

July 2023

IEF Comparative Analysis

Of Monthly Oil Market Reports

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eia

Oil Market Context

Saudi Arabia and Russia extend/deepen production cuts

Saudi Arabia announced on July 3rd that it was extending its voluntary 1 mb/d production cut from July into August. The Kingdom's crude production is expected to fall to ~9 mb/d – a two-year low. Simultaneously, Russia announced it would be cutting an additional 500 kb/d from crude exports in August and Algeria announced a 20 kb/d cut for the same month.

Mixed-messages on the global economy and oil demand

Negative economic sentiment continues to weigh on markets, but oil demand in the world's largest consuming countries has surprised to the upside.

In the US, the world's largest oil consumer, both economic data and oil demand continue to be revised up. Estimates of 1Q23 GDP was revised up to 2.0% in June after May estimates pegged it at just 1.3%. Additionally, latest final oil demand data, for April 2023, came in nearly 500 kb/d above estimates.

Official PMI data showed China's manufacturing sector contracted for a third consecutive month in June. However, the country's oil demand has remained robust, soaring to a record high in April and falling slightly in May to the 2nd highest level on record.

Furthermore, economic and oil demand growth in other non-OECD countries, including India and Brazil, continue to exceed and defy economists' expectations of an impending slowdown.

In contrast, demand remains subdued across OECD Europe where the HCOB Eurozone Manufacturing PMI has indicated a contraction for 12-consecutive months. The region's oil demand in 1H23 averaged ~150 kb/d below year-ago levels.

US begins SPR buyback

The US Department of Energy has announced plans to buyback at least 12 mb of oil for the Strategic Petroleum Reserve (SPR) this year, including 6 mb already contracted for delivery in August and September. On July 7th, the DOE issued a solicitation for an additional 6 mb for delivery in October and November and noted that they will pursue additional repurchase opportunities as "market conditions allow." The US SPR has fallen to a 40-year low of 347 mb following a ~250 mb drawdown over the past 18-months.

2023 Forecast Highlights:

- **Global demand:**

- IEA and OPEC remain fairly aligned on global demand growth (~2.2-2.4 mb/d), while EIA sees lower growth (1.8 mb/d). IEA continues to see ~0.7 mb/d higher Chinese demand growth this year vs. EIA and OPEC. Meanwhile, OPEC sees more robust demand in Russia, Africa, the Middle East and other non-OECD countries compared to IEA and EIA.
- IEA revised down its 2023 demand growth forecast by 0.2 mb/d this month primarily on weaker OECD Europe and Middle East demand. Meanwhile, EIA revised up its demand growth by 0.2 mb/d on stronger forecasts for Europe, Brazil, and non-OECD Asia. OPEC revised up its forecast by 0.1 mb/d on stronger-than-expected 2Q23 demand in China and the US.

- **Non-OPEC and OPEC NGL supply:**

- IEA and EIA both now see non-OPEC and OPEC NGL supply growing this year by 1.9 mb/d. OPEC sees lower growth at 1.5 mb/d.
- IEA revised up its non-OPEC supply growth forecast by 0.1 mb/d led by higher Russia and US projections. Meanwhile, EIA revised down its non-OPEC growth forecast by 0.2 mb/d on weaker projections for Norway and South America. OPEC's annual forecast remained unchanged this month as upward revisions to 1H23 offset downward revisions to 2H23.
- The largest divergence in supply forecasts is for Russian production. OPEC sees a 0.75 mb/d decline in Russian output this year vs. IEA's and EIA's forecast of a 0.2-0.3 mb/d annual decline.
- All three forecasters expect the US to be the largest driver of non-OPEC supply growth, adding ~1 mb/d of new supply this year.

- **“Call on OPEC”:**

- IEA and OPEC see the “call on OPEC” rising to 30.1-30.4 mb/d in the second half of the year. This implies a ~2 mb/d global supply shortfall in 2H23 if OPEC production were to remain constant at June levels (28.19 mb/d).

- **June OPEC production:**

- OPEC secondary sources show OPEC production rose by 0.09 mb/d in June to 28.19 mb/d led by a 56 kb/d increase from Iran and a 54 kb/d increase in Iraq. IEA estimates show OPEC crude production remained flat month-on-month in June at 28.7 mb/d. IEA estimates a higher production figure for Iran and UAE vs. OPEC secondary sources.

- **OECD inventories:**

- IEA estimates OECD commercial inventories rose by 5.4 mb in May to 2,824 mb and stood 92.2 mb below the five-year average. OPEC estimates OECD commercial stocks rose by 20.2 mb in May to 2,815 mb and stood 101 mb below the latest five-year average and 140 mb below the 2015-2019 average.

2024 Forecast Highlights:

OPEC issued its inaugural 2024 outlook this month

- **Global demand:**

- OPEC's inaugural 2024 forecast shows demand growth slowing to 2.2 mb/d from 2.4 mb/d this year. This is double IEA's forecast for of 1.1 mb/d and 0.6 mb/d above EIA's forecast of 1.6 mb/d.
- IEA sees OECD demand declining by 0.3 mb/d next year while OPEC and EIA both forecast 0.3 mb/d growth. Additionally, OPEC sees 0.2 mb/d stronger demand growth in the Middle East next year compared to both IEA and EIA.
- Notably, OPEC shows quarterly demand reaching 105.3 mb/d by 4Q24 – which is ~4 mb/d higher than all three agencies' estimates for the most recent quarter, 2Q23.
- Despite having a lower y/y demand growth forecast, IEA sees higher demand levels than EIA for most of 2024 due to a higher 2023 baseline forecast. IEA sees quarterly demand rising to 104.5 mb/d by 4Q24 vs. EIA's 103.2 mb/d.

- **Non-OPEC and OPEC NGL supply:**

- Both IEA and EIA see non-OPEC and OPEC NGL supply growing by 1.0-1.2 mb/d in 2024. OPEC sees slightly faster growth at 1.5 mb/d primarily due to a higher US growth forecast.
- Notably, IEA and EIA both see US production growth slowing to 0.4 mb/d next year from >1.0 mb/d this year. Despite a significant slowdown, the US is still the strongest driver of non-OPEC supply growth in 2024.

- **“Call on OPEC”:**

- IEA's balance implies OPEC would need to produce an average 29.2 mb/d in 2024 to balance the market. This implies a ~1 mb/d supply shortfall if OPEC production were to remain at June 2023 levels (28.2 mb/d).
- EIA's balance implies OPEC would need to produce an average of 28.7 mb/d in 2024 to balance the market, implying a 0.5 mb/d global supply shortfall if OPEC production remained at June 2023 levels.
- OPEC's balance implies a 30.2 mb/d “Call on OPEC”, implying a 2.0 mb/d global supply shortfall if OPEC production remains constant at June 2023 levels.
- OPEC's 2024 balance is ~1 mb/d tighter than IEA's primarily due to a higher demand forecast.

2023 Outlook Comparison

Summary of 2023 Balances and Revisions

- IEA loosened its 2023 forecast by 0.4 mb/d this month on lower demand (OECD Europe) and stronger non-OPEC (Russia) and OPEC NGL supply. Meanwhile, EIA tightened its 2023 forecast by 0.3 mb/d on stronger demand (Brazil and Europe) and weaker non-OPEC production (Norway and South America).
- IEA and OPEC see the “Call on OPEC” rising in the second half of the year and exceeding recent OPEC production levels by ~2 mb/d, implying a significant global supply shortfall.

		2023 Balance Summary											
		Updated Forecast						Revisions to Last Month's Forecast					
		1Q23	2Q23	3Q23	4Q23	2023	2023 Y/Y	1Q23	2Q23	3Q23	4Q23	2023	2023 Y/Y
Global Demand	IEA	100.5	101.4	103.1	103.3	102.1	2.2	0.0	-0.2	-0.3	-0.2	-0.2	-0.2
	OPEC	101.6	101.2	102.0	103.2	102.0	2.4	0.1	0.4	-0.1	0.0	0.1	0.1
	EIA	100.1	101.0	101.8	101.8	101.2	1.8	0.1	0.1	0.2	0.1	0.1	0.2
OECD Demand	IEA	45.5	45.6	46.9	46.4	46.1	0.2	0.0	-0.1	-0.3	-0.2	-0.1	-0.1
	OPEC	45.5	45.5	46.8	46.2	46.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
	EIA	45.5	45.6	46.5	46.6	46.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1
Non-OECD Demand	IEA	55.0	55.9	56.2	56.9	56.0	2.1	-0.1	0.0	-0.1	0.0	0.0	-0.1
	OPEC	56.1	55.7	55.1	57.0	56.0	2.4	0.0	0.4	-0.1	-0.1	0.1	0.1
	EIA	54.6	55.3	55.3	55.3	55.1	1.6	0.1	0.1	0.1	0.1	0.1	0.1
Non-OPEC Supply* and OPEC NGLs	IEA	72.3	72.7	73.0	73.1	72.8	1.9	0.0	0.4	0.2	0.2	0.2	0.2
	OPEC	73.1	72.9	71.9	72.4	72.6	1.5	-0.1	0.4	-0.2	-0.2	0.0	0.0
	EIA	72.6	72.8	73.3	73.7	73.1	1.9	0.0	-0.2	-0.4	-0.2	-0.2	-0.2
OPEC Crude**	IEA	29.3	28.8					0.1					
	OPEC	28.8	28.3					0.0					
	EIA	28.5	28.4	27.5	27.8	28.0	-0.7	0.0	0.0	-0.3	0.0	-0.1	-0.1
Call on OPEC	IEA	28.1	28.7	30.0	30.2	29.3	0.3	-0.1	-0.5	-0.5	-0.4	-0.4	-0.4
	OPEC	28.5	28.4	30.0	30.8	29.4	1.0	0.1	0.0	0.1	0.2	0.1	0.1
	EIA	27.5	28.2	28.5	28.1	28.1	-0.1	0.1	0.3	0.5	0.4	0.3	0.4
Global Stock Change and Miscellaneous to Balance**	IEA	1.2	0.1					0.1					
	OPEC	0.3	-0.1					-0.1					
	EIA	1.0	0.2	-1.0	-0.4	-0.1		-0.2	-0.4	-0.8	-0.4	-0.4	

