

November 2023

IEF Comparative Analysis

Of Monthly Oil Market Reports

IEF

iea



Oil Market Context

Oil prices fall on macro concerns but physical markets remain tight

Oil prices have fallen by nearly 18% from their peak in late-September on macro economic concerns and negative sentiment. The number of WTI short positions have more than quadrupled over the past month to their highest level since July. WTI's prompt spreads flipped to a bearish contango for short stints earlier this month, also for the first time since July.

However, global demand continues to defy weak economic signals. China's demand continues to set records with the latest data showing demand was at an all-time high in September at 17.1 mb/d and was up 1.9 mb/d year-on-year. Similarly, the latest final data for the US shows demand in August surpassed expectations and grew by >0.6 mb/d year-on-year.

Slightly offsetting the robust growth in demand has been record production levels in the US, Brazil, and Guyana. US crude production rose to a record high in August as well productivity and operational efficiencies have more than offset the effect of reduced drilling. The US oil rig count remains >30% below pre-COVID levels.

Global crude inventories are estimated to have fallen by more than 140 mb in 3Q23.

OPEC+ set to meet for the first time in five months

OPEC+ is scheduled to meet on Sunday, November 26th in Vienna. It will be the first full Ministerial Meeting for the group since June 4th. The group will discuss production levels for 2024. Currently, a 2 mb/d production cut announced in October 2022 is scheduled to extend through the end of 2024. Additionally, a subset of the group has implemented a voluntary cut of 1.16 mb/d, announced on April 2, 2023, which are scheduled to expire at the end of 2023. Furthermore, Saudi Arabia has been cutting an extra 1.0 mb/d since July 2023 and may extend or rescind the cuts.

2023 Forecast Highlights:

- **Global demand:**

- IEA, OPEC, and EIA raised their global demand growth forecasts marginally on stronger 2H23 demand (primarily the US and China). IEA and OPEC remain aligned on global demand growth (~2.4-2.5 mb/d) while EIA sees lower growth (1.9 mb/d) from a weaker Chinese forecast.
- IEA continues to see ~1.0 mb/d higher Chinese demand growth vs. EIA and 0.6 mb/d higher vs. OPEC.

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

- IEA and EIA revised up 2023 non-OPEC supply growth by 0.2 mb/d on stronger US and Brazil production in 2H23. OPEC revised up 3Q23 production by 0.3 mb/d on higher Russian production.
- IEA and EIA both now see non-OPEC supply growth at 2.3-2.4 mb/d while OPEC continues to see lower growth at 1.7 mb/d.
- The largest divergence in supply forecasts is for Russian production where OPEC sees 4Q23 supply levels at 1.0-1.2 mb/d below IEA and EIA forecasts.
- All three outlooks expect the US to be the largest driver of non-OPEC supply growth, adding around 1.3-1.5 mb/d of supply this year.

- **“Call on OPEC” and Global Balance:**

- OPEC and IEA balances imply a 1.0-3.0 mb/d global supply deficit in 4Q23 if OPEC production stays at October levels.

- **October OPEC production:**

- OPEC secondary sources show OPEC production rose by 80 kb/d in October to 27.90 mb/d led by a 51 kb/d increase from Angola and a 46 kb/d increase from Iran. IEA estimates show OPEC crude production remained flat at 28.21 mb/d. IEA estimates 0.3 mb/d higher UAE production compared to OPEC secondary sources.

- **OECD inventories:**

- OPEC estimates OECD commercial stocks fell by 15.6 mb in September to 2,783 mb and stood 118 mb below the latest five-year average and 184 mb below the 2015-2019 average. IEA estimates OECD commercial inventories rose by 1.8 mb to 2,813 mb and stood 71.2 mb below the five-year average.

2024 Forecast Highlights:

- **Global demand:**

- IEA and EIA both revised up their 2024 demand growth forecasts slightly to 0.9 mb/d and 1.4 mb/d, respectively. OPEC continues to see more robust demand growth at 2.2 mb/d.
- IEA sees OECD demand *declining* by 0.3 mb/d next year while OPEC expects 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 climbing in 1Q24 to ~2 mb/d above IEA and EIA forecasts.
- 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 104.1 mb/d by 4Q24 vs. EIA's 102.9 mb/d.

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

- EIA revised up 2024 non-OPEC supply growth by 0.1 mb/d to 1.2 mb/d on a stronger Brazil forecast.
- IEA revised down non-OPEC supply growth by 0.1 mb/d to 1.3 mb/d on slightly lower US and Canadian growth.
- OPEC's forecast was relatively unchanged from last month at 1.4 mb/d.
- All three forecasts both see US production growth slowing to 0.4-0.6 mb/d next year from >1.2 mb/d this year. Despite a significant slowdown, the US is still the strongest driver of non-OPEC supply growth in 2024.
- Other drivers of non-OPEC supply growth include Brazil, Guyana, and Canada.

- **“Call on OPEC”:**

- The “call on OPEC” for next year ranges from 27.7 mb/d (EIA) to 29.9 mb/d (OPEC). IEA falls in the middle at 28.4 mb/d.
- OPEC's 2024 balance is ~1.5 mb/d tighter than IEA's and 2.2 mb/d tighter than EIA's primarily due to OPEC's higher demand forecast and tighter baseline (2023) balance. Notably, OPEC's balance implies a 2 mb/d supply deficit in 2024 if OPEC production were to remain at October levels.

2023 Outlook Comparison

Summary of 2023 Balances and Revisions

- The largest revisions this month include:
 - IEA's upward revisions to 2H23 supply (+0.3 mb/d) in the US and Brazil and 2H23 demand (+0.2 mb/d) in the US and China;
 - EIA's upward revisions to 2023 supply (+0.2 mb/d) in Russia, Brazil, and the US and 2H23 demand (+0.2 mb/d) in the US, Middle East, and Japan;
 - OPEC's upward revisions to 3Q23 supply (+0.3 mb/d) in Russia and the US and 4Q23 demand (+0.2 mb/d) in China and the US.
- EIA continues to see the lowest global oil demand growth this year driven by a lower Chinese forecast. OPEC sees the lowest non-OPEC supply growth this year due to a lower Russian forecast.

		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	100.3	101.7	103.0	102.8	102.0	2.4	0.0	0.0	0.3	0.2	0.1	0.1
	OPEC	101.6	101.5	102.1	103.3	102.1	2.5	0.0	0.1	-0.1	0.2	0.0	0.0
	EIA	99.9	100.8	101.6	101.9	101.0	1.9	0.1	0.0	0.2	0.2	0.1	0.1
OECD Demand	IEA	45.4	45.7	46.1	46.2	45.8	0.1	0.0	0.0	0.1	0.0	0.0	0.0
	OPEC	45.4	45.7	46.2	46.0	45.8	0.1	0.0	0.1	-0.1	0.1	0.0	0.0
	EIA	45.2	45.3	46.2	46.5	45.8	0.1	0.0	-0.1	0.2	0.2	0.1	0.1
Non-OECD Demand	IEA	54.9	56.0	56.9	56.6	56.1	2.3	0.0	0.0	0.3	0.0	0.1	0.1
	OPEC	56.1	55.8	55.9	57.3	56.3	2.4	0.0	0.0	0.0	0.1	0.0	0.0
	EIA	54.7	55.4	55.4	55.4	55.2	1.7	0.1	0.0	0.0	0.0	0.0	0.0
Non-OPEC Supply* and OPEC NGLs	IEA	72.5	73.0	73.6	73.8	73.2	2.2	0.0	0.0	0.2	0.4	0.2	0.2
	OPEC	73.2	73.1	73.5	72.3	73.0	1.8	0.0	0.0	0.3	0.0	0.1	0.1
	EIA	72.7	73.1	74.1	74.5	73.6	2.2	0.1	0.2	0.3	0.4	0.2	0.2
OPEC Crude**	IEA	29.4	28.9	28.0				0.0	0.0				
	OPEC	28.8	28.3	27.6				0.0	0.0				
	EIA	28.5	28.4	27.5	27.6	28.0	-0.7	0.0	0.0	0.1	0.1	0.1	0.1
Call on OPEC	IEA	27.9	28.7	29.4	29.0	28.7	0.1	0.0	0.0	0.1	-0.3	0.0	0.0
	OPEC	28.4	28.4	28.6	30.9	29.1	0.6	0.0	0.1	-0.4	0.1	0.0	-0.1
	EIA	27.3	27.7	27.6	27.4	27.5	-0.4	0.0	-0.2	-0.1	-0.2	-0.1	-0.1
Global Stock Change and Miscellaneous to Balance**	IEA	1.5	0.2	-1.4				0.0	0.0				
	OPEC	0.4	-0.1	-1.0				0.0	-0.1				
	EIA	1.2	0.7	-0.1	0.2	0.5		0.1	0.2	0.2	0.3	0.2	

