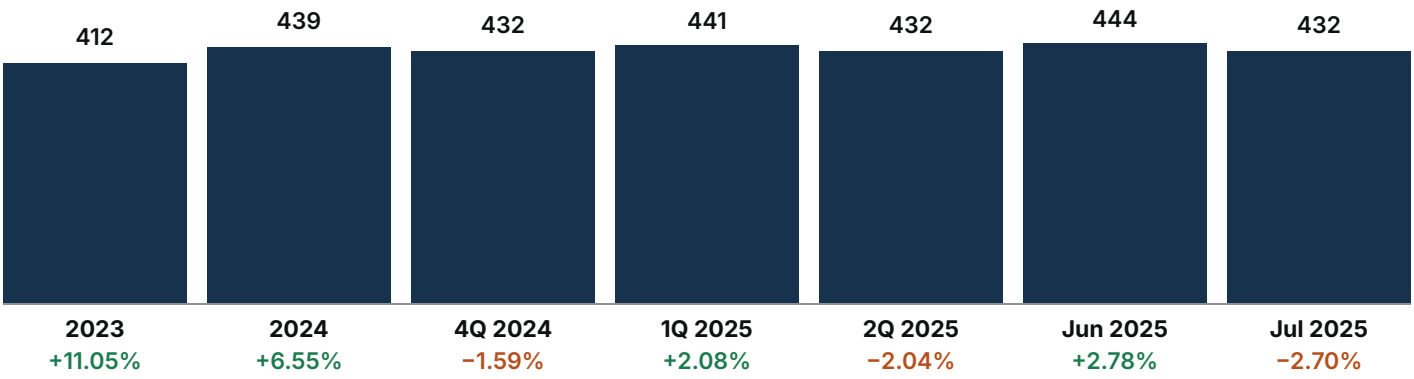
This may mean that while reducing expansion projects, companies tend to maintain high production through existing drilling platforms, but this strategy may accelerate the depreciation rate of drilling platforms and oil fields.

Exhibit 15. North American drilling rig counts: US, Canada, Mexico



Source: OPEC August 2025 MOMR, September 2025 MOMR. Chart created by Sonny Xi.

Exhibit 16. OPEC rig count, 2023 – July 2025

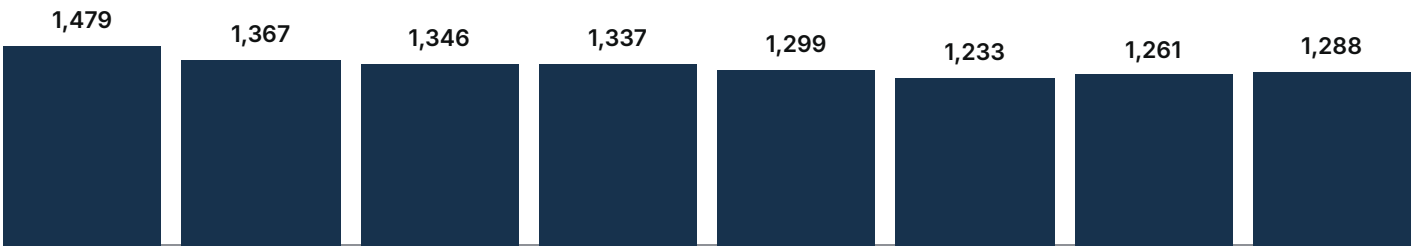


Despite announced production increases, OPEC's rig count has moved sideways in a 412–444 band, ending August where it began the year.

Figures below each bar are period-on-period change. August MOMR data is used because OPEC significantly changed the calculation method for Saudi Arabia's drilling rigs in September, leading to inconsistencies. Source: OPEC August 2025 MOMR.

According to the latest data, drilling rig counts have declined significantly. The US dropped from 688 rigs in 2023 to 538 in August 2025, with Mexico and Canada showing similar declining trends. OPEC's performance is more complex: although it has announced production increases, drilling rig counts have only increased slightly.