* Includes biofuels and processing gains

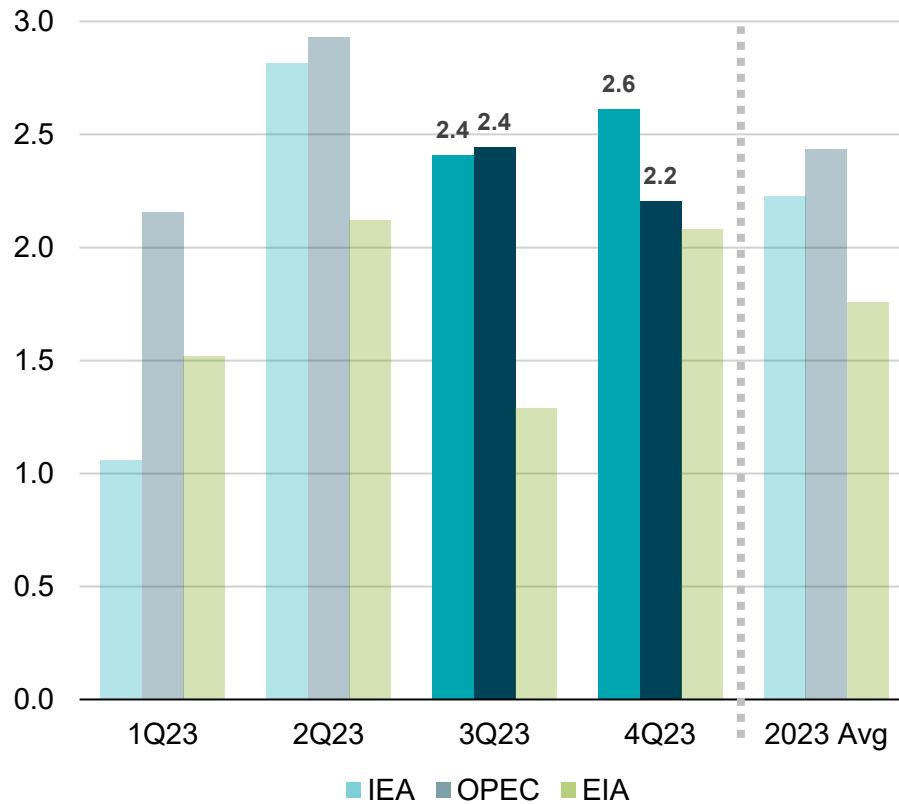
** Only EIA publishes a forecast of OPEC crude production and global stock change

Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

IEA and OPEC both see global demand growth outpacing non-OPEC supply growth significantly in 2H23

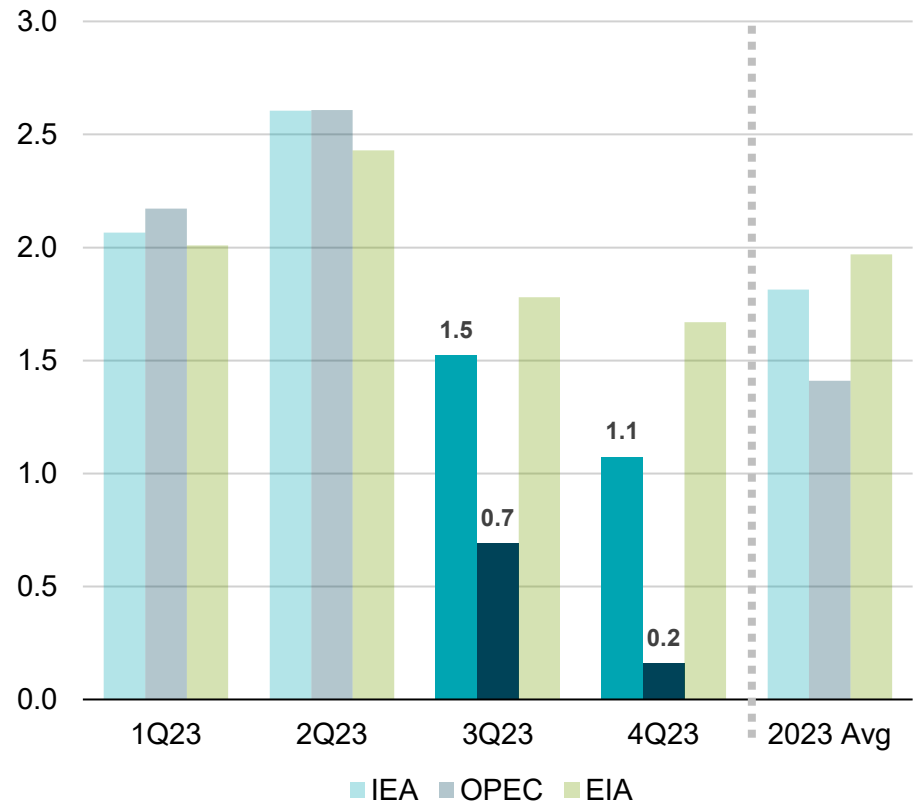
Global Demand Y/Y Growth

y/y growth in million barrels per day



Non-OPEC Supply Y/Y Growth

y/y growth in million barrels per day

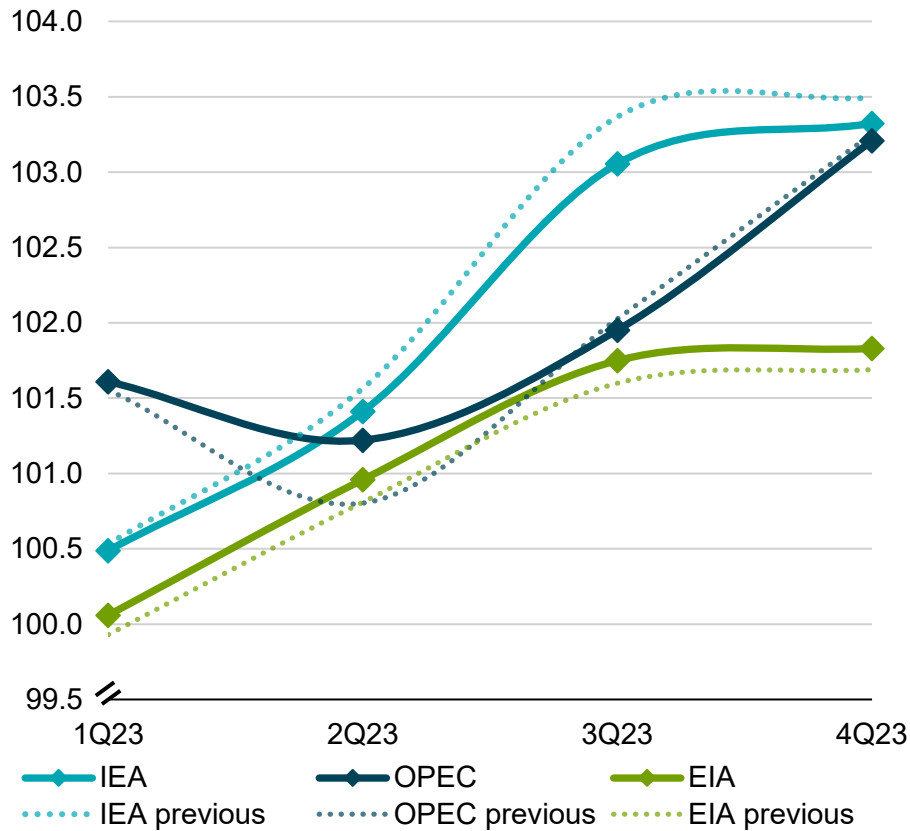


Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

IEA and OPEC see global demand surpassing 103 mb/d by the end of 2023; OPEC sees non-OPEC supply weakening substantially in 3Q23

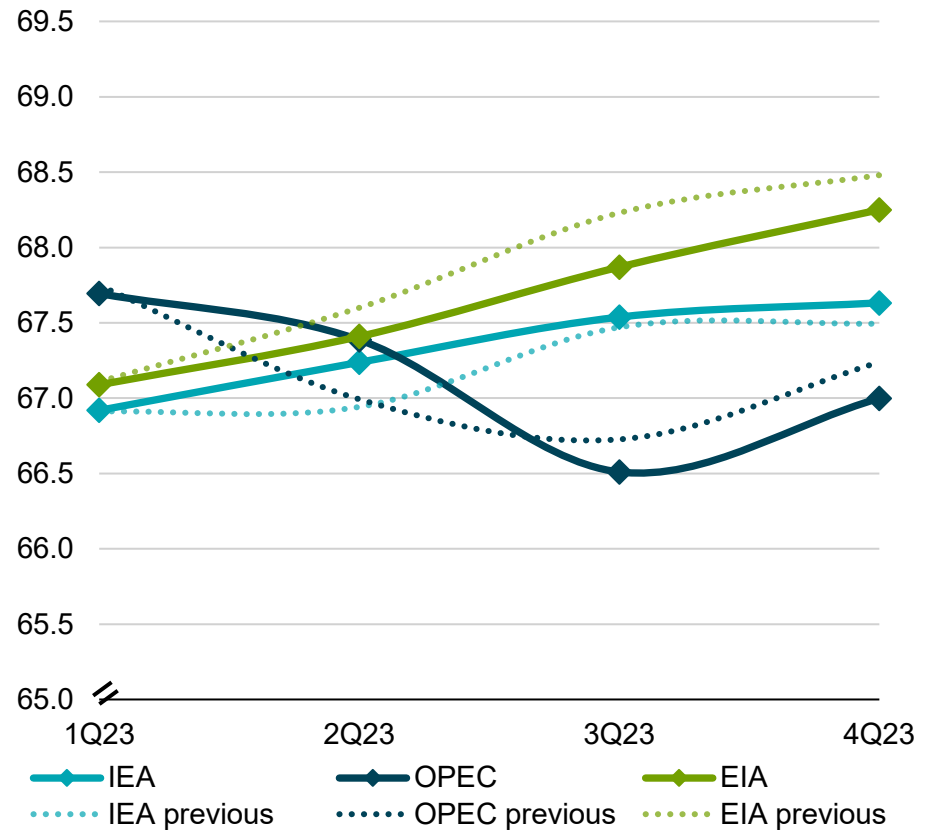
Global Demand

demand in million barrels per day



Non-OPEC Supply

supply in million barrels per day



Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

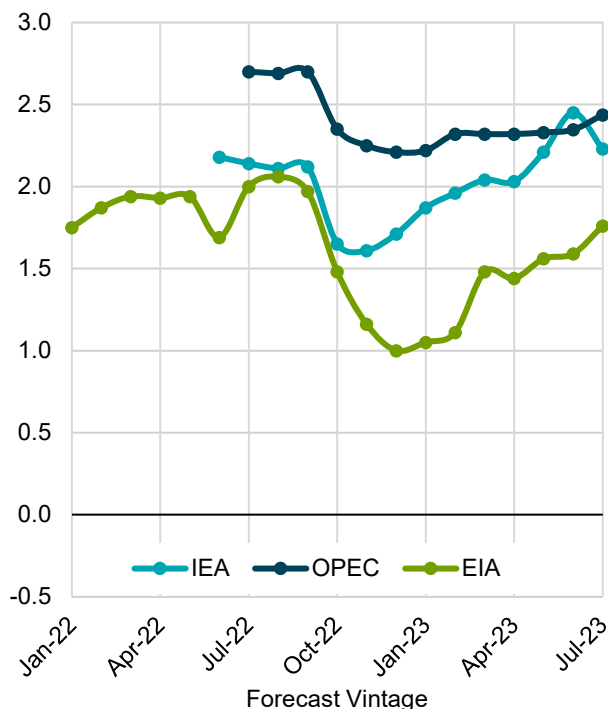
Evolution of 2023 Demand Growth Forecasts

- IEA revised global demand growth lower for the first time since April, while OPEC and EIA both revised forecasts higher this month.
- EIA continues to see the weakest demand growth this year, driven by a lower non-OECD demand forecast.
- OECD demand growth forecasts are beginning to converge ~0.1 mb/d.