* Includes biofuels and processing gains

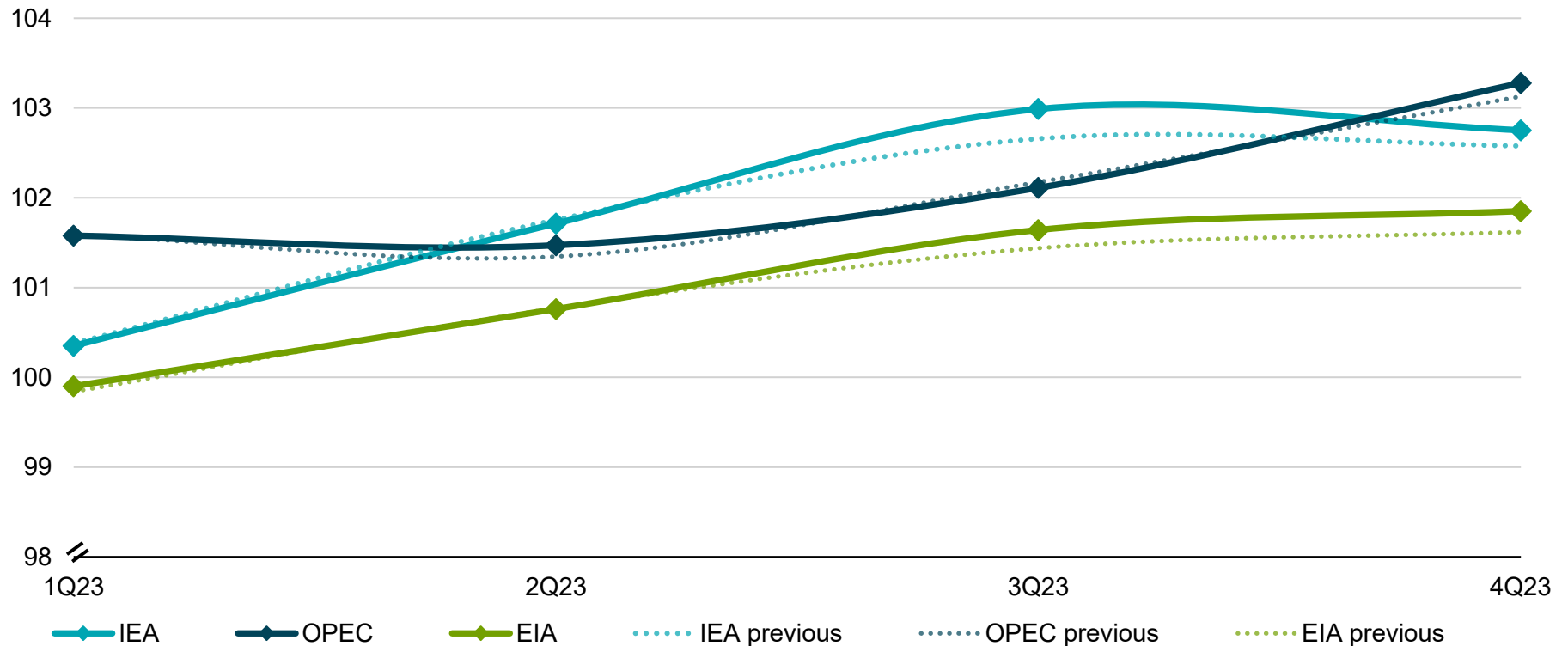
** Only EIA publishes a forecast of OPEC crude production and global stock change

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

EIA estimates consistently lower global demand levels than OPEC and IEA for 2023

Global Demand

demand in million barrels per day



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

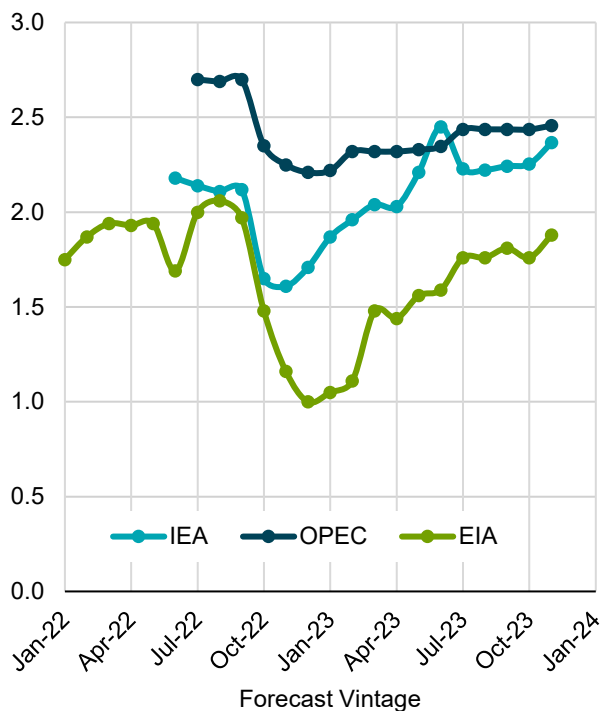
Evolution of 2023 demand growth forecasts

- IEA and EIA both revised up their global demand growth forecasts for this year on upwardly revised 2H23 demand forecasts in the US and across the Non-OECD.
- EIA continues to see the weakest demand growth this year, driven by a lower non-OECD demand forecast.

Global Demand Growth

Evolution of 2023 Forecasts

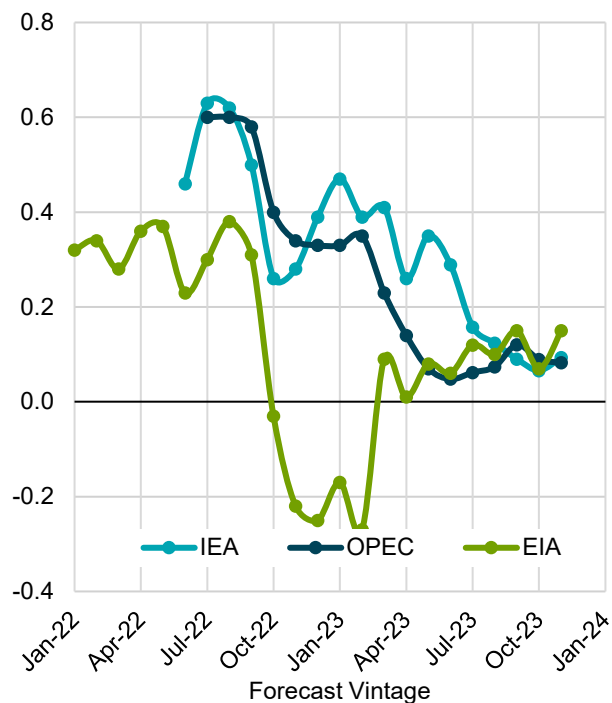
y/y growth in million barrels per day



OECD Demand Growth

Evolution of 2023 Forecasts

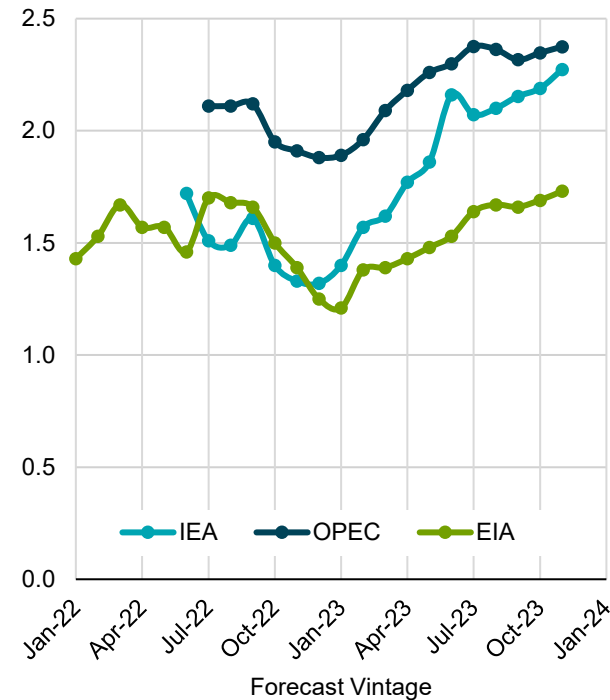
y/y growth in million barrels per day



Non-OECD Demand Growth

Evolution of 2023 Forecasts

y/y growth in million barrels per day

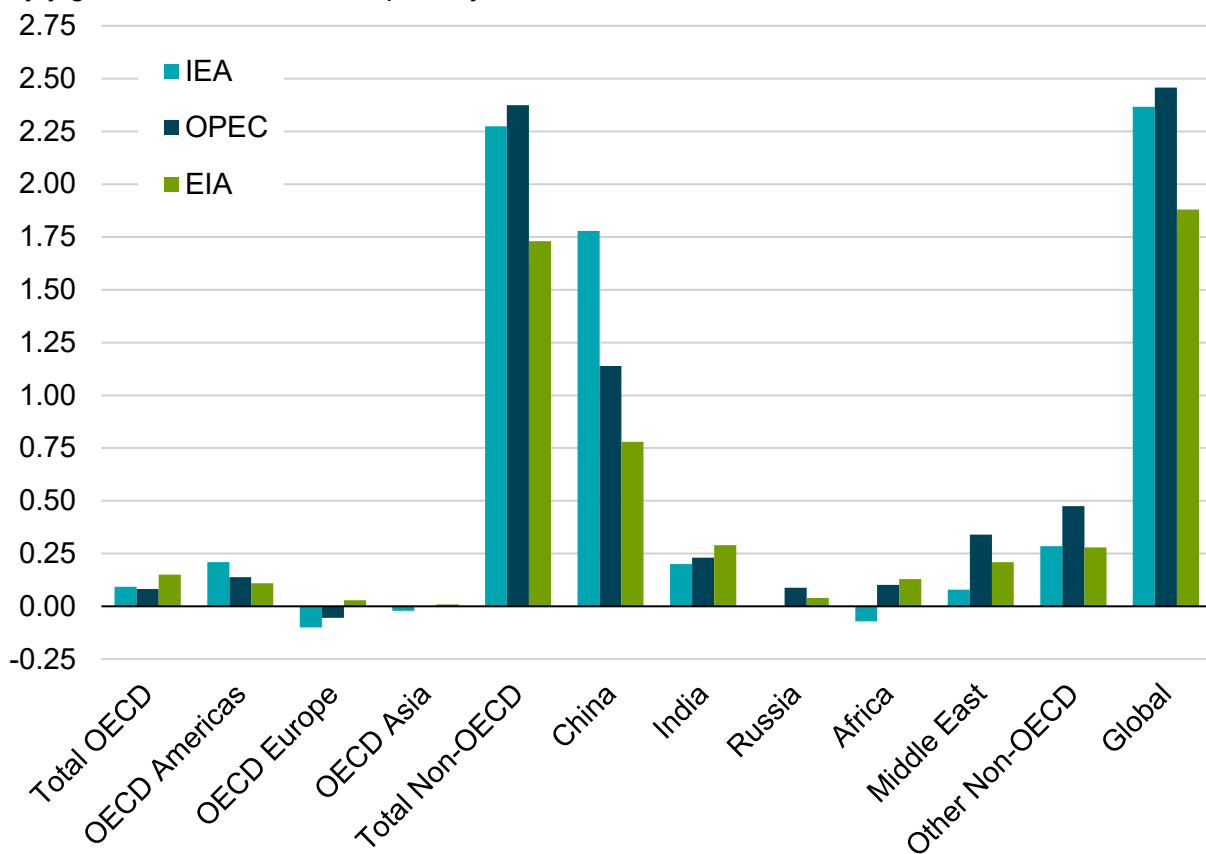


Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

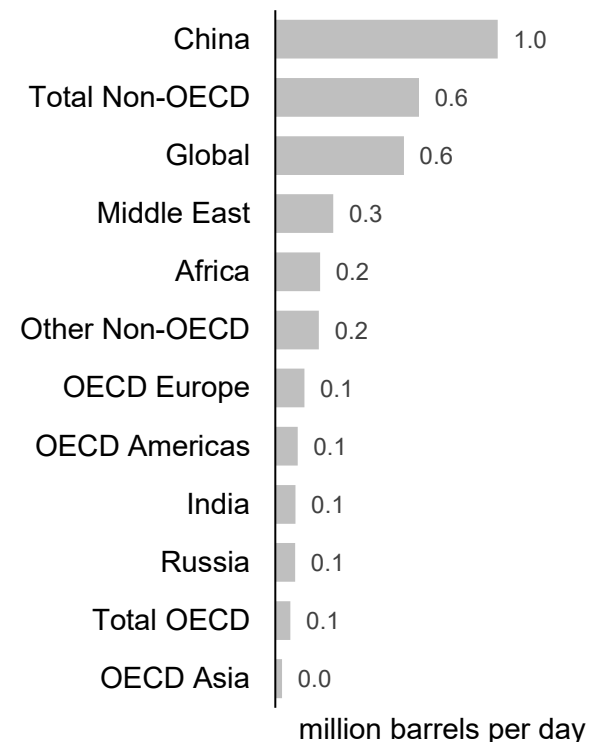
China drives the largest demand growth forecast divergence with IEA seeing 1 mb/d higher growth vs. EIA