Exhibit 17. Non-OPEC rig count, 2023 – August 2025



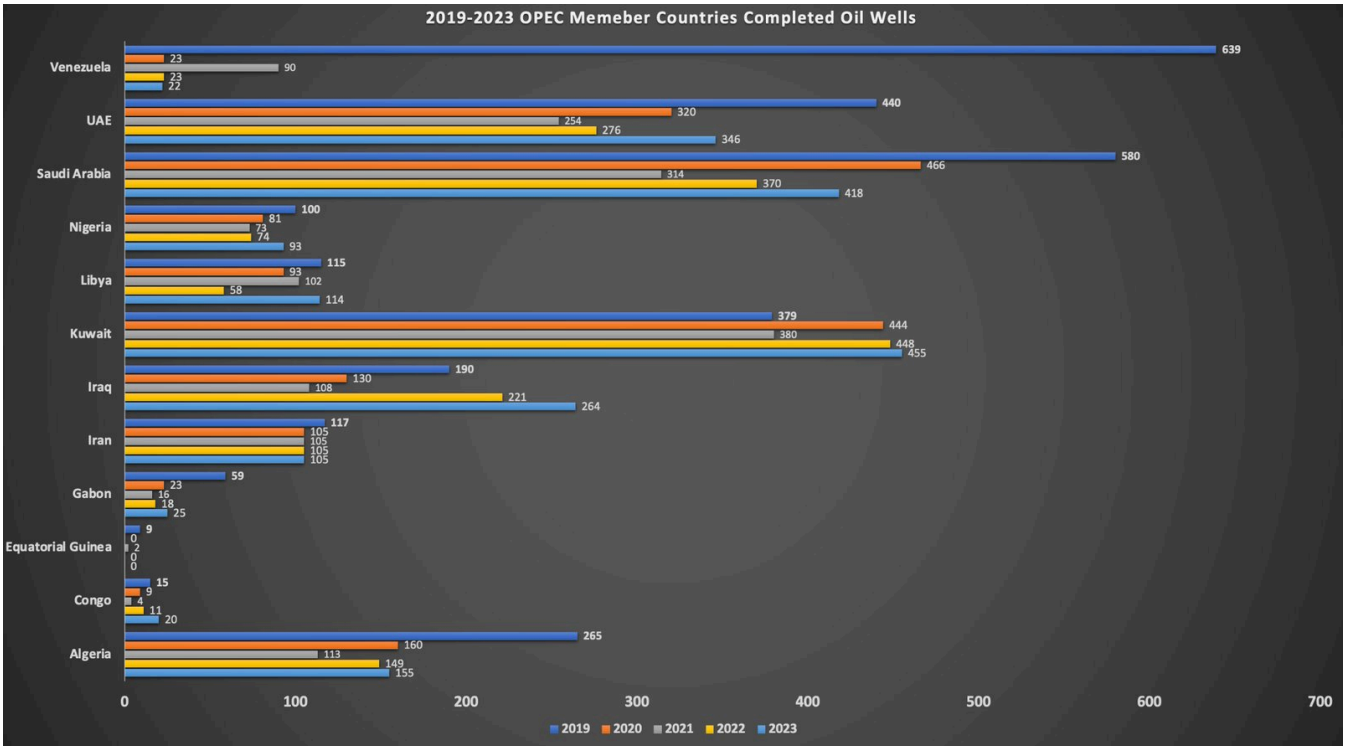
Peak-to-trough: 1,479 → 1,233 rigs, a 16.6% decline, with only a partial recovery through August.

Data excludes China, Russia and other Eurasian regions. Source: OPEC September 2025 MOMR.

Non-OPEC drilling rigs are similarly declining year by year and quarter by quarter. Reasons include falling oil prices leading to lower investment returns, macroeconomic downturn, and geopolitical factors. The key contradiction lies in: oil production equipment investment is decreasing, but production increases have become an important strategic goal for various countries. This may indicate that current production increases to some extent rely on overdrawing existing equipment and production capacity. The sustainability of this model deserves attention, but it may also create future investment opportunities.