Global Demand Growth

Evolution of 2023 Forecasts

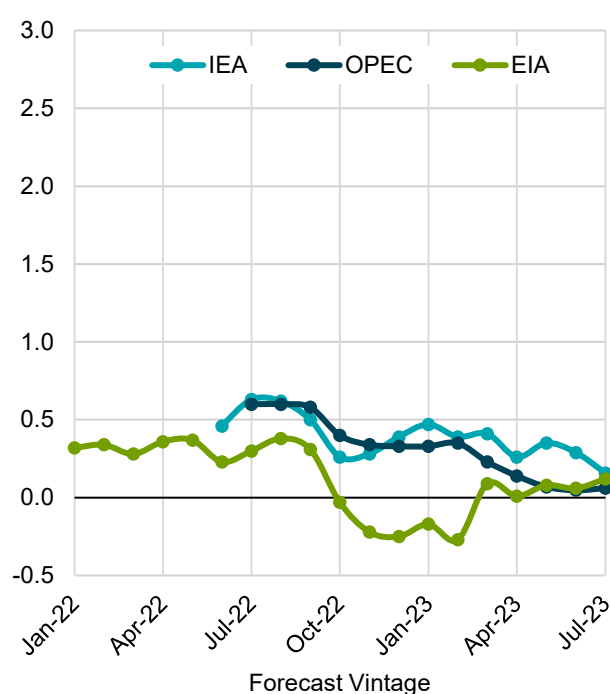
y/y growth in million barrels per day



OECD Demand Growth

Evolution of 2023 Forecasts

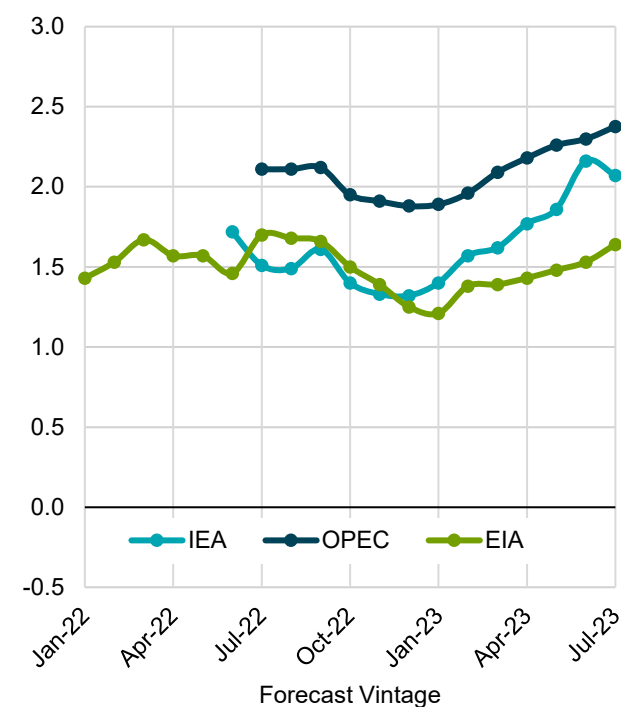
y/y growth in million barrels per day



Non-OECD Demand Growth

Evolution of 2023 Forecasts

y/y growth in million barrels per day

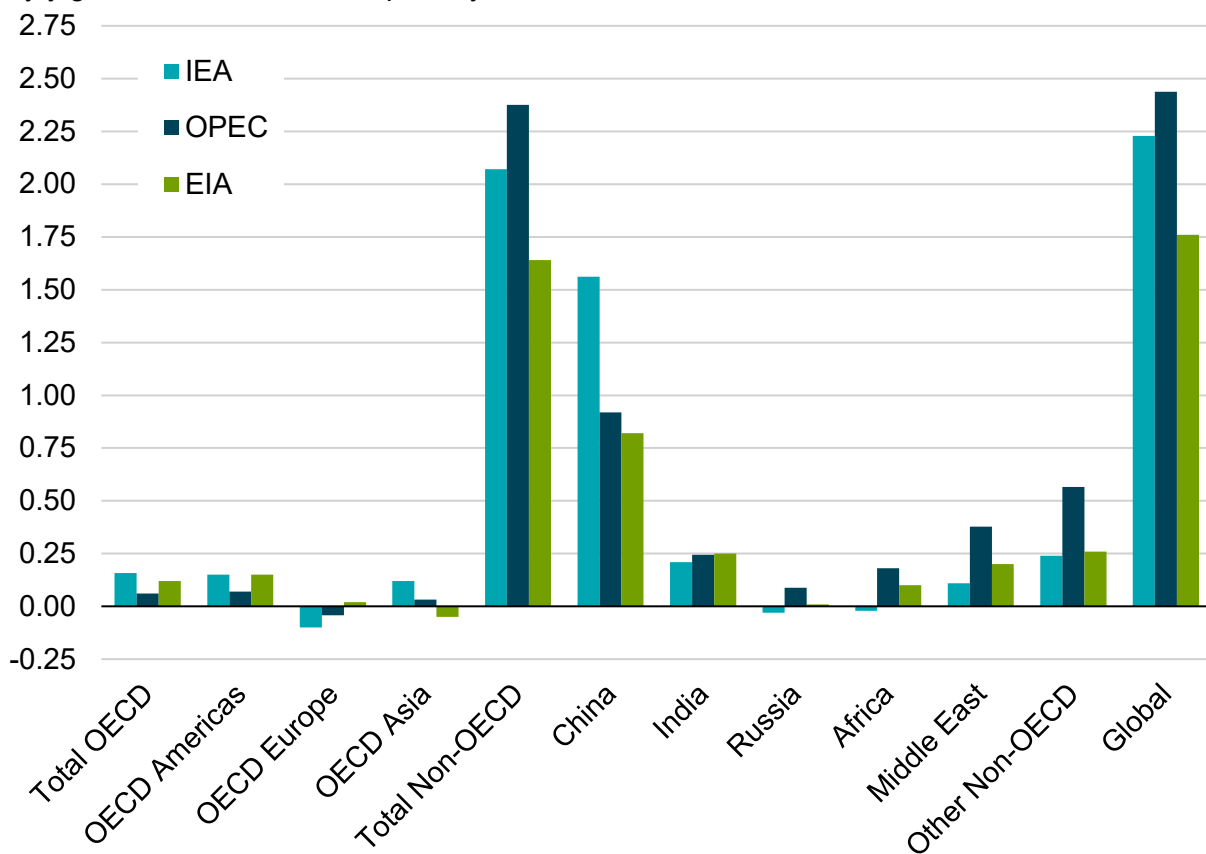


Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

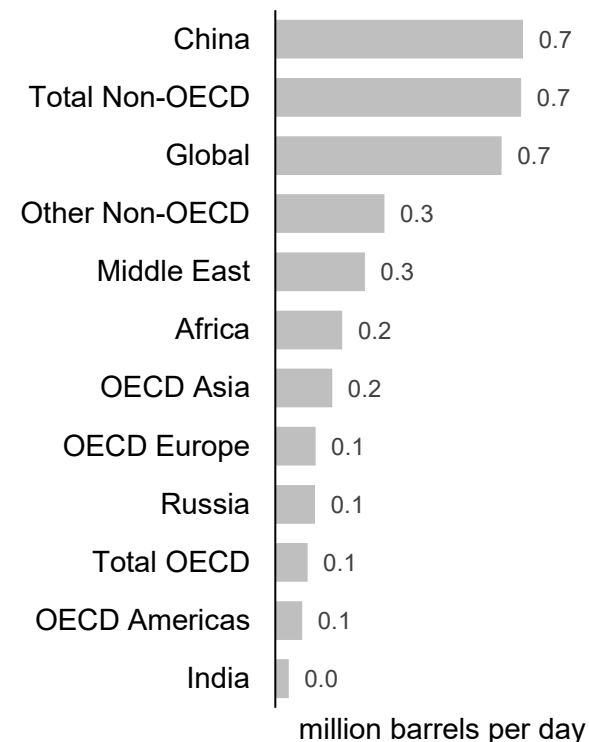
China drives the largest demand growth forecast divergence with IEA seeing the most robust growth

2023 Demand Growth Forecasts by Region

y/y growth in million barrels per day



Range in 2023 Demand Growth Forecasts



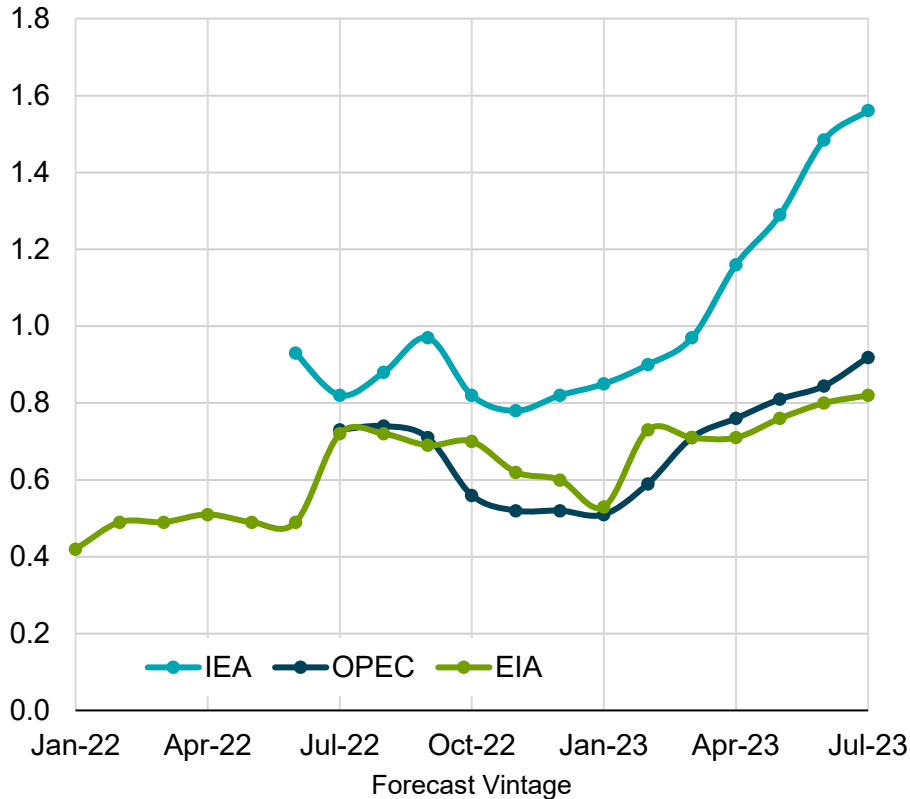
Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

IEA sees ~0.7 mb/d stronger Chinese demand growth this year; OPEC sees Chinese demand weakening in 3Q23 before robust growth in 4Q23