2023 Demand Growth Forecasts by Region

y/y growth in million barrels per day



Range in 2023 Demand Growth Forecasts



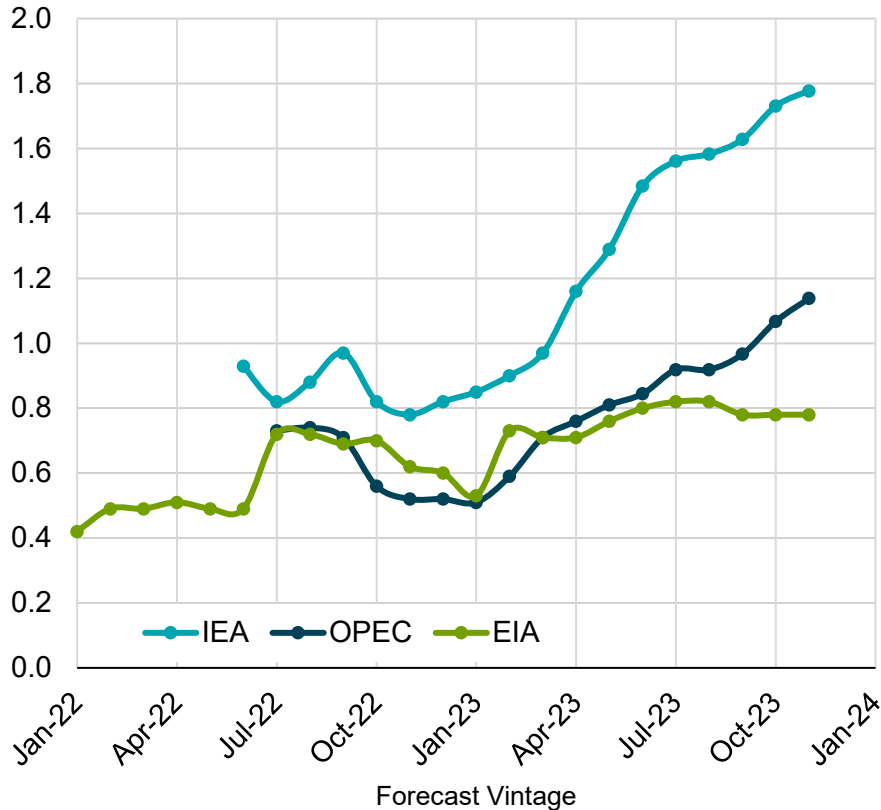
Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

Both IEA and OPEC revised up their 3Q23 Chinese demand forecasts for a 2nd consecutive month, but IEA continues to see the most robust growth

Chinese Annual Average Demand Growth

Evolution of 2023 Forecasts

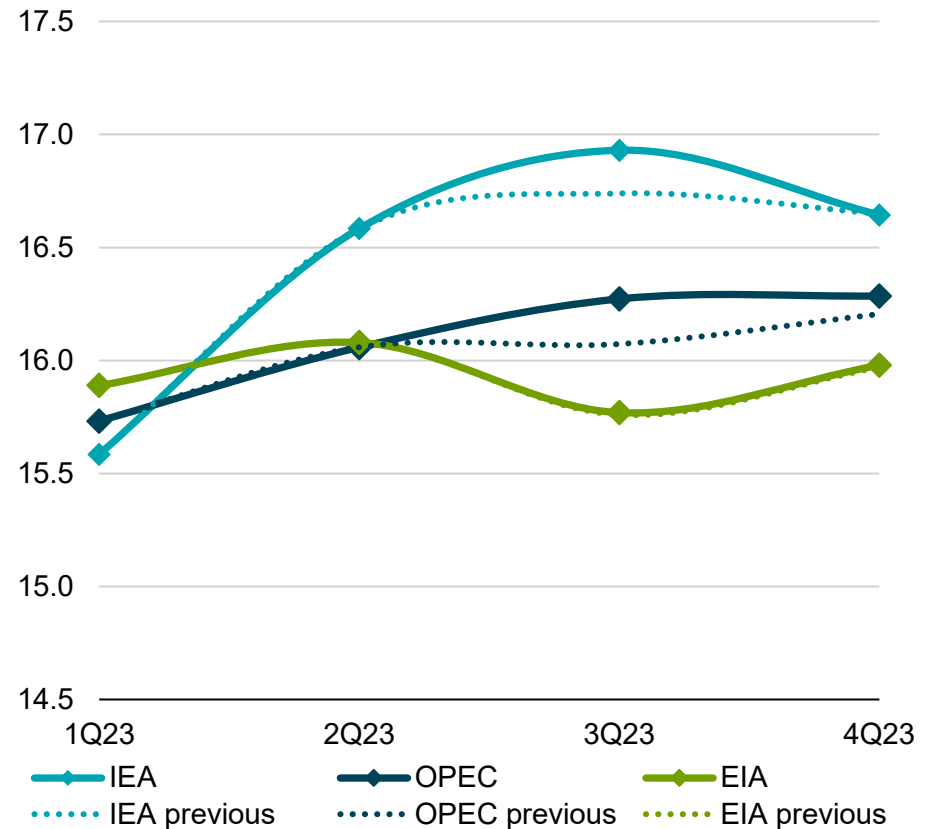
y/y growth in million barrels per day



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

Chinese Demand

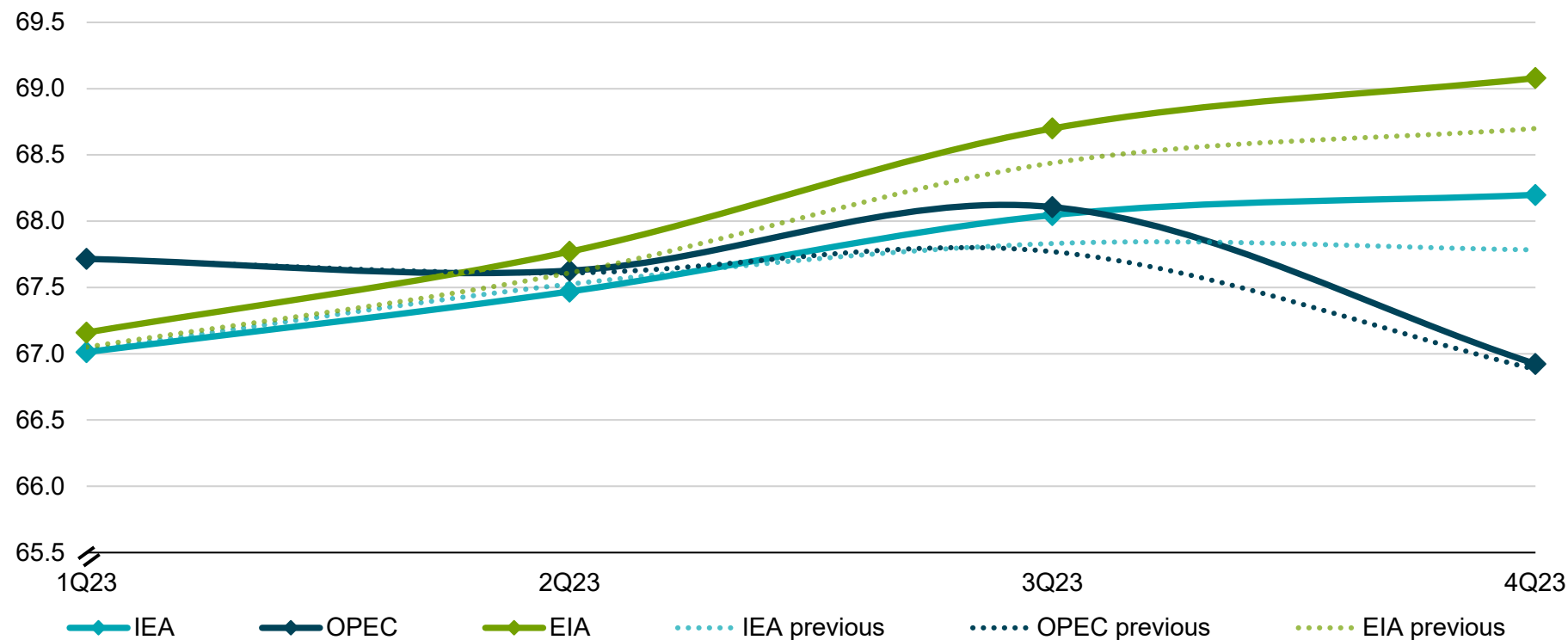
million barrels per day



OPEC's 4Q23 non-OPEC supply forecast is 2 mb/d lower than EIA's due to a weaker Russian and US forecast

Non-OPEC Supply

supply in million barrels per day



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

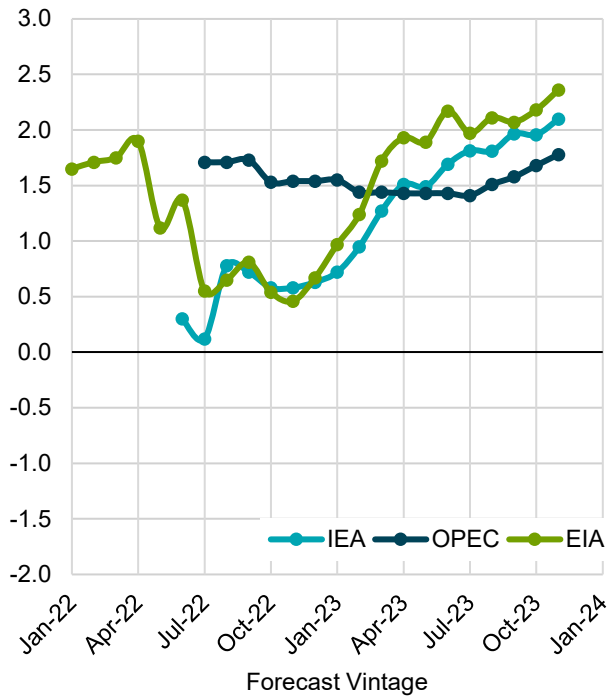
Evolution of 2023 Non-OPEC Supply Growth Forecasts

- All three agencies revised up 2023 non-OPEC supply growth on higher US and Brazil forecasts.
- OPEC revised up its Russian supply forecast for a fourth consecutive month, but it continues to see a 0.2-0.3 mb/d steeper decline for the year vs. IEA and EIA.

