Organization of the Petroleum Exporting Countries

OPEC Monthly Oil Market Report

13 December 2023

Feature article:
Review of 2023 and outlook for 2024

Organization of the Petroleum Exporting Countries

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Tuesday, 11 June

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Oil Market Highlights

Crude Oil Price Movements

In November, the OPEC Reference Basket (ORB) fell by $6.86, or 7.5%, m-o-m to average $84.92/b. Oil futures prices trended lower amid increased volatility, with the ICE Brent front-month contract dropping by $6.67, or 7.5%, m-o-m to $82.03/b, and the NYMEX WTI front-month contract dropping by $8.09, or 9.5%, to average $77.38/b. The DME Oman front-month contract dropped by $6.25, or 7.0%, m-o-m to settle at $83.06/b. The front-month ICE Brent/NYMEX WTI spread widened by $1.42 in November to average $4.65/b. The market structure weakened, with the front end of the ICE Brent and DME Oman futures forward curves flattening, while the nearest NYMEX WTI timespreads flipped into contango. Over the month, hedge funds and other money managers substantially reduced bullish positions, contributing to increased price volatility and exerting downward pressure on futures prices.

World Economy

The forecast for world economic growth is revised up slightly to 2.9% for 2023, but remains unchanged at 2.6% for 2024. US economic growth is revised up to 2.4% for 2023 and 1.0% for 2024. Eurozone economic growth remains unchanged at 0.2% for 2023 and 0.5% for 2024. Japan's economic growth is revised down to 1.7% for 2023 and 0.9% for 2024. China's forecast remains unchanged at 5.2% for 2023 and 4.8% for 2024. India's growth forecast is revised up to 6.5% for 2023, while growth for 2024 remains unchanged at 5.9%. Brazil's forecast also remains unchanged at 2.5% for 2023 and 1.2% for 2024. Russia's economic growth forecast is revised up to 2.2% for 2023 and 1.3% for 2024.

World Oil Demand

The world oil demand growth forecast for 2023 remains unchanged from last month's estimate at 2.5 mb/d. Downward revisions in the OECD Europe and Asia Pacific in 3Q23 and 4Q23 are offset by upward revisions in OECD Americas. Similarly, in the non-OECD, downward adjustments to the Middle East and Africa in 3Q23 and 4Q23 were offset by upward revisions in China, Other Asia, and Latin America. Oil demand in the OECD is expected to grow by around 0.1 mb/d in 2023 and by 2.4 mb/d in the non-OECD. For 2024, world oil demand is expected to grow by a healthy 2.2 mb/d, unchanged from the previous month's assessment. The OECD is expected to expand by about 0.3 mb/d, with OECD Americas contributing the largest increase. The non-OECD is expected to increase by around 2.0 mb/d, led by growth in China, India, the Middle East, and Other Asia.

World Oil Supply

The non-OPEC liquids supply growth forecast remains unchanged at 1.8 mb/d for 2023. The main drivers of liquids supply growth in 2023 include the US, Brazil, Kazakhstan, Norway, Guyana, Mexico and China. For 2024, non-OPEC liquids production is expected to expand by 1.4 mb/d, broadly unchanged from the previous month's assessment. The main drivers for liquids supply growth next year are expected to be the US, Canada, Guyana, Brazil, Norway and Kazakhstan. The largest declines are anticipated in Mexico and Malaysia. OPEC NGLs and non-conventional liquids are forecast to grow by around 50 tb/d to average 5.4 mb/d in 2023 and by another 65 tb/d in 2024 to average 5.5 mb/d. OPEC-13 crude oil production in November dropped by 57 tb/d m-o-m to average 27.84 mb/d, according to available secondary sources.

Product Markets and Refining Operations

In November, refinery margins decreased in the US Gulf Coast (USGC) as losses were seen across the barrel, except gasoil. US gasoline crack spreads continued to drop seasonality. This, coupled with rising refinery product output following the conclusion of heavy maintenance turnarounds, weighed on USGC refining economics. In Rotterdam and Singapore, margins remained under pressure, although slight improvements were seen m-o-m as refining margins were supported by lower feedstock prices and a positive performance at the top section of the barrel, backed by planned stock builds ahead of the year-end holiday season. Suppressed product exports from China also helped to sustain margins, particularly in Southeast Asia. Global refinery intakes witnessed a recovery in November, with a 1.7 mb/d rise to average 80.2 mb/d. Y-o-y, global intakes were 817 tb/d higher. In the coming months, with refineries back online, intakes are expected to be supported, although weakening margins may limit the upside.