Chinese Annual Average Demand Growth

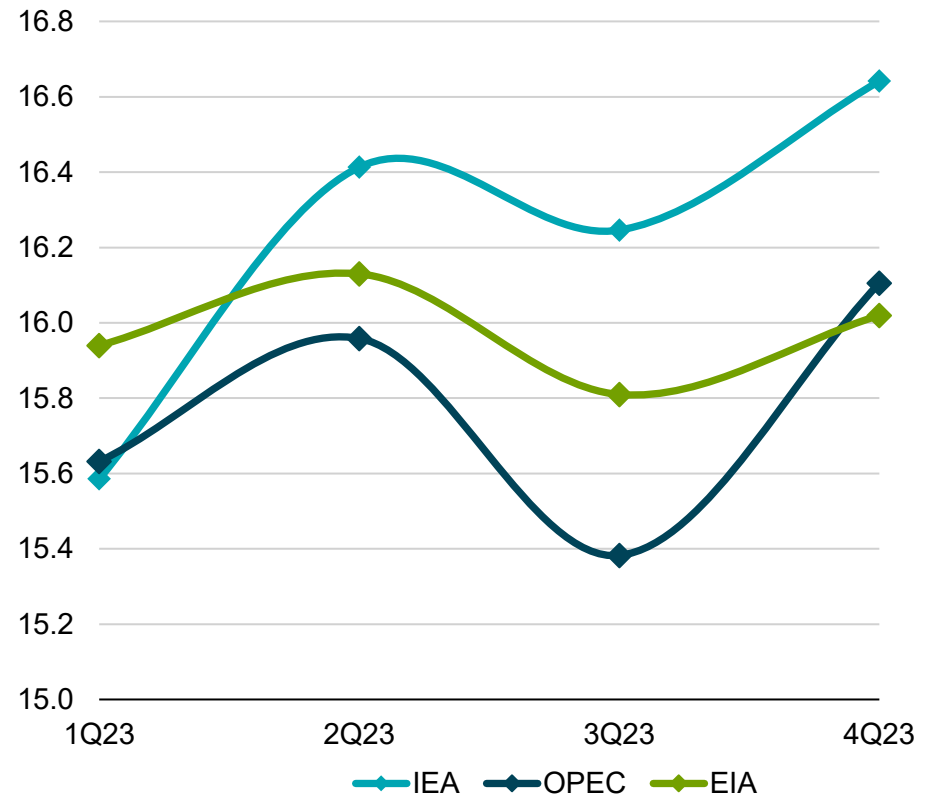
Evolution of 2023 Forecasts

y/y growth in million barrels per day



Chinese Demand

million barrels per day



Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

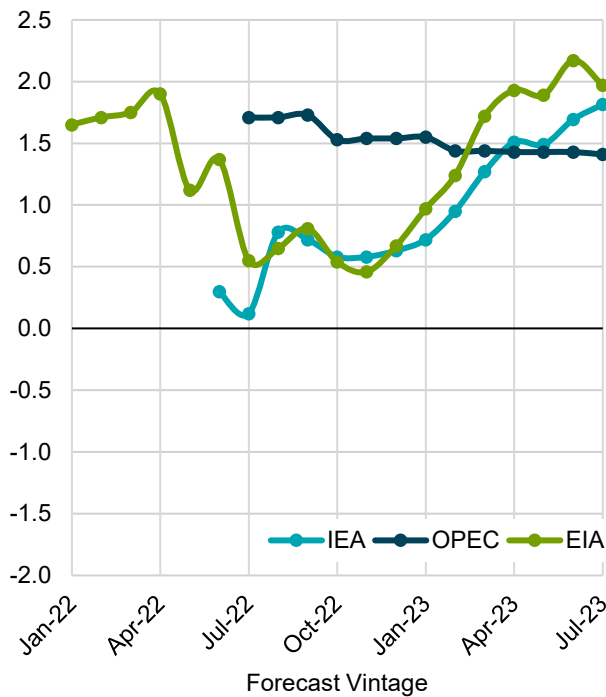
Evolution of 2023 Non-OPEC Supply Growth Forecasts

- IEA revised up non-OPEC supply growth by 0.1 mb/d, on a slightly higher Russia forecast. EIA revised down its non-OPEC growth forecast by 0.2 mb/d on a weaker outlook for Norway and South America.
- OPEC continues to see the weakest non-OPEC growth this year due primarily to a lower Russia forecast.

Non-OPEC Supply Growth

Evolution of 2023 Forecasts

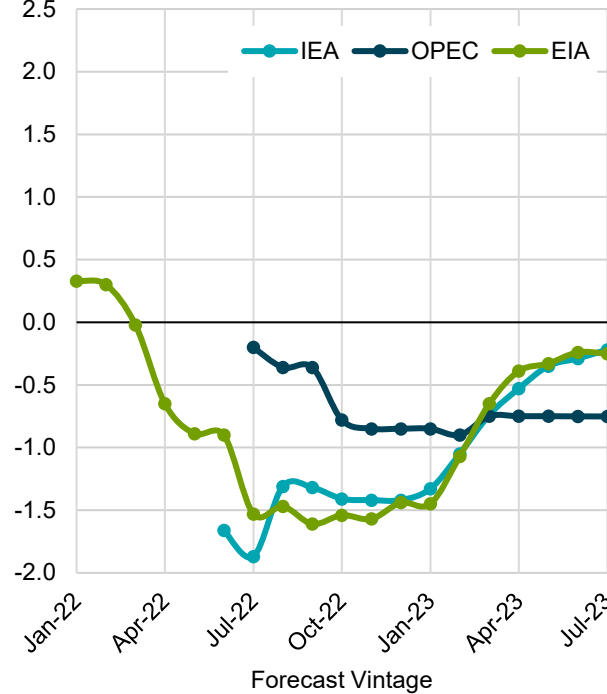
y/y growth in million barrels per day



Russia Supply Growth

Evolution of 2023 Forecasts

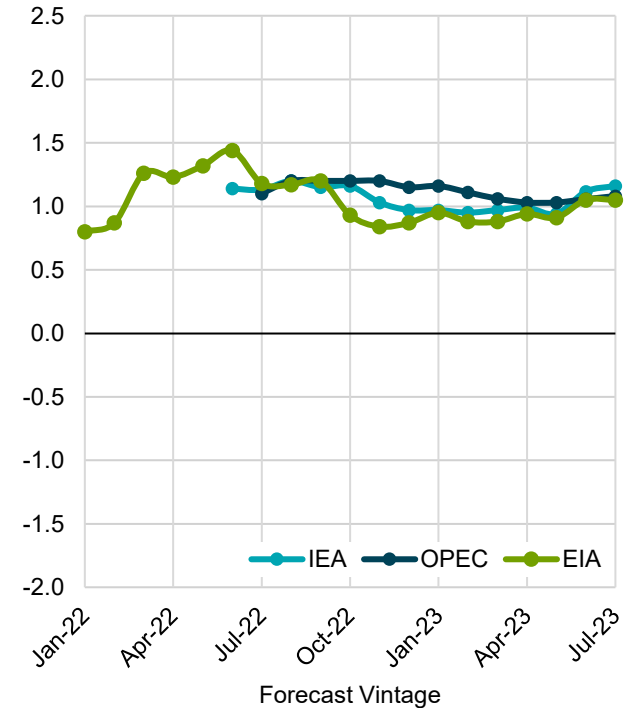
y/y growth in million barrels per day



US Supply Growth

Evolution of 2023 Forecasts

y/y growth in million barrels per day

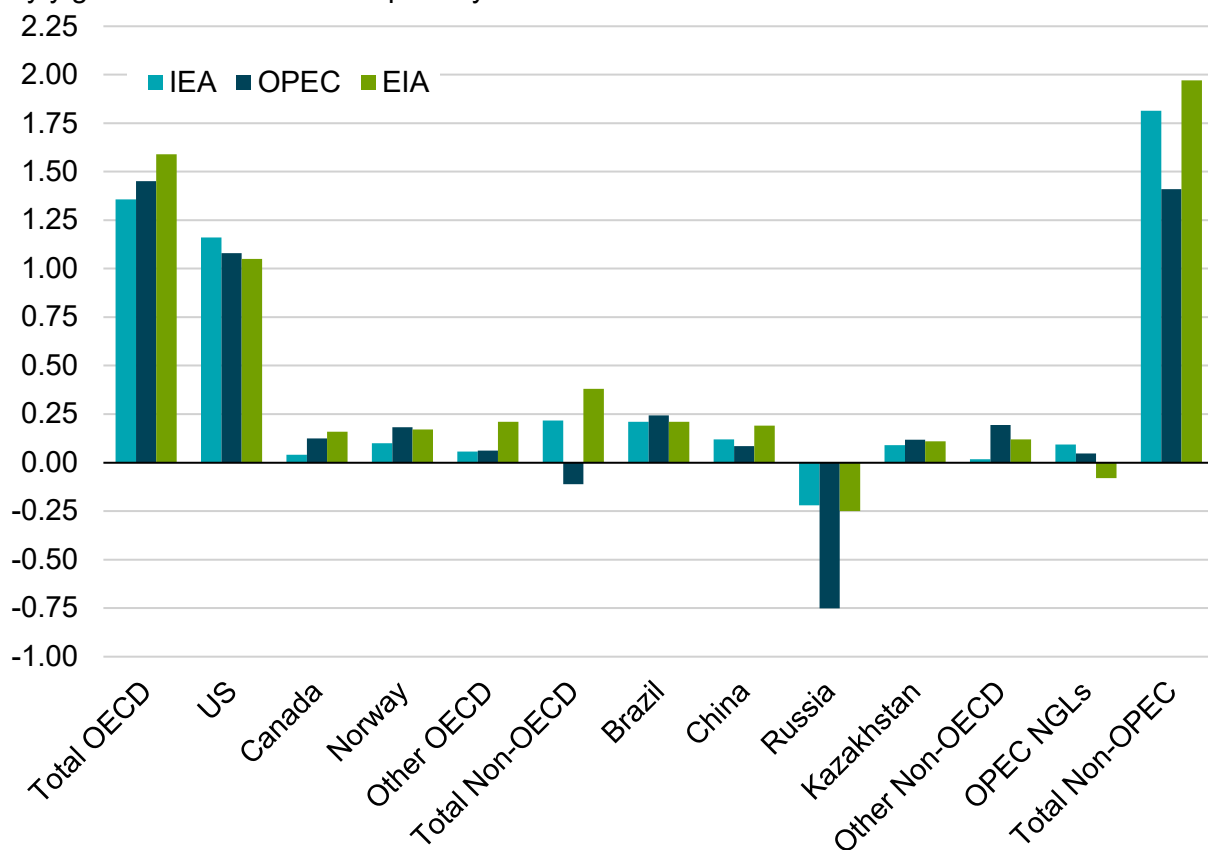


Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

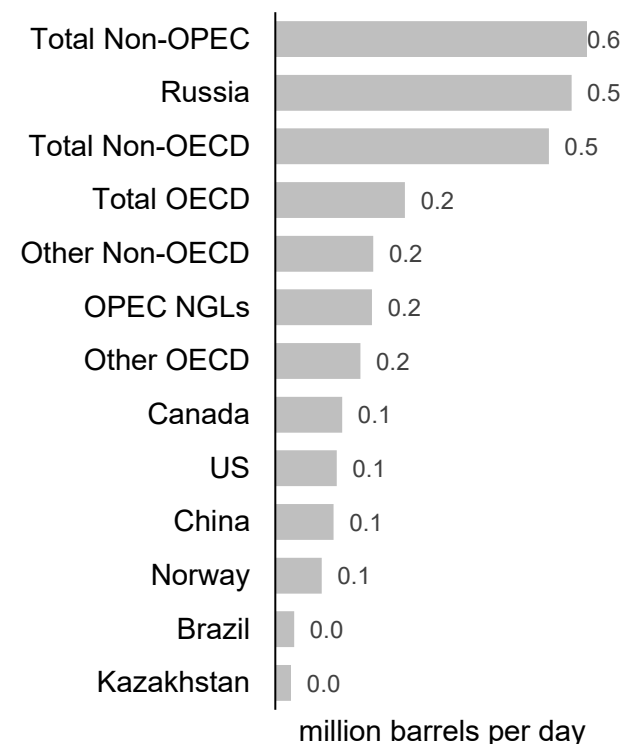
Russia drives the largest supply growth forecast divergence with OPEC seeing the steepest decline