Non-OPEC Supply Growth

Evolution of 2023 Forecasts

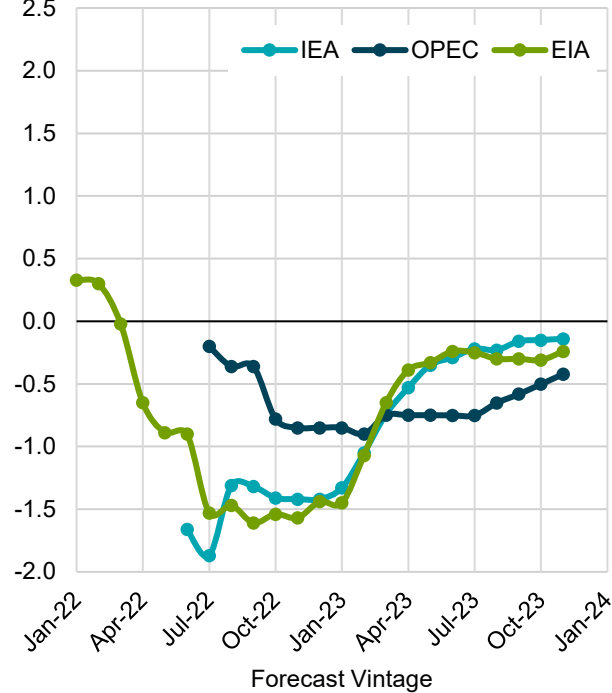
y/y growth in million barrels per day



Russia Supply Growth

Evolution of 2023 Forecasts

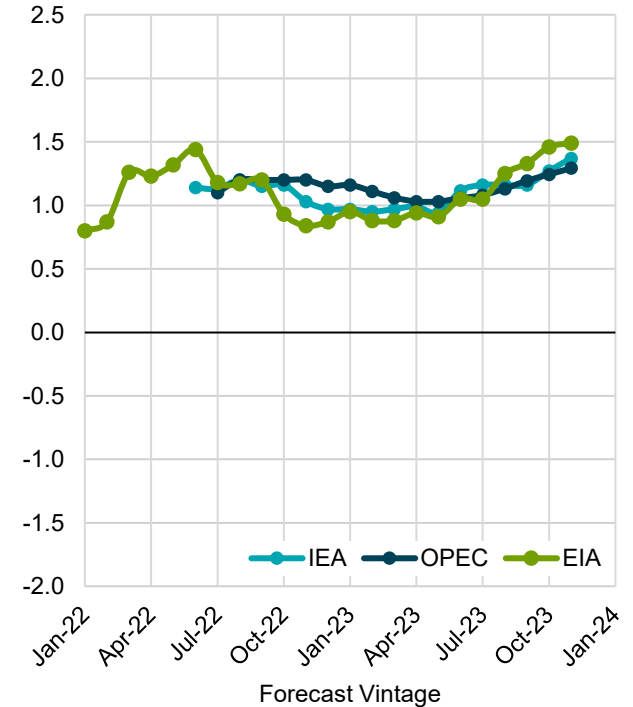
y/y growth in million barrels per day



US Supply Growth

Evolution of 2023 Forecasts

y/y growth in million barrels per day

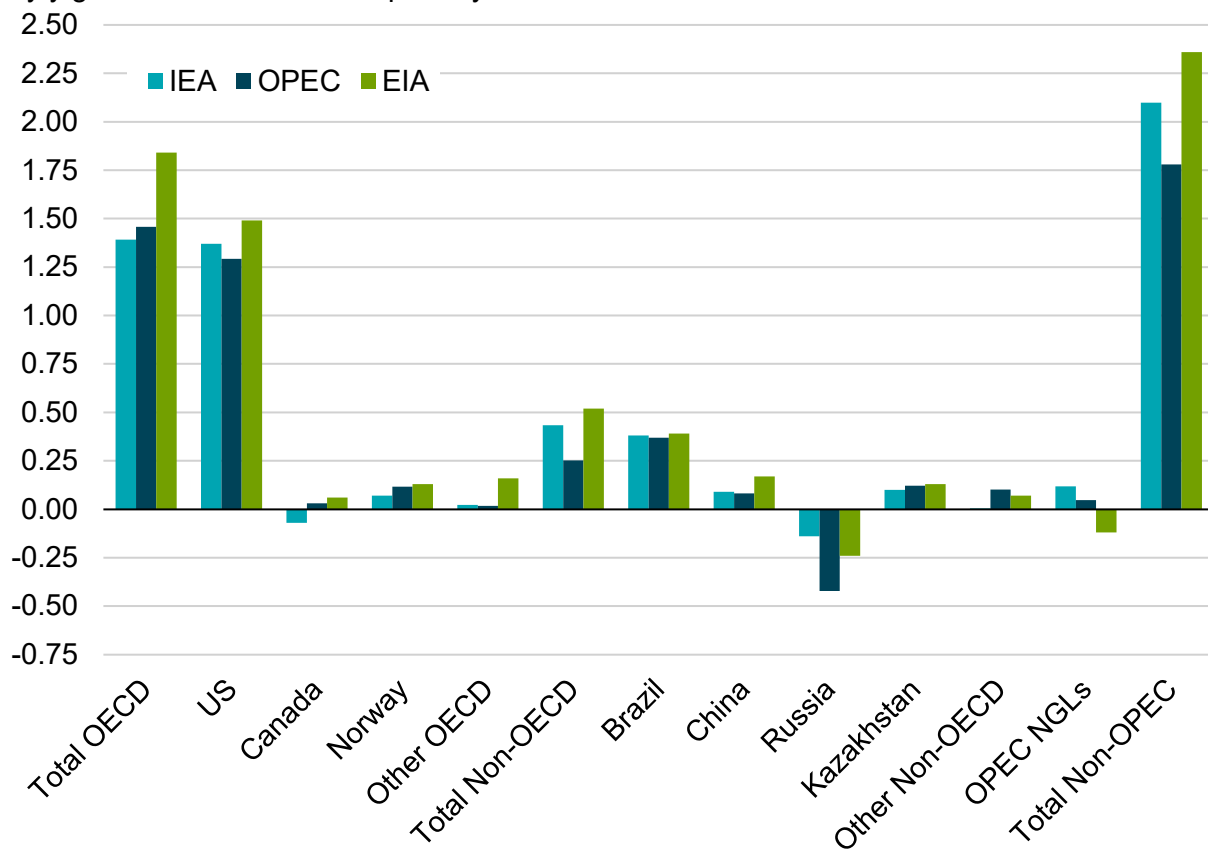


Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

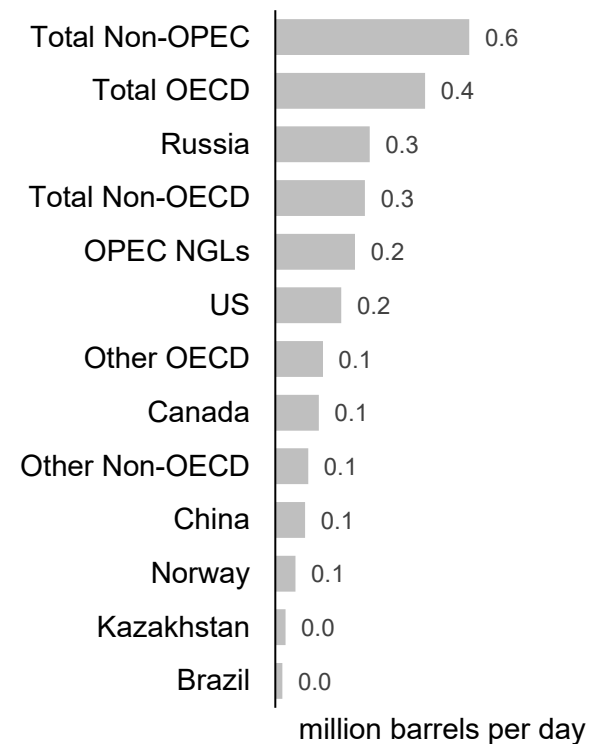
Russia drives the largest supply growth forecast divergence with OPEC seeing the steepest decline