Tanker Market

Dirty freight rates recovered further in November, on tightening availability, although they remained below the volatile levels seen in the same month last year. VLCC spot freight rates saw healthy gains, with rates on the Middle East-to-East route rising by 30% m-o-m. Suezmax rates saw a more measured increase, building on a spike in rates the month before. Suezmax rates on the USGC-to-Europe route increased by 9% m-o-m. Aframax rates rose, although gains were more muted East of Suez. Around the Mediterranean, Aframax rates rose by around 17% m-o-m. Clean rates saw mixed movement, with East of Suez rates falling by 24% m-o-m, while West of Suez rates rose 28%.

Crude and Refined Products Trade

Preliminary data shows US crude imports broadly stable at an average of 6.3 mb/d in November, while crude exports increased to 4.8 mb/d, the highest since March 2022. Meanwhile, China's crude imports recovered some of the previous month's decline, averaging 11.6 mb/d in October, a gain of almost 4% m-o-m. China's product exports slipped a further 8% m-o-m, with drops driven by gasoline, naphtha, and other products category. Following seven months of declines dating back to February 2023, India's crude imports increased, averaging 4.4 mb/d in October. India's product imports were the second-highest on record, driven by gains in LPG, naphtha and gasoline. Japan's crude imports declined by about 12% in October to average 2.3 mb/d. Product exports, including LPG, dropped from a seven-month high in September to average 494 tb/d. Declines were seen across most major products, except gasoline. Preliminary estimates show OECD Europe crude imports increasing slightly in November, while product imports are also seen gaining momentum.

Commercial Stock Movements

Preliminary data for October 2023 shows total OECD commercial oil stocks down by 12.8 mb, m-o-m. At 2,818 mb, they were 128 mb below the 2015–2019 average. Within the components, crude stocks rose by 11 mb, m-o-m, while products stocks fell by 23.8 mb, m-o-m. OECD commercial crude stocks stood at 1,342 mb in October, which is 112 mb lower than the 2015–2019 average. Total product stocks stood at 1,476 mb, which is 16 mb below the 2015–2019 average. In terms of days of forward cover, OECD commercial stocks in October remained unchanged, m-o-m, to stand at 61.7 days. This is 0.7 days less than the 2015–2019 average.

Balance of Supply and Demand

Demand for OPEC crude in 2023 remains unchanged from the previous month's assessment to stand at 29.1 mb/d. This is around 0.6 mb/d higher than in 2022. Demand for OPEC crude in 2024 also remains unchanged from the previous month's assessment to stand at 29.9 mb/d, which is 0.8 mb/d higher than the estimated level in 2023.

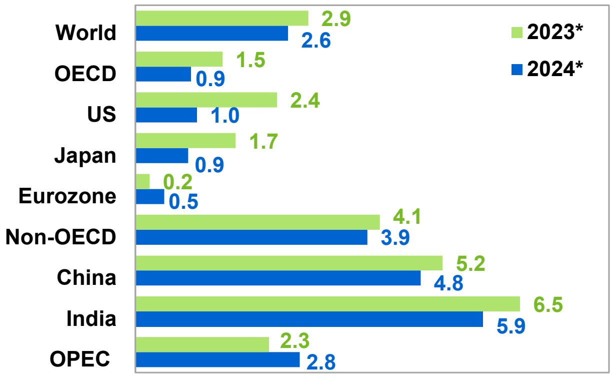
Feature Article

Review of 2023 and outlook for 2024

Economic growth seen in the first three quarters this year in most key economies had been better than expected. With this, the global economic forecast for 2023 is expected at 2.9%. As this robust economic growth is expected to extend into 2024, the global economic growth is forecasted at 2.6% for the year 2024.

In OECD economies, the robust growth observed in the US during 1H23 and 3Q23 is expected to moderate slightly, with a steady trajectory anticipated in 4Q23 and throughout 2024. The Eurozone that witnessed lower-than-anticipated growth up to 3Q23 is expected to see a slight pickup in 4Q23 and in 2024. Japan's economic growth exceeded its potential in 1H23, with a projected normalization in 2H23 and throughout 2024. In the non-OECD group, India, Brazil and Russia exhibited robust economic growth surpassing expectations up to 3Q23, with this trend expected to persist in 4Q23 and throughout 2024. In China, prudent government measures supported the country in achieving its 2023 growth target, with a marginal slowdown expected in 2024. Global economic challenges in 2024 remain with some upside potential, including an improved global macro environment driven by accommodative monetary policies and a more favourable geopolitical landscape.