2023 Supply Growth Forecasts by Region

y/y growth in million barrels per day



Range in 2023 Supply Growth Forecasts



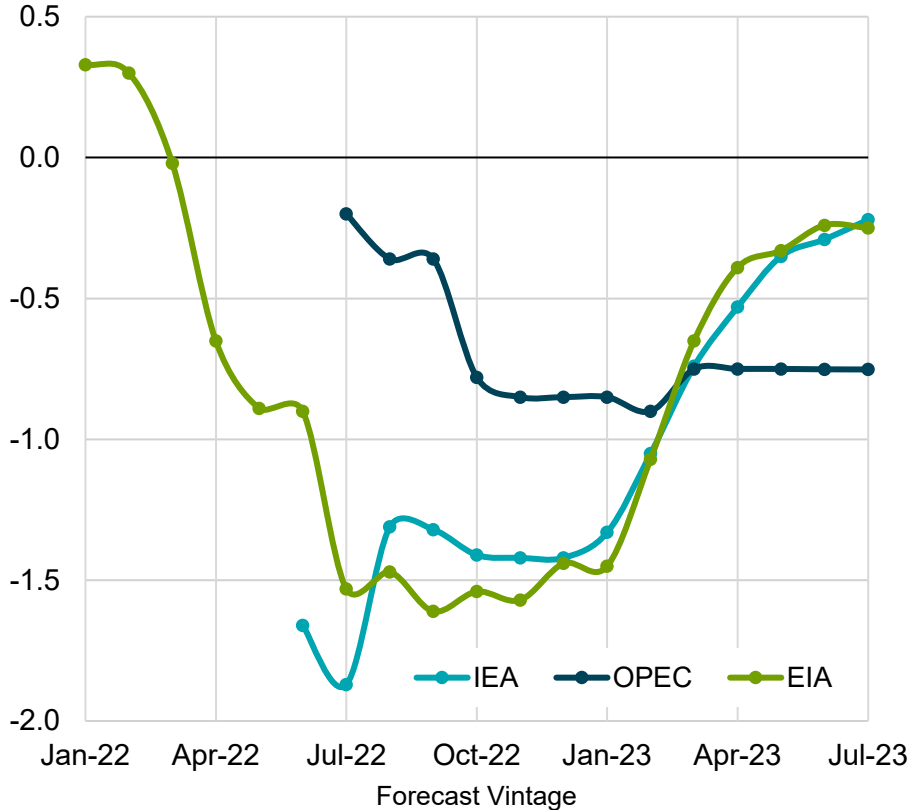
Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

IEA and EIA have revised Russian supply forecasts sharply higher since January; OPEC sees >1mb/d lower output in 2H23 vs. IEA and EIA

Russia Supply Growth

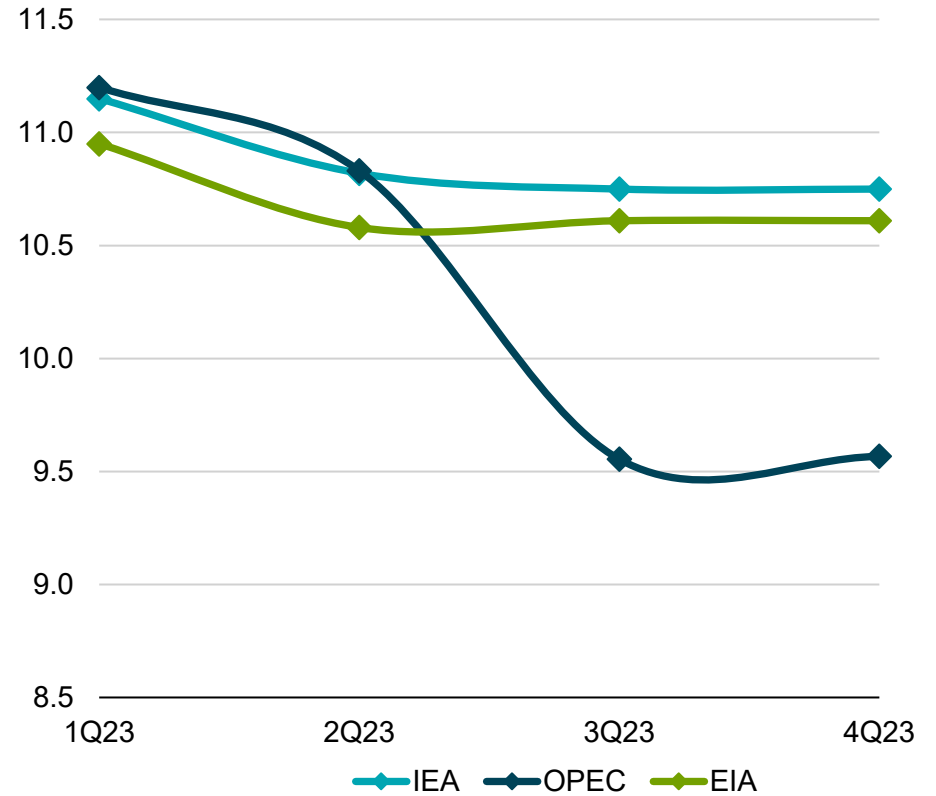
Evolution of 2023 Forecasts

y/y growth in million barrels per day



Russia Production

million barrels per day

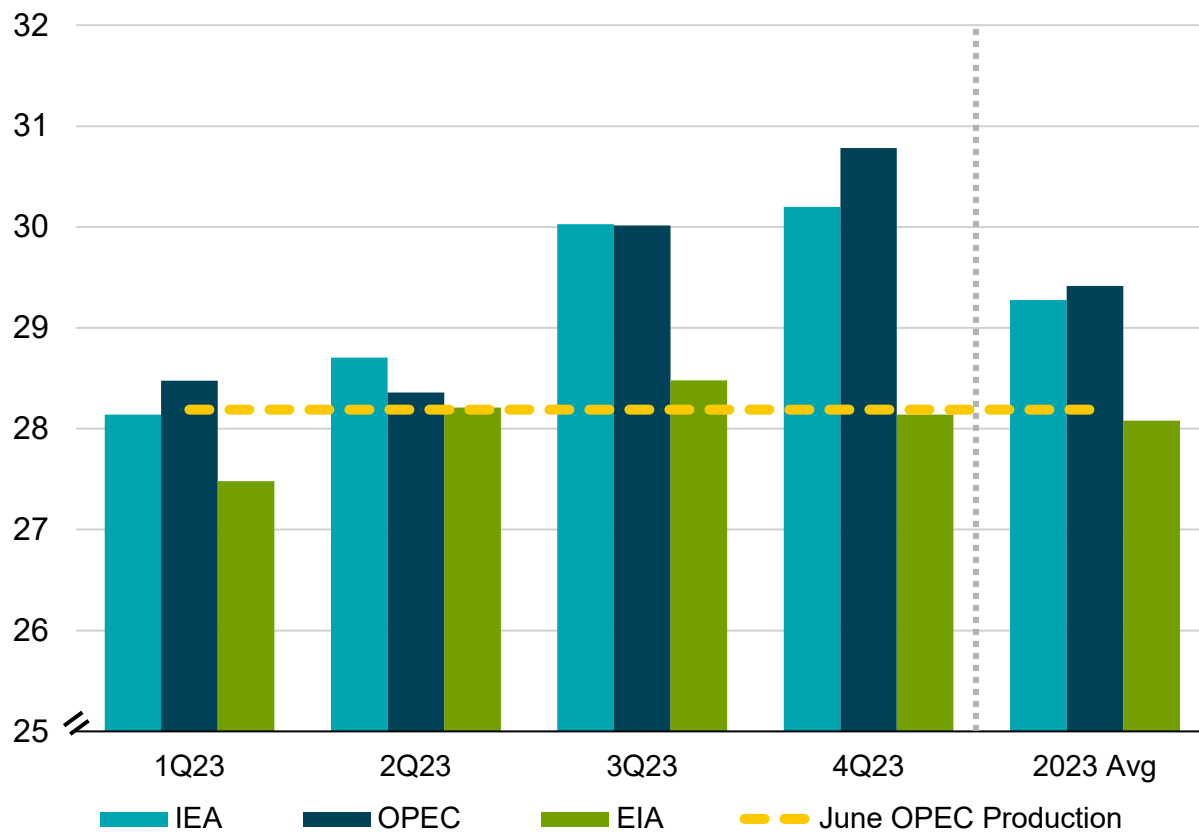


Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

IEA and OPEC balances imply a ~2 mb/d global supply shortfall in 2H23 if OPEC production were to remain at June levels

2023 Call on OPEC and Recent OPEC Production Levels

million barrels per day



- The “call on OPEC crude” is a calculation and not a forecast of actual OPEC production.
- The “call on OPEC” estimates what OPEC would need to produce to balance global supply and demand.
- It is estimated by subtracting a forecast for non-OPEC production and OPEC NGLs from global demand.

Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

2024 Outlook Comparison

Summary of 2024 Balances and Revisions

- OPEC released its inaugural 2024 balance this month.
- OPEC's inaugural 2024 forecast shows demand growth slowing to 2.2 mb/d from 2.4 mb/d this year. This is double IEA's forecast for 2024 demand growth of 1.1 mb/d and 0.6 mb/d above EIA's forecast of 1.6 mb/d.
- Both IEA and EIA see non-OPEC and OPEC NGL supply growing by 1.0-1.2 mb/d in 2024. OPEC sees slightly faster growth at 1.5 mb/d primarily due to a higher US growth forecast.