Oil fields have fixed cycles from exploration to extraction. Current exploration and expansion investments are slowing, yet production increases are achieved by overdrawing existing equipment, potentially creating future supply gaps. By then, if equipment aging and field depletion intensify, it may push up oil prices, prompting countries to reinvest in exploration and extraction, but this will require several years.

Exhibit 18. OPEC member countries' completed oil wells, 2019–2023



Iran data is forecast data. Source: OPEC 2024 ASB. Chart created by Sonny Xi.

Completed wells refer to oil and gas wells ready for production or injection operations, reflecting the actual results of oil and gas development. Data from 2019–2023 shows that completed well counts in Saudi Arabia and the UAE peaked in 2019 and have declined since, while Kuwait's rose.

SAUDI ARABIA	KUWAIT	UAE
580 → 418	379 → 455	440 → 346
−28%	+20%	−21%

This trend indicates that new capacity investment by OPEC's core oil-producing countries has slowed significantly. Even if investment resumes in 2024, considering oil field development cycles, new capacity may require several years to effectively contribute to production, while natural decline of existing wells may continue to erode total capacity during this period.

08 Investment Recommendations

Based on the above analysis, oil prices may decline in the short term, and the oil industry may reduce capital investment and lay off employees to weather the downcycle while increasing shareholder returns to enhance stock value. In the long term, if the aforementioned supply gap forms as expected, there's room for oil prices to rebound. At that point, companies may resume capital investment and oil field exploration to compensate for the equipment and capacity overdraw in this cycle, driving the industry back onto a growth trajectory. However, the realization of this path depends on multiple factors, including the speed of new energy substitution, geopolitical evolution, and technological progress, with significant uncertainty.

From a medium to long-term allocation perspective, ideal oil companies may need the following characteristics:

01	Healthy financial condition to smoothly weather oil price downcycles
02	Rapid production expansion capability and technological advantages
03	Ability to return value to shareholders through stable dividends
04	Complete industrial chain with lower sensitivity to oil price volatility

Investors seeking high returns could buy oil service and exploration companies during supply-side recovery, as these companies have high sensitivity to oil price volatility and may offer higher returns when oil prices rebound. However, timing is difficult with higher risks and uncertainty. Given the complexity of timing and higher risks, this article doesn't make specific recommendations for such high-beta targets. Investors should carefully evaluate based on their own risk tolerance.

09 Reference Targets

> **IMPORTANT NOTE**
>
> The following are only case analyses based on screening criteria and do not constitute specific investment recommendations. Investors should make independent judgments based on their own situation, risk tolerance, and investment objectives.

Cases meeting screening criteria: **ExxonMobil (XOM), Chevron (CVX), Shell (SHEL)**. The three companies listed above meet the screening criteria described earlier to some extent.

Exhibit 19. Financial comparison: XOM, CVX, SHEL vs industry

Metric	ExxonMobil (XOM)	Chevron (CVX)	Shell (SHEL)	Integrated oil industry
Debt / equity ratio	14.44%	20.01%	41.33%	0.61 (average)
Interest coverage ratio	61.46x	22.9x	42.35x	6.7x–11.7x (average)
Current ratio	1.25	1.00	1.32	0.85 (median)
Quick ratio	0.88	0.74	1.07	0.55 (median)
Levered free cash flow	$20.8 bn	$14.04 bn	$22.05 bn	N/A
Cash and cash equivalents	$14.35 bn	$4.01 bn	$32.07 bn	N/A
Dividend yield	3.53%	4.47%	3.95%	3.69% (average)

As of October 18, 2025, based on companies' Q2 2025 financial reports. N/A indicates no available data. Debt/equity is shown as reported by each source: company figures in percent, industry benchmark as a ratio. Source: Yahoo Finance, NYU Stern, Full Ratio and others. Table created by Sonny Xi.