2023 Supply Growth Forecasts by Region

y/y growth in million barrels per day



Range in 2023 Supply Growth Forecasts



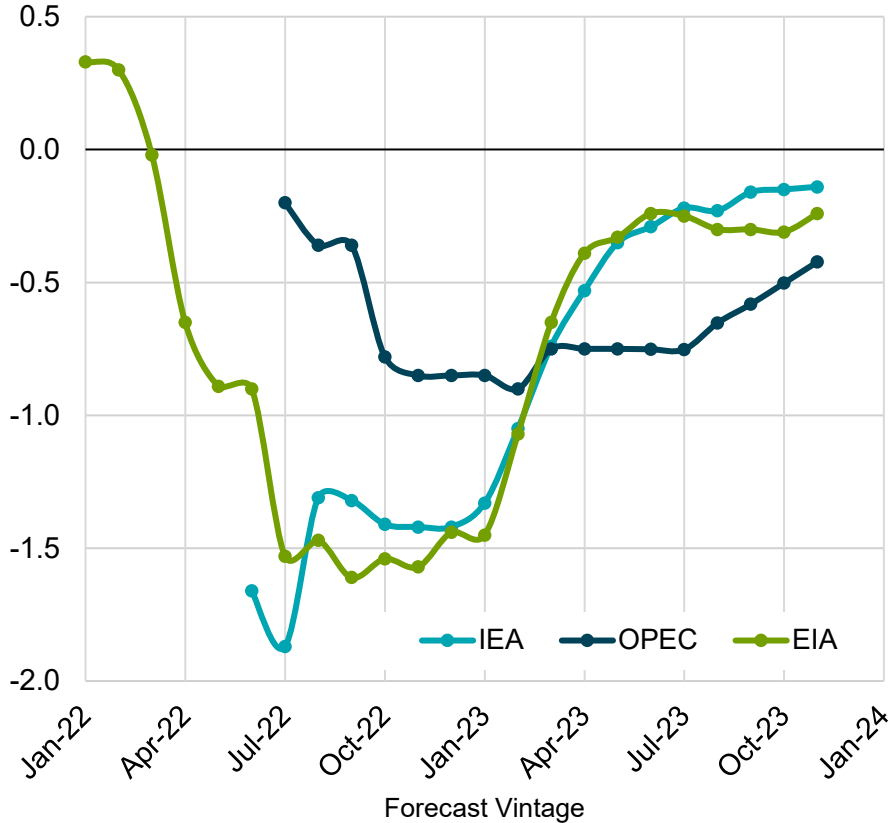
Source: IEF, IEA OMR, OPEC MOMR, EIA STEO

OPEC sees Russian production falling to ~9.6 mb/d in 4Q23 while IEA and EIA see production at 10.6-10.8 mb/d

Russia Supply Growth

Evolution of 2023 Forecasts

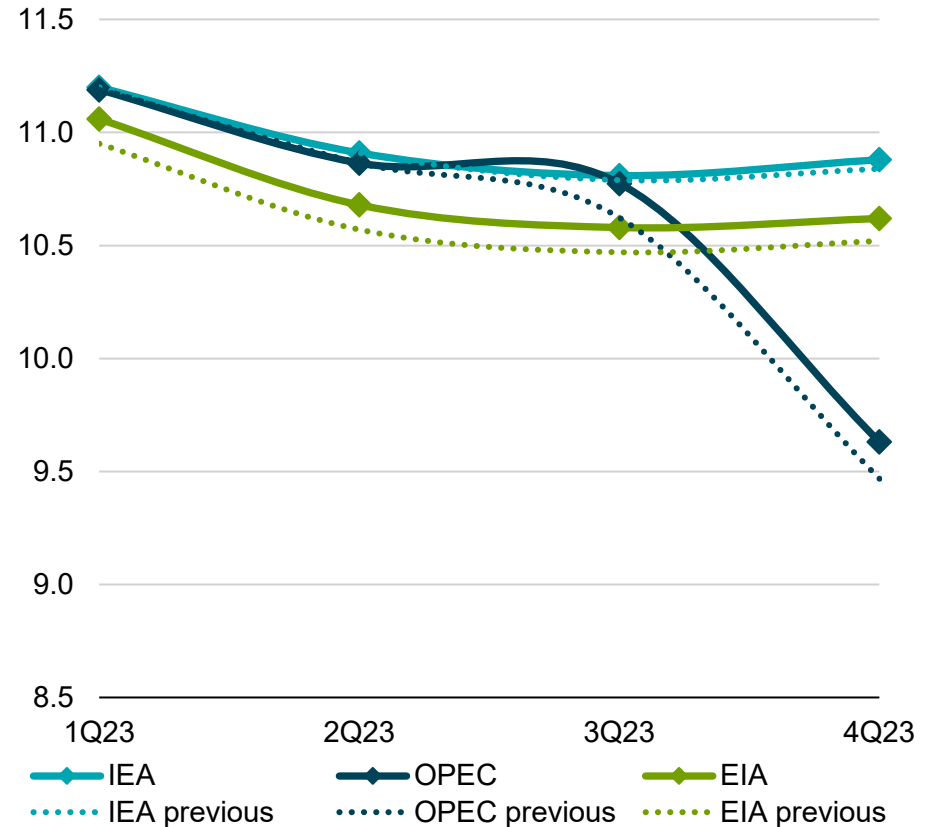
y/y growth in million barrels per day



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

Russia Production

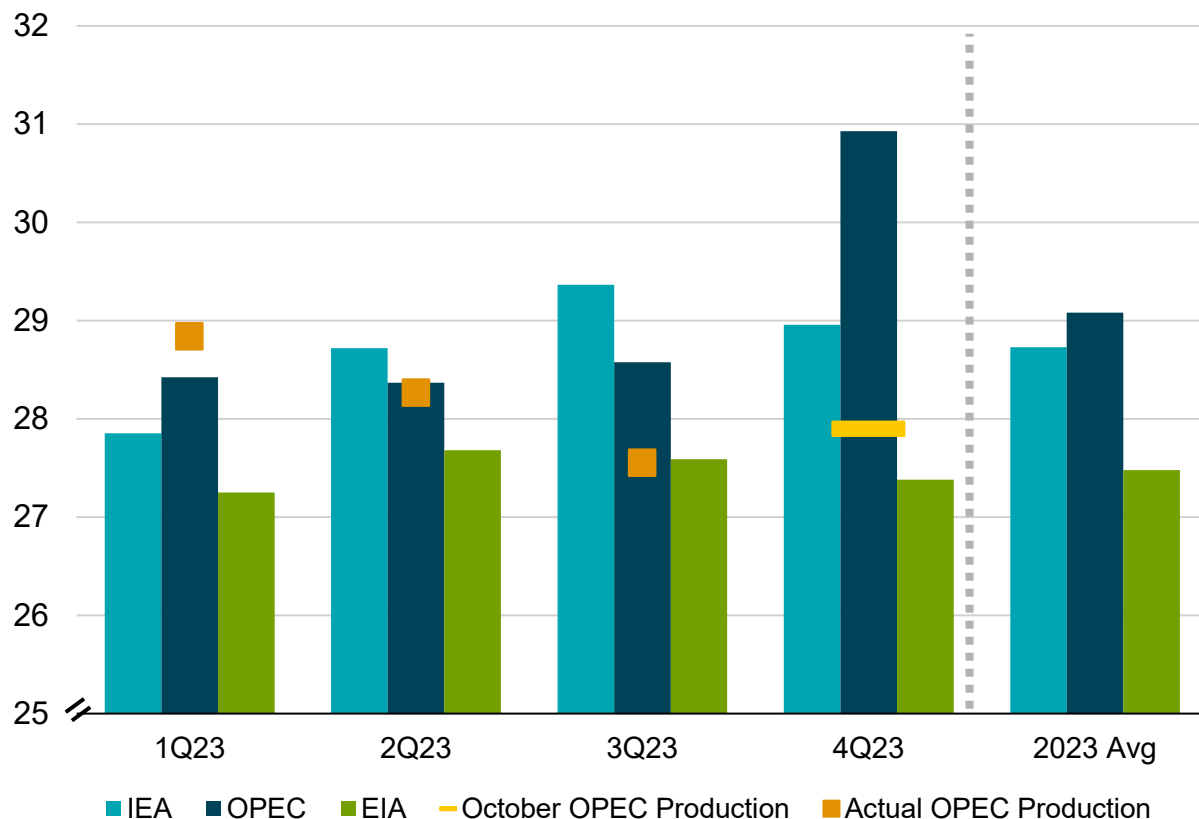
million barrels per day



OPEC and IEA balances imply a 1.0-3.0 mb/d global supply shortfall in 4Q23 if OPEC production were to remain at October 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

- The largest revisions this month include:
 - EIA's upward revisions to supply (+0.3 mb/d) in the US, Brazil, and Russia and demand (+0.2 mb/d) in the US and Japan.
 - IEA's upward revisions to demand (+0.2 mb/d) in the US and China.
- IEA, OPEC, and EIA continue to see similar non-OPEC supply growth next year of 1.2-1.4 mb/d.
- Demand forecasts continue to diverge sharply. IEA continues to see only 0.9 mb/d of global demand growth while OPEC continues to see 2.2 mb/d.

		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	101.5	102.4	103.5	104.1	102.9	0.9	0.2	0.2	0.1	0.2	0.2	0.0
	OPEC	103.6	103.6	104.8	105.4	104.4	2.2	0.0	0.1	-0.1	0.2	0.0	0.0
	EIA	102.0	102.1	102.8	102.9	102.4	1.4	0.2	0.2	0.2	0.2	0.2	0.1
OECD Demand	IEA	45.2	45.3	45.6	45.9	45.5	-0.3	0.1	0.1	-0.1	0.2	0.1	0.0
	OPEC	45.7	46.0	46.5	46.2	46.1	0.3	0.0	0.1	-0.1	0.1	0.0	0.0
	EIA	45.7	45.4	46.1	46.2	45.9	0.1	0.2	0.2	0.2	0.2	0.2	0.1
Non-OECD Demand	IEA	56.3	57.1	57.9	58.2	57.4	1.3	0.1	0.1	0.2	0.0	0.1	0.0
	OPEC	57.9	57.7	58.2	59.2	58.3	2.0	0.0	0.0	0.0	0.1	0.0	0.0
	EIA	56.2	56.7	56.7	56.7	56.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Non-OPEC Supply* and OPEC NGLs	IEA	73.8	74.6	74.9	74.7	74.5	1.3	0.2	0.1	0.1	0.0	0.1	-0.1
	OPEC	74.0	74.0	74.6	75.3	74.5	1.4	0.1	0.1	0.1	0.1	0.1	0.0
	EIA	74.2	74.4	75.0	75.4	74.7	1.2	0.3	0.3	0.4	0.3	0.3	0.1
OPEC Crude**	IEA												
	OPEC												
	EIA	27.7	27.9	28.0	27.8	27.8	-0.2	0.0	0.0	0.1	0.1	0.0	0.0
Call on OPEC	IEA	27.7	27.8	28.6	29.4	28.4	-0.3	0.0	0.1	0.0	0.1	0.1	0.1
	OPEC	29.6	29.6	30.2	30.1	29.9	0.8	-0.2	0.0	-0.2	0.1	0.0	0.0
	EIA	27.8	27.7	27.9	27.5	27.7	0.2	-0.1	-0.1	-0.2	-0.2	-0.1	0.0
Global Stock Change and Miscellaneous to Balance**	IEA												
	OPEC												
	EIA	-0.1	0.2	0.2	0.3	0.1		0.1	0.1	0.2	0.2	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