		2024 Balance Summary											
		Updated Forecast						Revisions to Last Month's Forecast					
		1Q24	2Q24	3Q24	4Q24	2024	2024 Y/Y	1Q24	2Q24	3Q24	4Q24	2024	2024 Y/Y
Global Demand	IEA	101.4	102.6	104.3	104.5	103.2	1.1	0.0	0.1	0.3	0.1	0.1	0.3
	OPEC	103.6	103.4	104.6	105.3	104.2	2.2						
	EIA	102.3	102.4	103.3	103.2	102.8	1.6	0.1	0.0	0.2	0.1	0.1	-0.1
OECD Demand	IEA	45.1	45.3	46.8	46.1	45.8	-0.3	0.0	-0.2	0.1	0.1	0.0	0.1
	OPEC	45.8	45.8	47.2	46.4	46.3	0.3						
	EIA	46.2	45.7	46.7	46.6	46.3	0.3	0.0	0.0	0.1	0.0	0.0	0.0
Non-OECD Demand	IEA	56.3	57.4	57.5	58.4	57.4	1.4	0.0	0.3	0.2	0.0	0.1	0.2
	OPEC	57.9	57.6	57.5	59.0	58.0	2.0						
	EIA	56.2	56.7	56.6	56.6	56.5	1.4	0.0	0.0	0.0	0.0	0.0	-0.1
Non-OPEC Supply* and OPEC NGLs	IEA	73.3	74.1	74.4	74.3	74.0	1.2	0.3	0.4	0.3	0.3	0.3	0.1
	OPEC	73.5	73.6	74.2	74.9	74.0	1.5						
	EIA	73.5	73.5	74.3	75.0	74.1	1.0	-0.2	-0.4	-0.2	-0.1	-0.2	0.0
OPEC Crude**	IEA												
	OPEC												
	EIA	28.4	28.6	28.6	28.3	28.5	0.5	0.1	0.1	0.1	0.1	0.1	0.2
Call on OPEC	IEA	28.2	28.6	29.9	30.2	29.2	-0.1	-0.3	-0.3	0.0	-0.2	-0.2	0.2
	OPEC	30.1	29.8	30.4	30.5	30.2	0.8						
	EIA	28.8	28.9	29.0	28.2	28.7	0.6	0.3	0.4	0.4	0.2	0.3	0.0
Global Stock Change and Miscellaneous to Balance**	IEA												
	OPEC												
	EIA	-0.4	-0.3	-0.3	0.1	-0.2		-0.2	-0.3	-0.3	-0.1	-0.2	

* Includes biofuels and processing gains

** Only EIA publishes a forecast of OPEC crude production and global stock change

Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

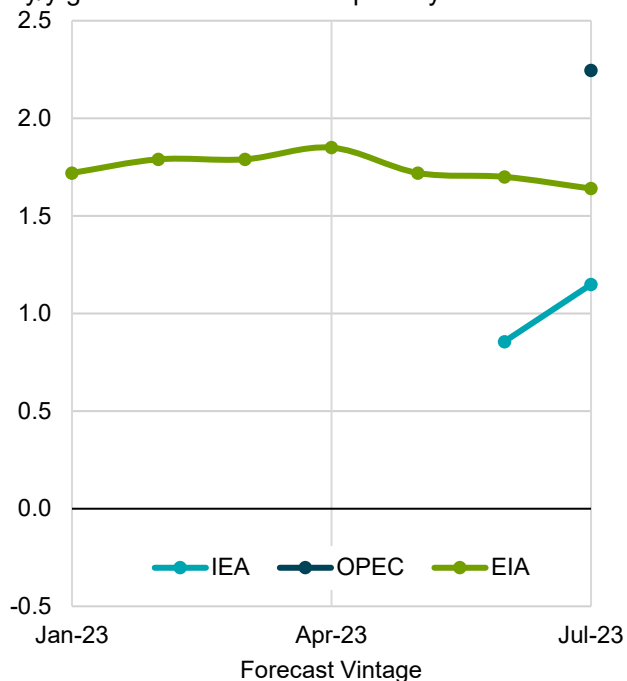
Evolution of 2024 Annual Demand Growth Forecasts

- OPEC’s 2024 global demand growth forecast is double IEA’s due to a higher OECD and Middle East demand growth forecast.
- IEA sees OECD demand declining by 0.3 mb/d next year. Meanwhile, OPEC and EIA both see OECD growing by 0.3 mb/d.

Global Demand Growth

Evolution of 2024 Forecasts

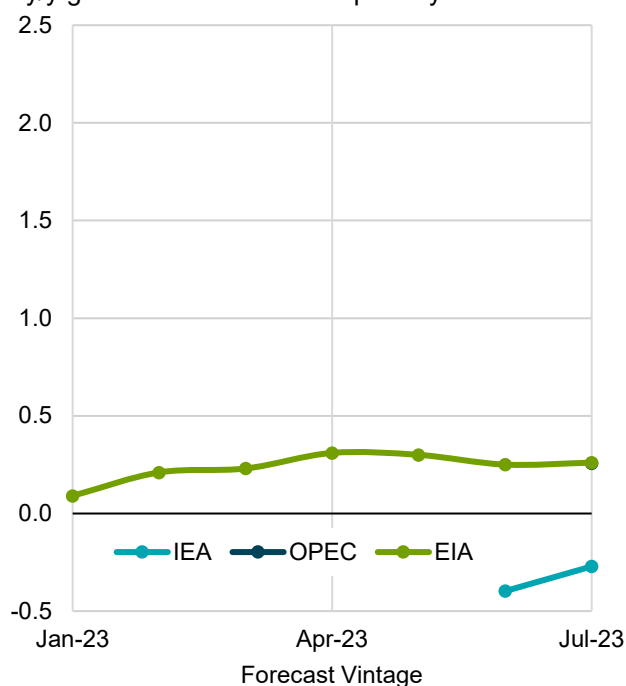
y/y growth in million barrels per day



OECD Demand Growth

Evolution of 2024 Forecasts

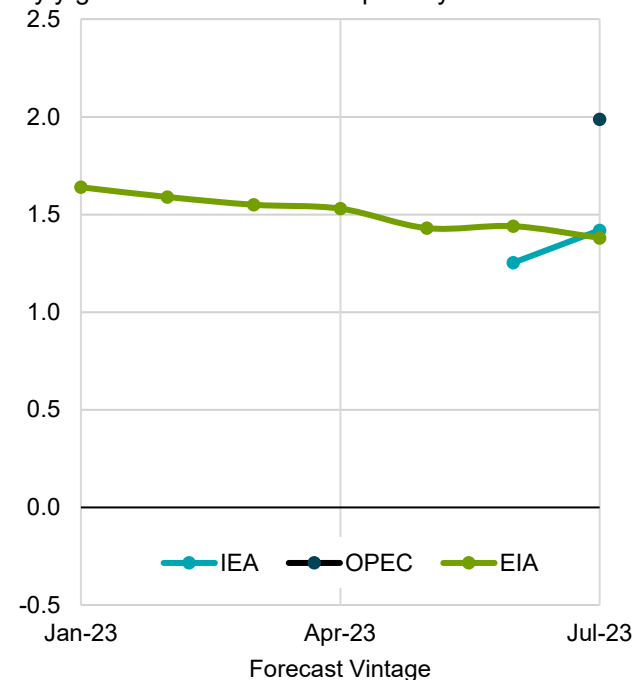
y/y growth in million barrels per day



Non-OECD Demand Growth

Evolution of 2024 Forecasts

y/y growth in million barrels per day

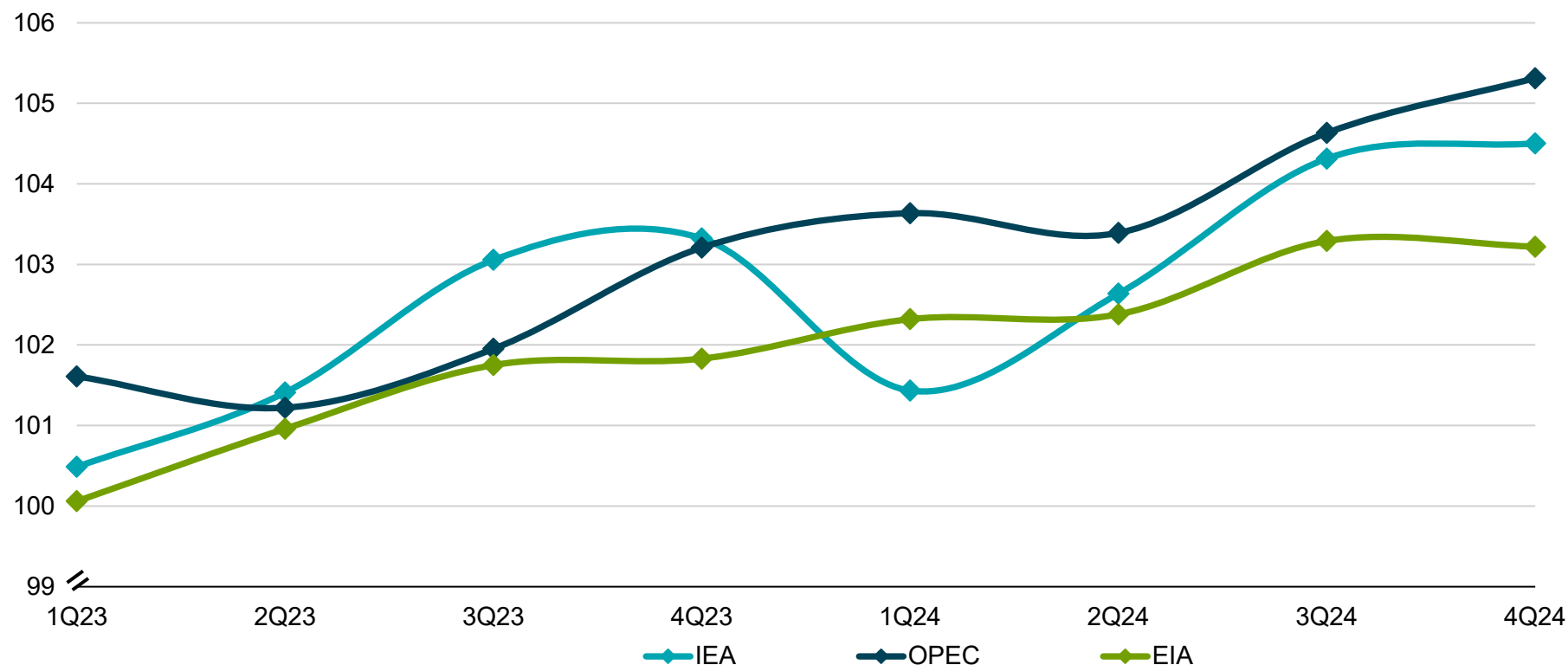


Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

OPEC sees global demand climbing to >105 mb/d by the end of next year – soaring ~4 mb/d above the most recent quarterly estimate (2Q23)