Financial condition. All three companies have relatively healthy financial data. Their debt-to-equity ratios are below industry averages, indicating low leverage and primary reliance on equity financing. All three companies also have high interest coverage ratios, demonstrating strong debt service capabilities. Regarding liquidity, all three companies' current and quick ratios exceed industry medians, with relatively sufficient cash reserves potentially helping to withstand oil price volatility.

Technology and production expansion capability. As global integrated oil and gas companies, all three enterprises possess relatively comprehensive technical strength and production expansion capabilities across oil extraction, refining, and productization. This is reflected in their robust cash reserves and free cash flow generation capabilities, potentially providing support for future capital investment resumption.

Shareholder returns and dividends. All three companies provide relatively high dividend yields: Chevron approximately 4.5%, Shell approximately 3.95%. (Dividend yields fluctuate with stock prices.) In a rate-cutting cycle, such dividend yields may be more attractive. However, dividend policies may change with company operating conditions and strategic adjustments.

Complete industrial chain, relatively low oil price volatility sensitivity. ExxonMobil, Chevron, and Shell are all integrated oil and gas companies with complete upstream, midstream, and downstream operations. This vertical integration structure may provide strong cost control capabilities and to some extent smooth cyclical volatility through profit hedging mechanisms between upstream and downstream businesses during oil price declines.

Holding period perspective. From a medium to long-term allocation perspective (approximately 2–3 years), dividend income during the holding period may to some extent buffer the impact of oil price volatility. If oil prices rise as expected, this may bring stock price appreciation opportunities. However, the realization of this path depends on multiple factors, including oil price trends, company operating performance, and macroeconomic environment, with uncertainty.

Investors should note: this section is only case analysis based on public data, aimed at illustrating the application of screening criteria, not specific investment recommendations. Any investment decisions should be based on investors' own due diligence, risk assessment, and investment objectives.

10 Key Risk Considerations

Macroeconomic uncertainty	The current global economy faces multiple challenges, including geopolitical conflicts, fiscal pressures in various countries, slowing economic growth, and inflation, with high uncertainty. Severe downside risks may cause the analysis in this article to deviate from actual trends, and investors need to make prudent decisions.
Oil price volatility	Oil is one of the most volatile commodities globally, significantly affected by geopolitics and economic cycles, with complex pricing mechanisms. Oil-related investments are full of uncertainty, and investors should carefully evaluate based on their own risk tolerance and return expectations.
Data limitations	The data in this article mainly comes from public institutions such as OPEC, IEA, FRED, etc., which may have perspective biases. All data has lag characteristics and can only reflect historical conditions rather than predict the future. Additionally, factors such as the Russia–Ukraine conflict have led to missing data in some areas. Investors should view existing data critically.
Analytical subjectivity	This article only represents the author's personal views and analytical framework, and does not constitute professional investment advice. Investors should combine their own research and judgment to make independent investment decisions.
Individual stock risks	Companies mentioned in the article are only for case illustration and do not represent recommendations. Any individual stock investment faces specific risks such as company operations, industry competition, and regulatory changes. Past performance does not represent future returns.

Disclaimer: This article is for academic exchange and idea reference only, and does not constitute any investment advice or offer. Investment carries risks, and market entry requires caution. Investors should make investment decisions independently and bear investment risks themselves.

DISCLOSURES

This report was prepared by Sonny Xi for informational purposes only and does not constitute investment advice or a recommendation to buy or sell any security. The author may hold positions in securities mentioned in this report.

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Sonny Xi is an independent investment researcher covering equities and macro, with a focus on rates and geopolitics. His work pairs bottom-up company valuation, such as the three-scenario DCF framework used in his equity reports, with top-down macro analysis.

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- Meta Platforms, Inc. (META): equity research report, October 2026
- CME Group Inc. (CME): equity research report, October 2026
- Amazon.com, Inc. (AMZN): equity research report, October 2026
- The Ensign Group (ENSG): sell recommendation
- H2 2026 Macro Outlook
- VAR macro forecasting model
- Constructing a Portfolio for a Five Percent Return Objective

ANALYST CERTIFICATION

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