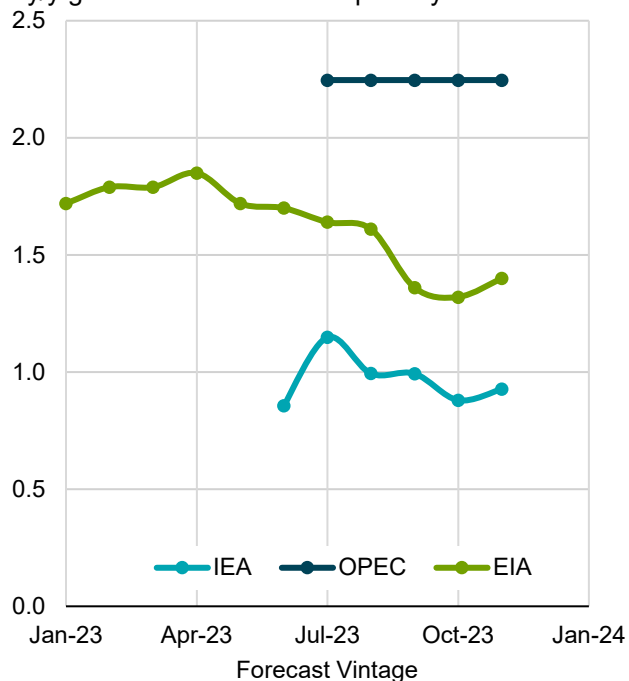
Evolution of 2024 Annual Demand Growth Forecasts

- OPEC’s 2024 global demand growth forecast is more than double IEA’s due to a higher OECD, Middle East, and Russian forecasts.
- IEA sees OECD demand declining by 0.3 mb/d next year, while OPEC sees 0.3 mb/d growth.

Global Demand Growth

Evolution of 2024 Forecasts

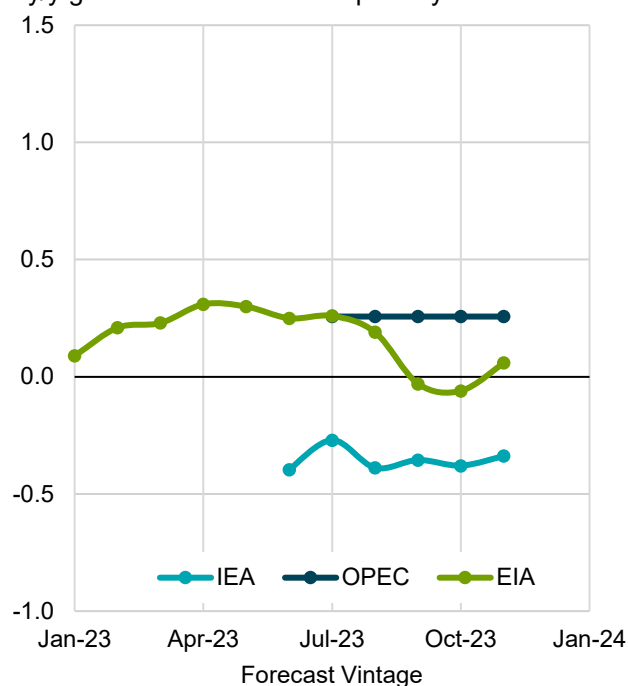
y/y growth in million barrels per day



OECD Demand Growth

Evolution of 2024 Forecasts

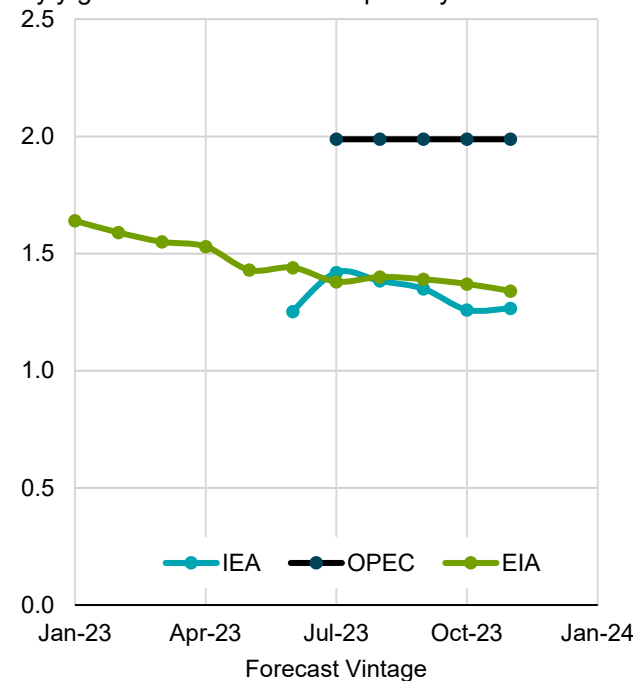
y/y growth in million barrels per day



Non-OECD Demand Growth

Evolution of 2024 Forecasts

y/y growth in million barrels per day

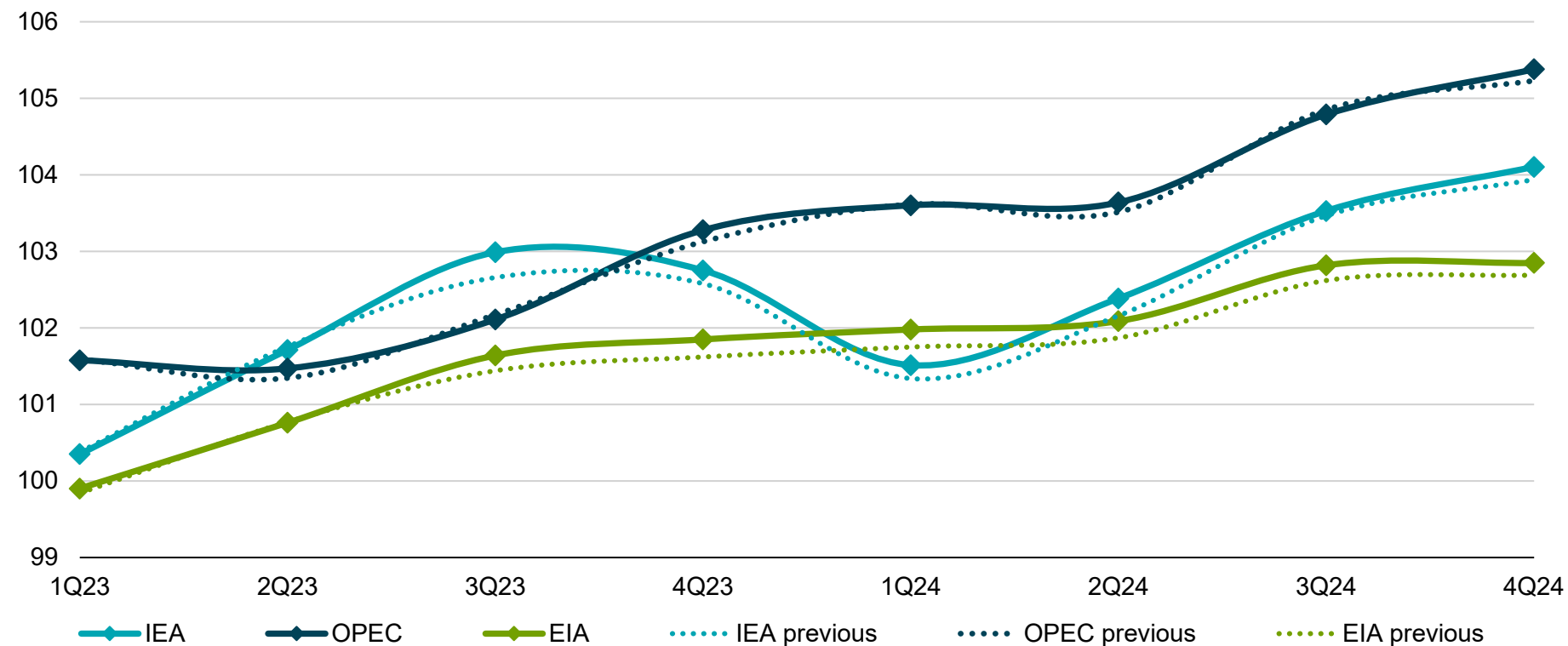


Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

OPEC continues to see global demand climbing from 4Q23 to 1Q24 to nearly 2 mb/d above both IEA and EIA forecasts