2023-24 Global Demand

demand in million barrels per day

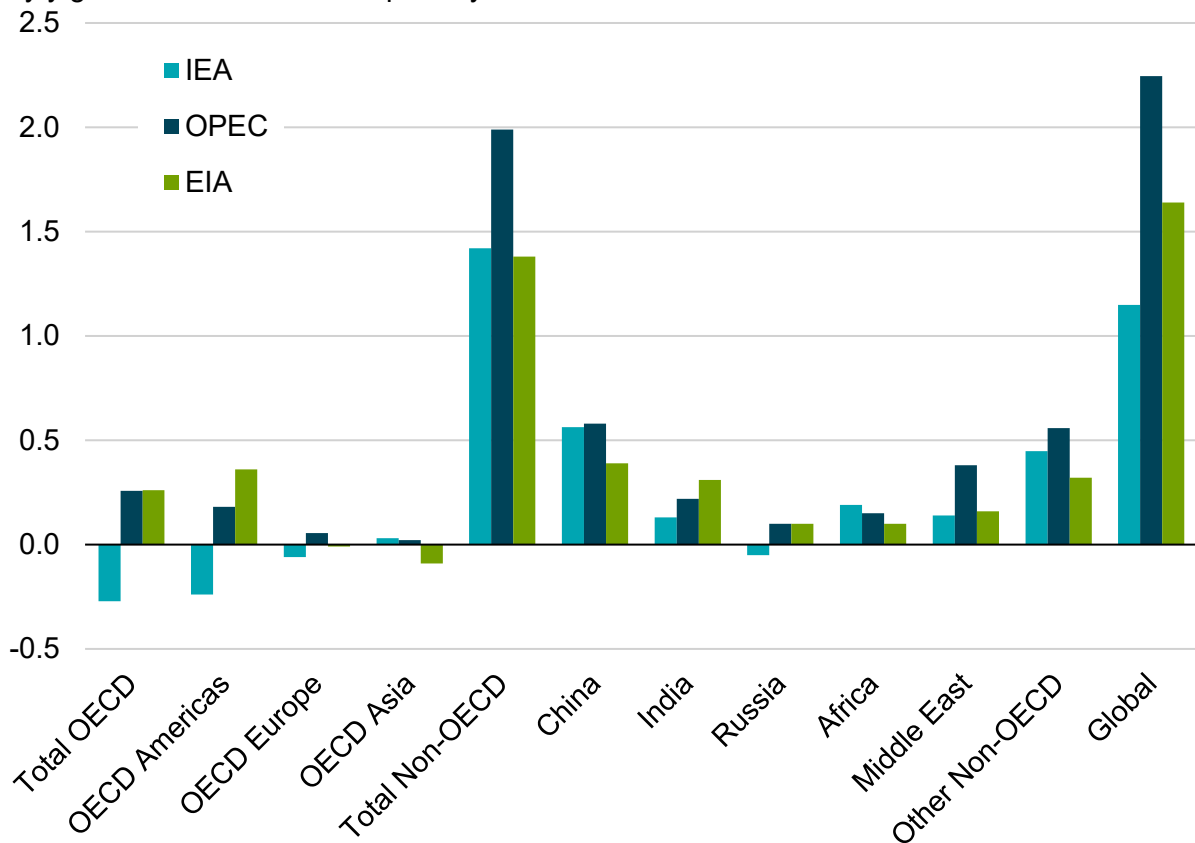


Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

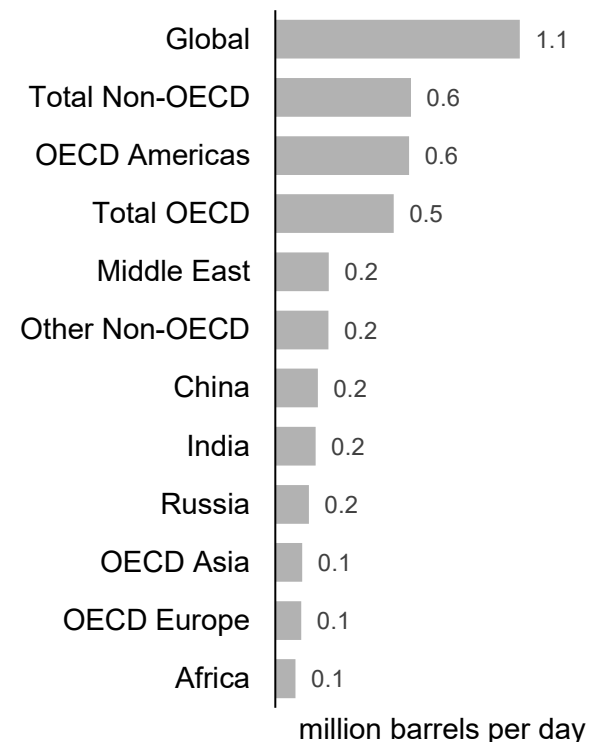
OPEC sees more robust demand growth than IEA in the OECD region, India, Russia, and the Middle East

2024 Demand Growth Forecasts by Region

y/y growth in million barrels per day



Range in 2024 Demand Growth Forecasts

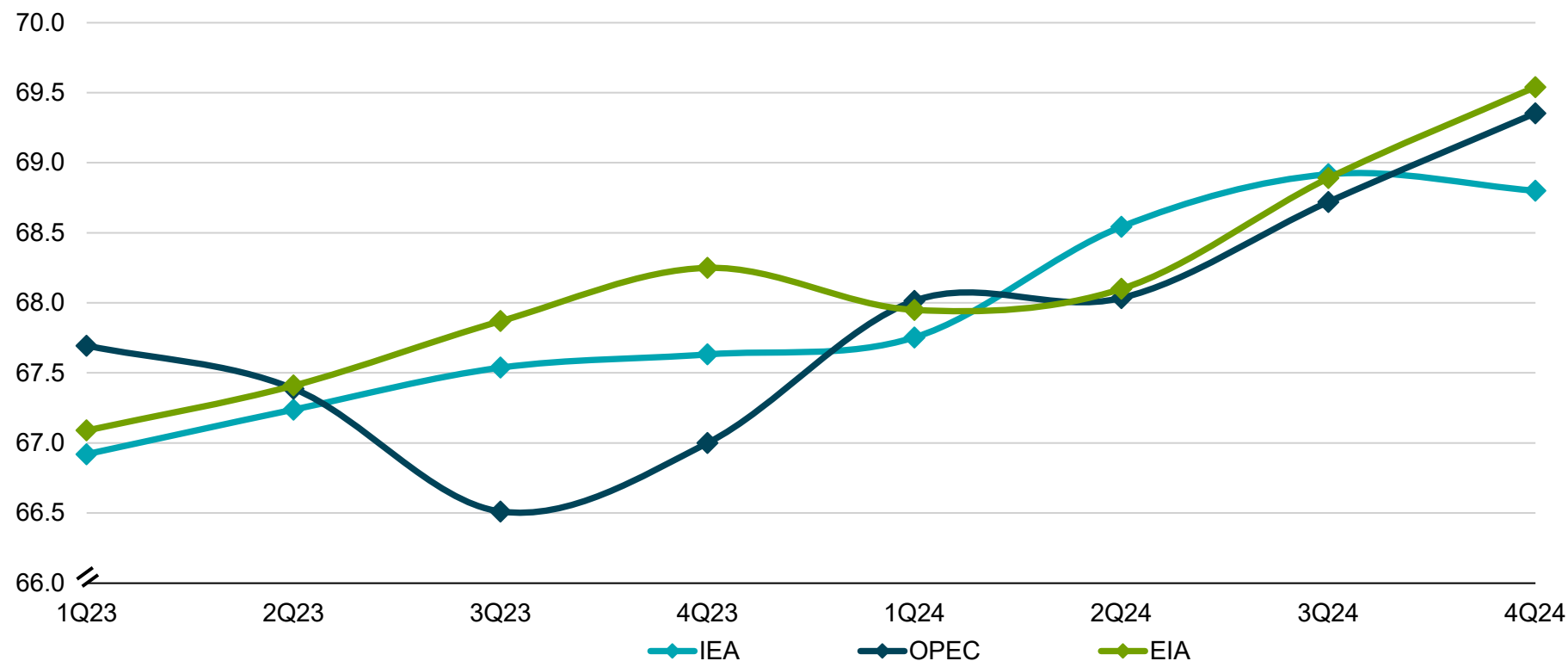


Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

Non-OPEC supply forecasts for 2024 are significantly more aligned than 2H23 projections

2023-24 Non-OPEC Supply

supply in million barrels per day



Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

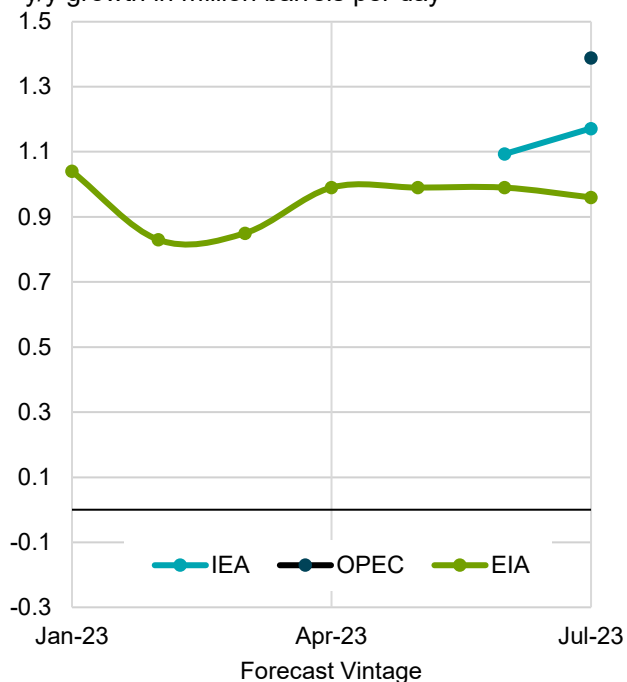
Evolution of 2024 Annual Non-OPEC Supply Growth Forecasts

- OPEC sees the most robust growth due primarily to a higher US forecast.
- While all three forecasts see US supply growth slowing substantially from 2023's >1 mb/d growth, the US is still expected to be the largest contributor to non-OPEC growth next year.

Non-OPEC Supply Growth

Evolution of 2024 Forecasts

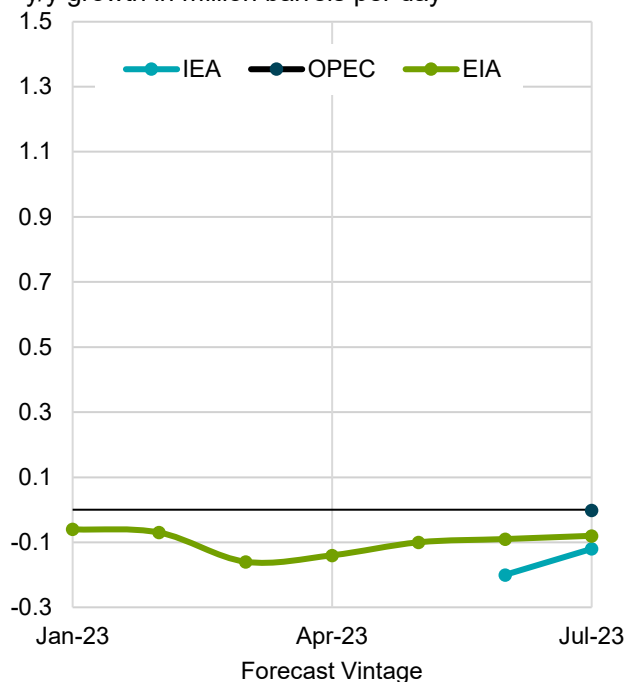
y/y growth in million barrels per day



Russia Supply Growth

Evolution of 2024 Forecasts

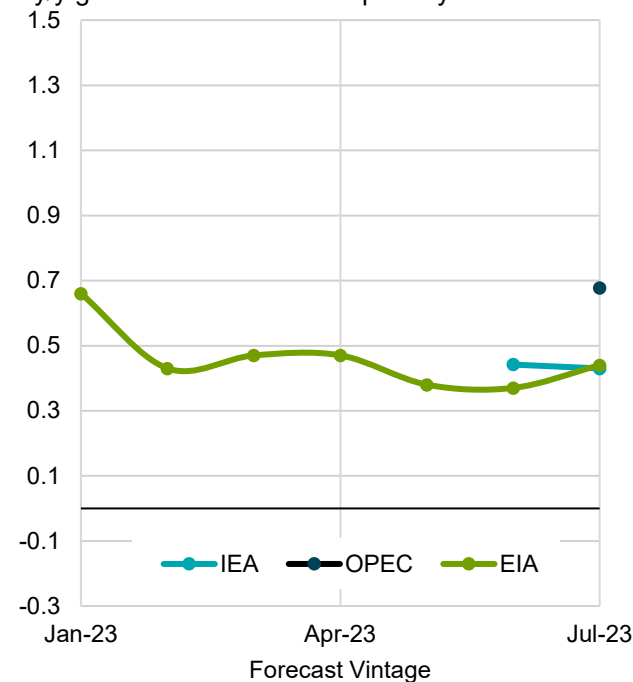
y/y growth in million barrels per day



US Supply Growth

Evolution of 2024 Forecasts

y/y growth in million barrels per day

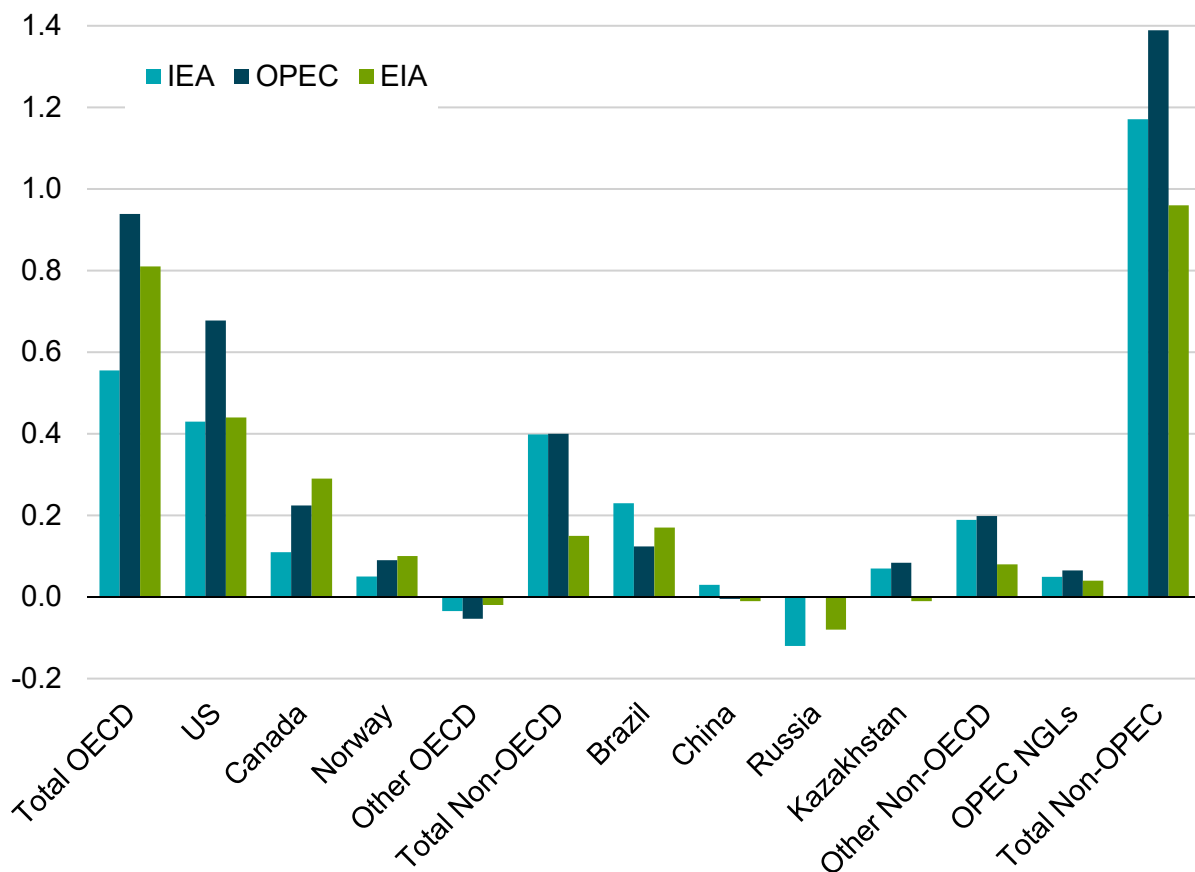


Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

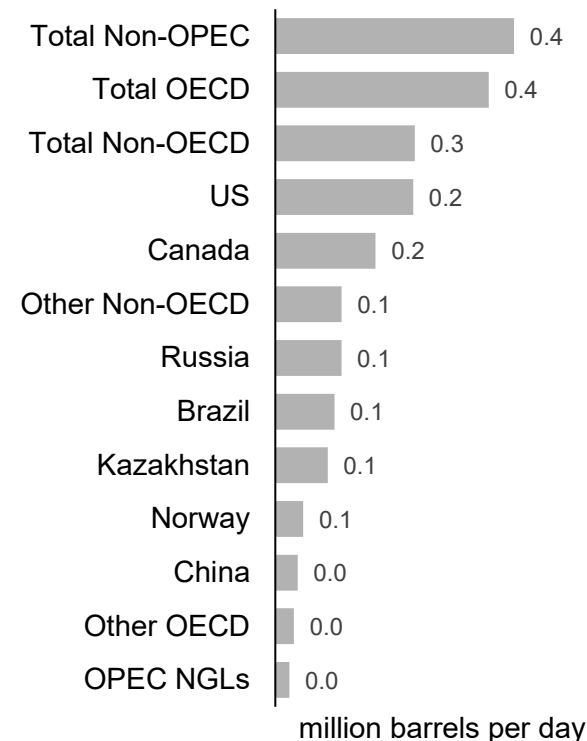
OPEC sees the strongest non-OPEC supply growth in 2024 due largely to a higher US forecast

2024 Supply Growth Forecasts by Region

y/y growth in million barrels per day



Range in 2024 Supply Growth Forecasts

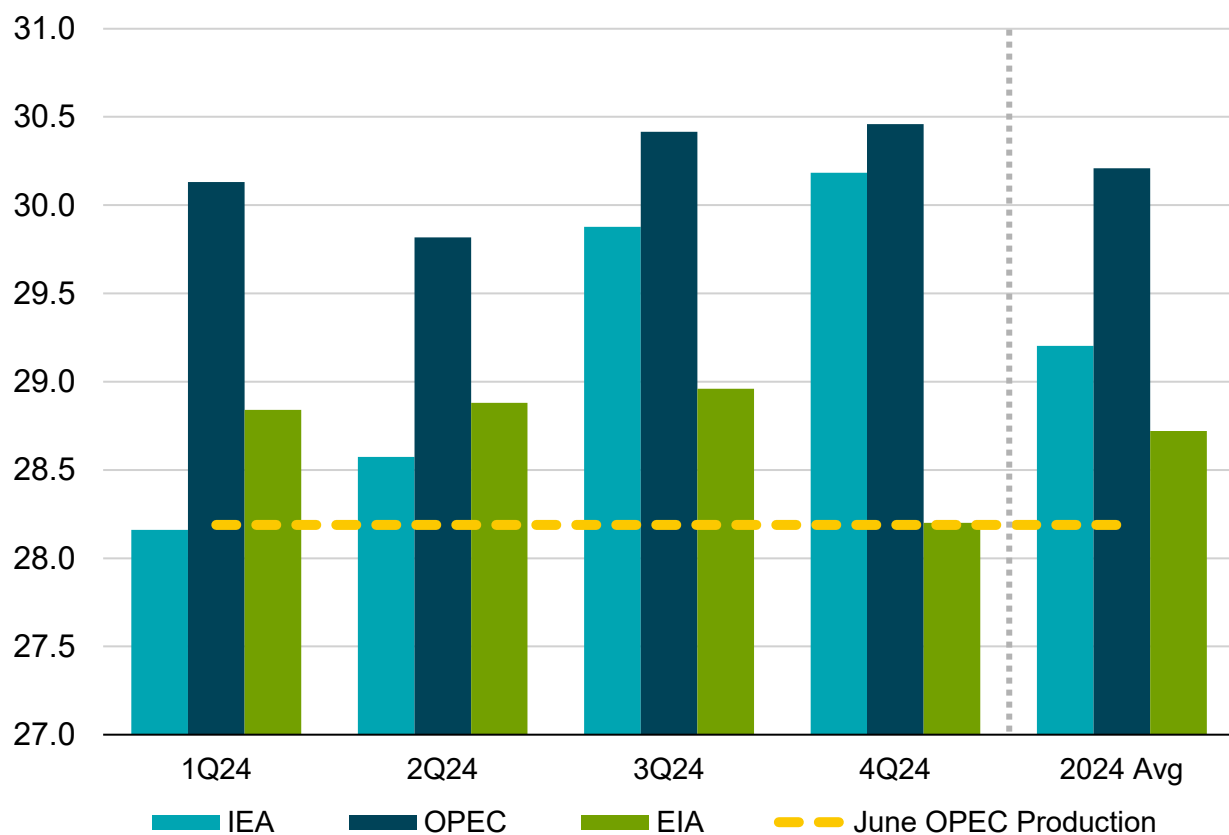


Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

OPEC's inaugural 2024 balance implies a ~2 mb/d supply shortfall if OPEC production remains at June 2023 levels

2024 Call on OPEC and Recent OPEC Production Levels

million barrels per day



- The “call on OPEC crude” is a calculation and not a forecast of actual OPEC production.
- The “call on OPEC” estimates what OPEC would need to produce to balance global supply and demand.
- It is estimated by subtracting a forecast for non-OPEC production and OPEC NGLs from global demand.
- OPEC’s balance is tighter than IEA and EIA’s primarily due to a stronger demand outlook.

Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

Appendix

Notes:

- The IEF conducts a comprehensive comparative analysis of the short-, medium-, and long-term energy outlooks of the IEA, OPEC, and the EIA to inform the IEA-IEF-OPEC Symposium on Energy Outlooks that the IEF hosts annually in Riyadh as part of the trilateral work programme.
- To inform IEF stakeholders on how perspectives on the oil market of both organizations evolve over time regularly, this monthly summary provides a snapshot overview of data points gained from comparing basic historical data and short-term forecasts of the IEA Oil Market Report, the OPEC Monthly Oil Market Report, and the EIA Short-term Energy Outlook.
- Data in tables and charts may not sum due to rounding.
- Some differences in regional/country supply figures may stem from different conventions in reporting processing gains and biofuels. EIA country-level data includes biofuels and processing gains, while OPEC only includes biofuels and IEA excludes both. All total non-OPEC production figures include biofuels and processing gains.

Upcoming Publication Dates

	IEA OMR	OPEC MOMR	EIA STEO	JODI
July	13 th (Thursday)	13 th (Thursday)	11 th (Tuesday)	17 th (Monday)
August	11 th (Friday)	10 th (Thursday)	8 th (Tuesday)	16 th (Wednesday)
September	13 th (Wednesday)	12 th (Tuesday)	12 th (Tuesday)	18 th (Monday)
October	12 th (Thursday)	12 th (Thursday)	11 th (Wednesday)	16 th (Monday)



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