2023-24 Global Demand

demand in million barrels per day

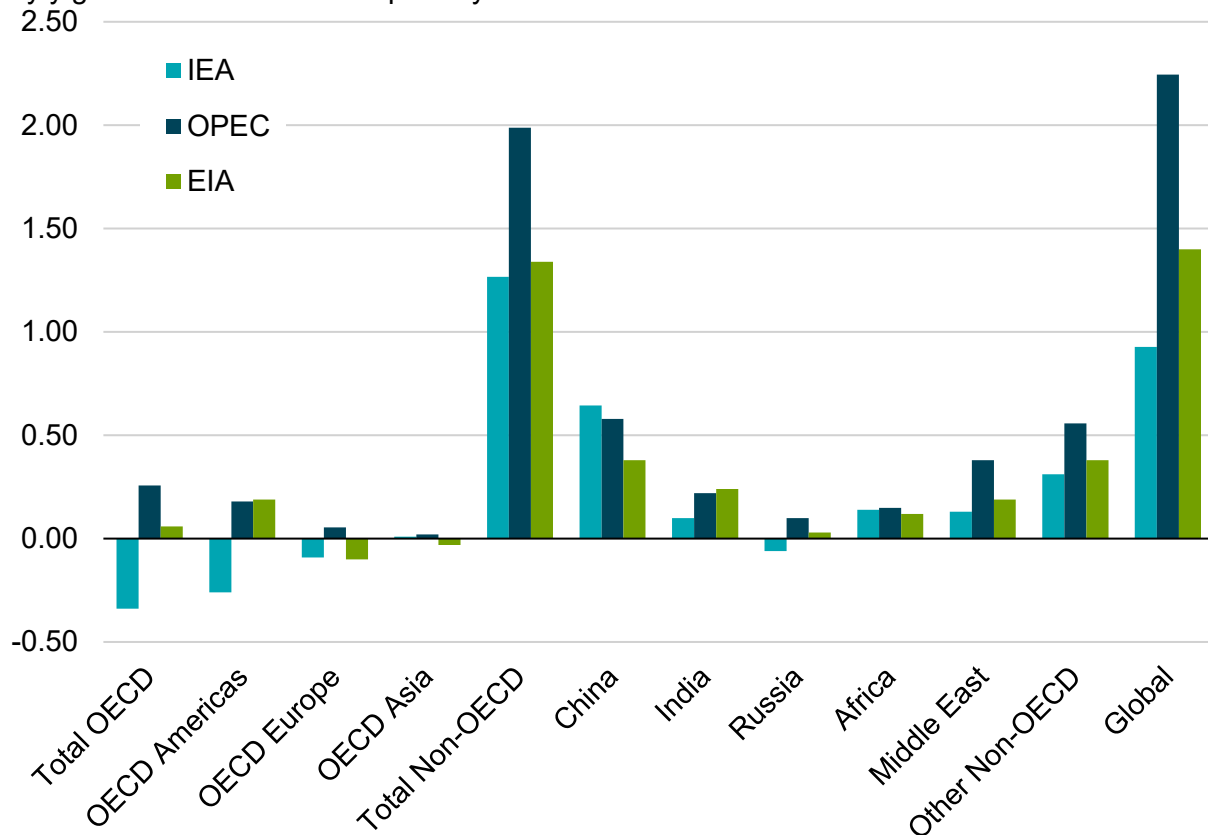


Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

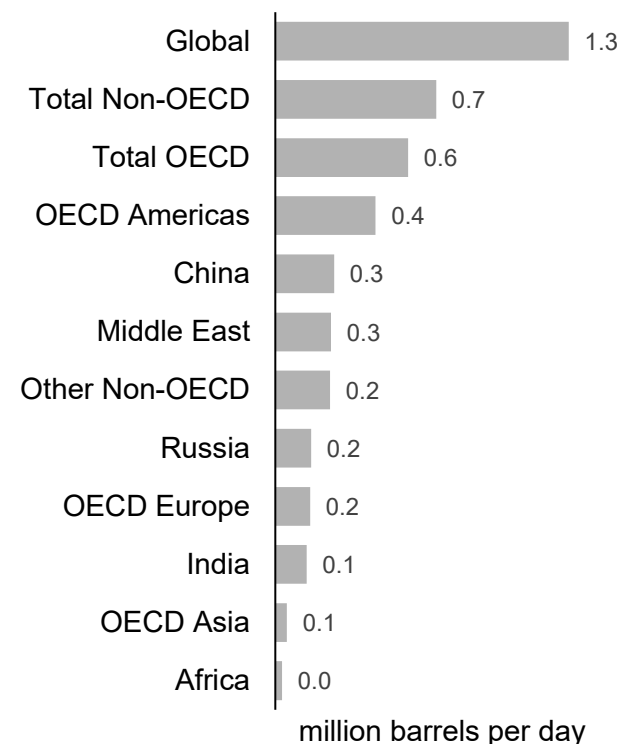
OPEC sees more robust demand growth than IEA in the OECD, India, Russia, and the Middle East

2024 Demand Growth Forecasts by Region

y/y growth in million barrels per day



Range in 2024 Demand Growth Forecasts

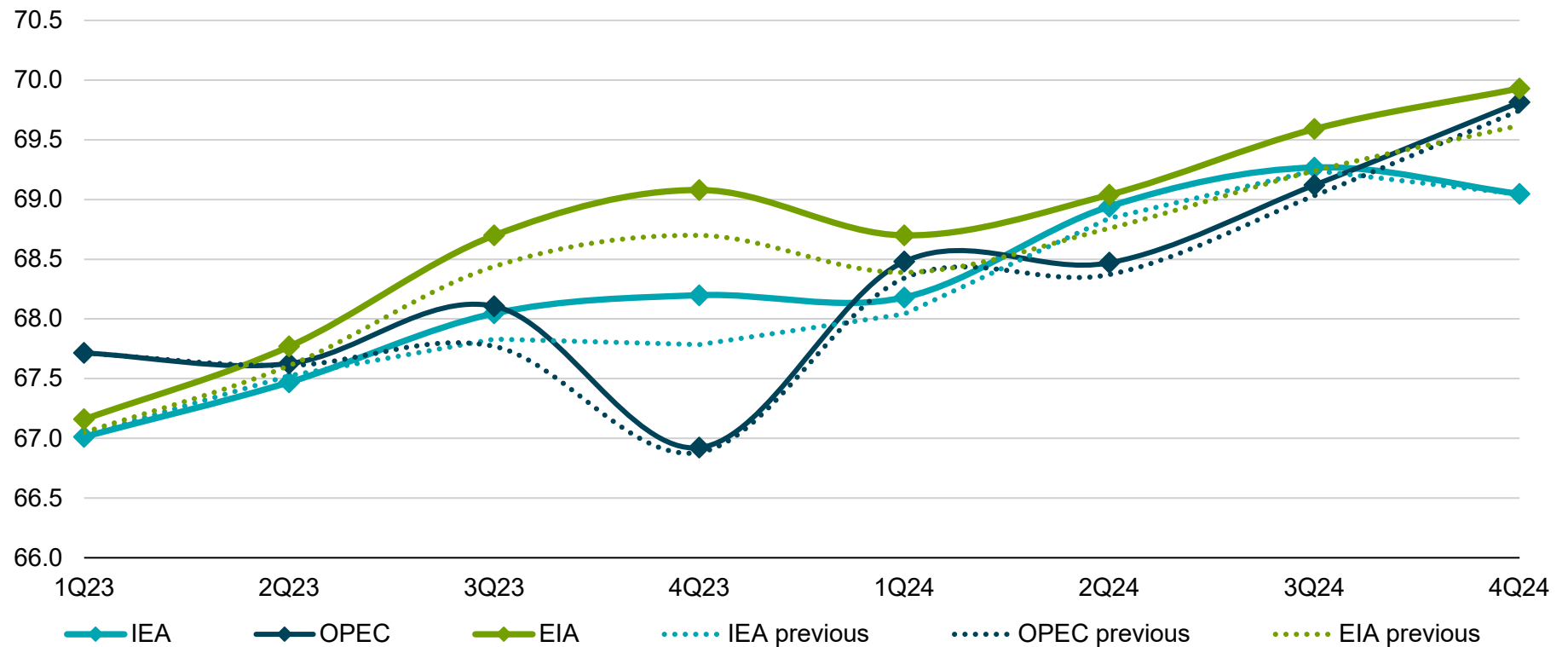


Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

Non-OPEC supply forecasts for 2024 are significantly more aligned than 4Q23 projections

2023-24 Non-OPEC Supply

supply in million barrels per day



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

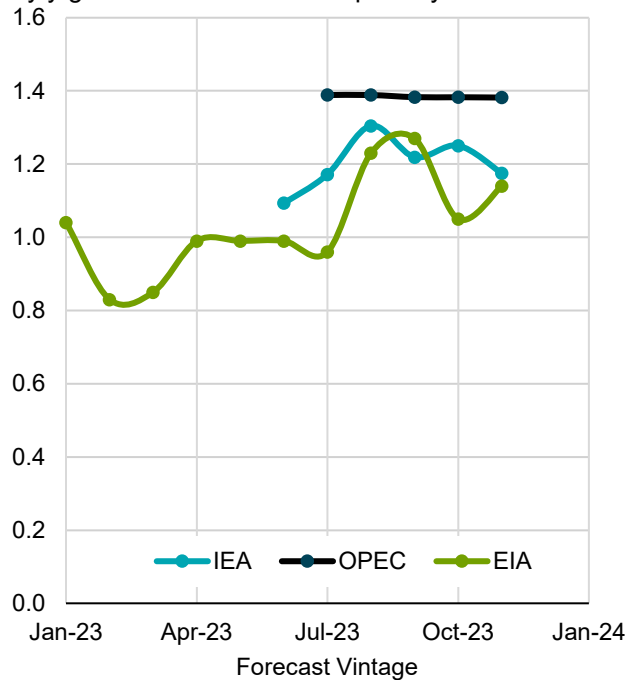
Evolution of 2024 Annual Non-OPEC Supply Growth Forecasts

- OPEC sees the most robust growth due primarily to a higher US and Russia 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

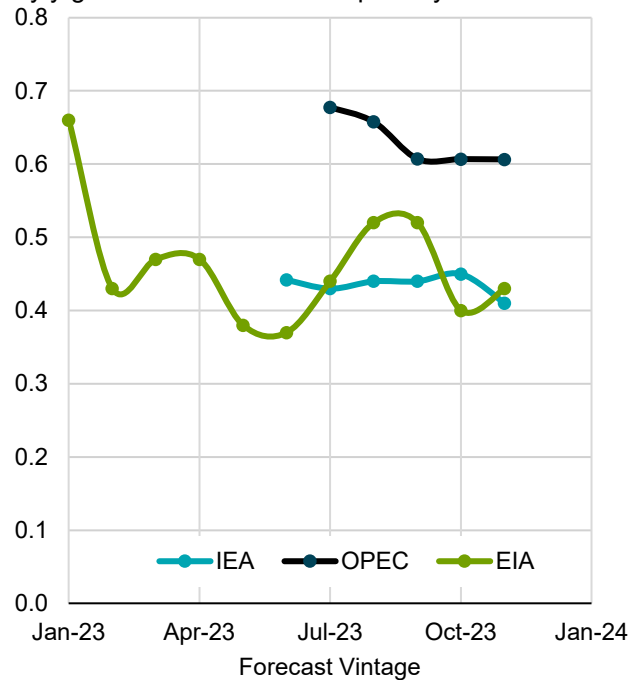
y/y growth in million barrels per day



US Supply Growth

Evolution of 2024 Forecasts

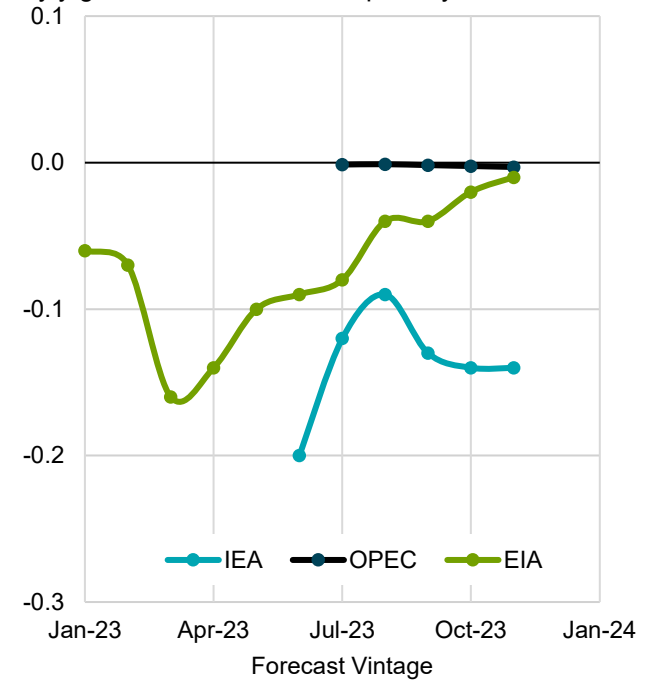
y/y growth in million barrels per day



Russia Supply Growth

Evolution of 2024 Forecasts

y/y growth in million barrels per day

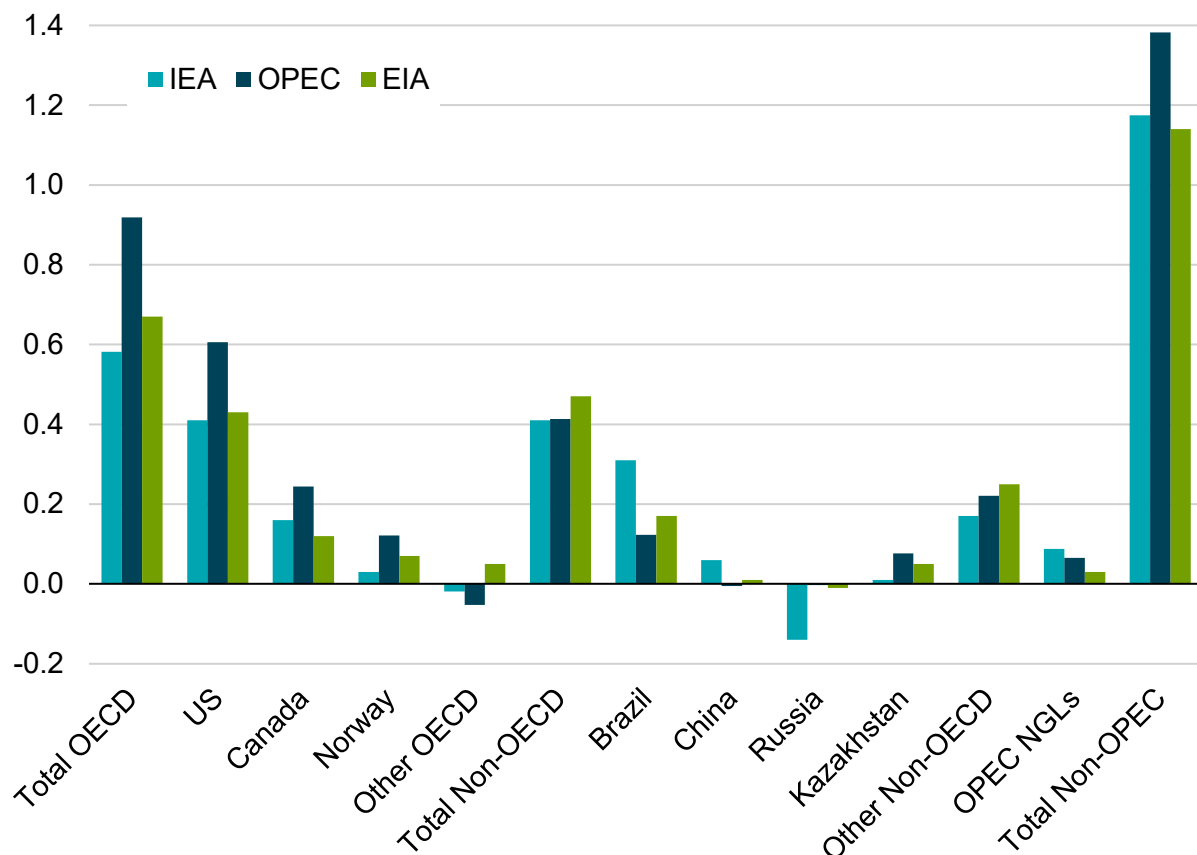


Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

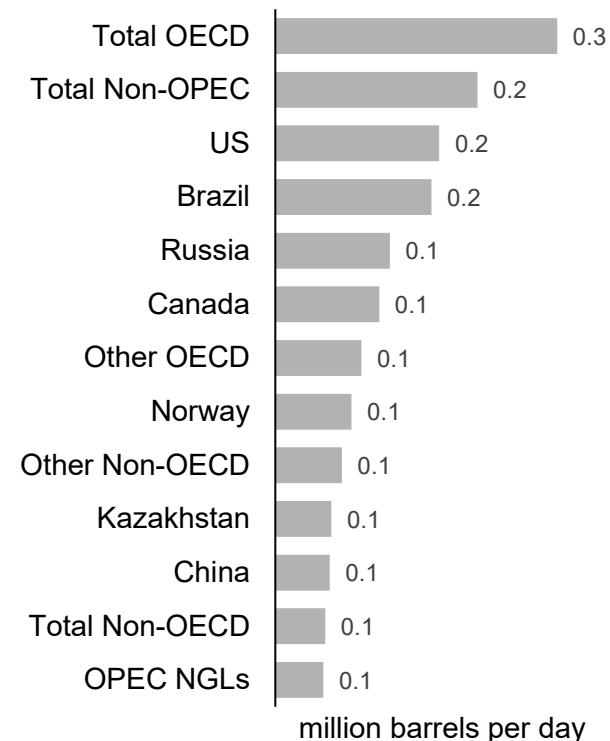
OPEC sees the strongest non-OPEC supply growth in 2024 due largely to a higher US, Canada, and Norway forecast

2024 Supply Growth Forecasts by Region

y/y growth in million barrels per day



Range in 2024 Supply Growth Forecasts

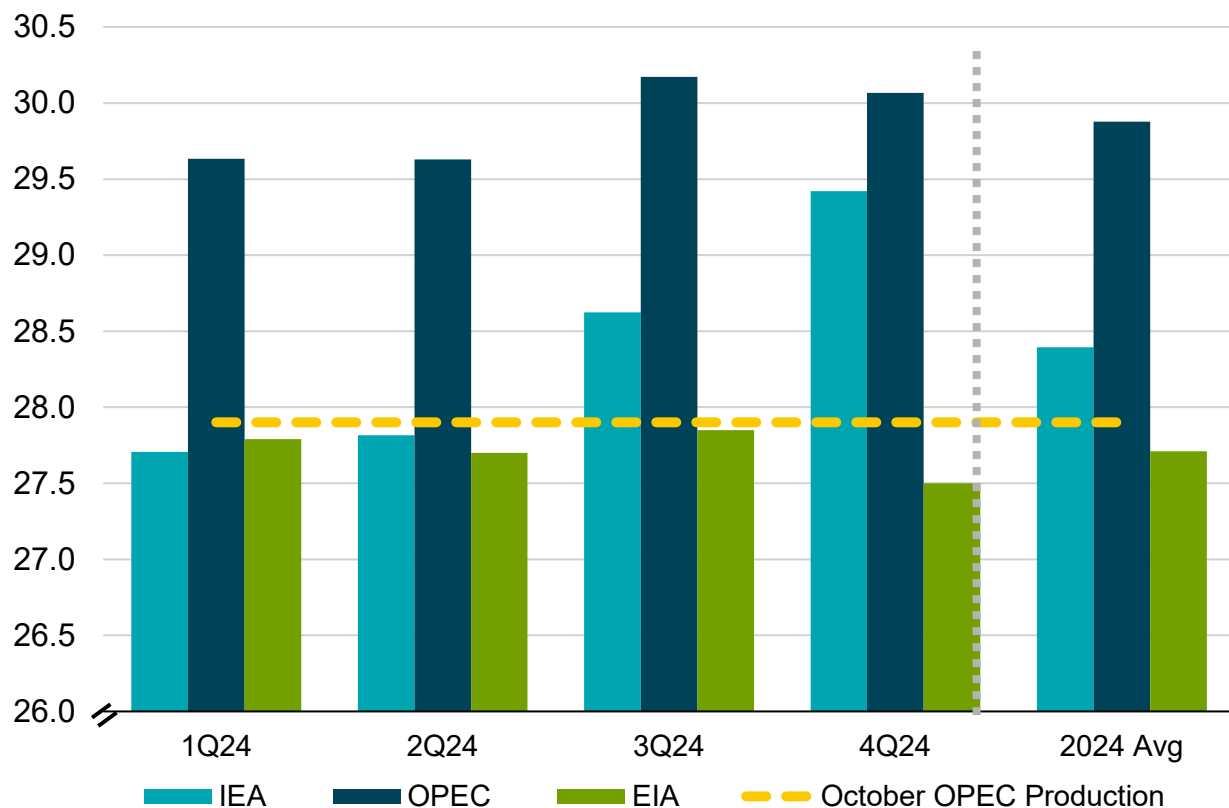


Source: IEF, IEA OMR, EIA STEO, OPEC MOMR

OPEC sees a much higher “call on OPEC” vs. IEA and EIA due to a more robust demand outlook

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.
- Notably, October’s OPEC production includes a 1.0 mb/d voluntary cut from Saudi Arabia which may be extended to rescinded in 2024 and >1 mb/d of voluntary adjustments announced in April 2023 that are scheduled to expire at the end of 2023.

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 program.
- 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
November	14 th (Tuesday)	13 th (Monday)	7 th (Tuesday)	16 th (Thursday)
December	14 th (Thursday)	13 th (Wednesday)	12 th (Tuesday)	18 th (Monday)
January	18 th (Thursday)	TBA	10 th (Wednesday)	22 nd (Monday)



The Global Home of **Energy Dialogue**
ief.org