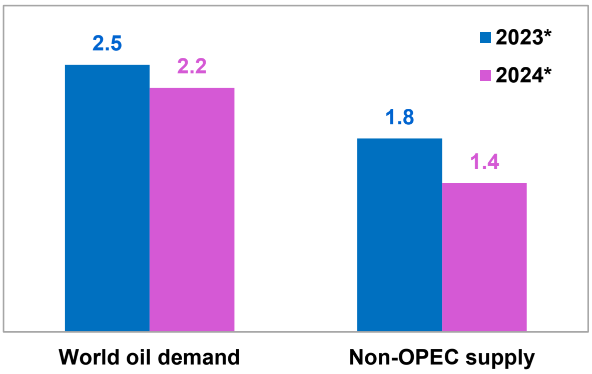
Graph 1: 2023–2024 real GDP growth in key countries and regions (%)



*Note: * 2023 and 2024 = Forecast. Source: OPEC.*

Expectations for economic growth in 2023 and 2024 are expected to play a defining role in shaping global oil demand. The forecast for y-o-y global oil demand growth in 2023 is 2.5 mb/d, primarily driven by the non-OECD at a robust 2.4 mb/d, y-o-y, expansion. China's economic rebound is a major driver, following the relaxation of COVID restrictions, contributing to a leading, y-o-y, growth of 1.2 mb/d. Within the OECD region, OECD Americas is expected to expand by 0.1 mb/d, y-o-y, driven by steady jet fuel recovery, coupled with robust gasoline requirements. Conversely, OECD Europe and Asia Pacific demand remains weak. Looking ahead to 2024, global oil demand is forecast to rise by a healthy 2.2 mb/d, y-o-y. OECD oil demand is expected to increase by 0.3 mb/d, predominantly in OECD Americas, with other regions also showing some growth. In the non-OECD, a 2.0 mb/d, y-o-y, increase is projected, with China and the Middle East leading the way, supported by Other Asia and India. This forecast centres on sustained economic and petrochemical activity across major consumer nations, which fosters demand for transportation fuels and distillates in 2024.

Graph 2: World oil demand and non-OPEC supply growth in 2023–2024 (mb/d)



*Note: * 2023 and 2024 = Forecast. Source: OPEC.*

On the supply side, non-OPEC supply growth is forecasted at 1.8 mb/d in 2023. Notably, the US is expected to account for around 70% of this expansion, with a, y-o-y, liquids production increase of 1.3 mb/d. Other key contributors to this growth include Brazil, Kazakhstan, Norway, Guyana, Mexico and China. As for 2024, non-OPEC supply is forecast to expand, y-o-y, by 1.4 mb/d. Growth drivers include US tight oil output, offshore start-ups in Latin America and the North Sea, and the expansion of oil sands projects in Canada. The US is projected again to lead the growth, comprising about 44% of the total, followed by Canada, Guyana, Brazil, Norway and Kazakhstan. Non-OPEC upstream sector investment is estimated at around $487 billion in 2023, up 11%, y-o-y, but this is forecast to drop slightly to around $482 billion in 2024.

As 2023 draws to an end, the OPEC Secretariat remains cautiously optimistic about the fundamental factors affecting oil market dynamics in 2024. In response to the broad spectrum of uncertainties that continues to surround the global oil market, many countries participating in DoC announced in November 2023 additional voluntary adjustments in 1Q24 to help maintain stability and balance in global oil markets. Indeed, countries participating in DoC will continue on these commitments to achieve and sustain a stable oil market and provide long-term guidance for the market.

Table of Contents

Crude Oil Price Movements

The ORB value declined in November, dropping by $6.86/b, or 7.5%, m-o-m to stand at $84.92/b, as all ORB component values dropped alongside their respective crude oil benchmarks, and lower crude differentials and official selling prices in almost all regions. Year-to-date, the ORB averaged $83.28/b, representing a decline of $18.61, or 18.3%, compared with $101.89/b in 2022.

Crude oil futures prices experienced a significant downturn, marked by heavy selloffs amidst a highly volatile futures market. Speculators played a major role in this trend, cutting their bullish positions sharply while increasing short positions. The market dynamic was fuelled by exaggerated concerns about oil demand growth, which negatively impacted market sentiment.

The ICE Brent front-month averaged $6.67, or 7.5%, m-o-m lower in November to stand at $82.03/b, and the NYMEX WTI fell by $8.09, or 9.5%, m-o-m to average $77.38/b. DME Oman crude oil futures prices decreased in November by $6.25, or 7.0%, m-o-m to settle at $83.06/b.

Hedge funds and other money managers turned more bearish about crude oil, closing a large volume of bullish futures and options positions, specifically in the NYMEX WTI market. At the same time, they raised bearish positions for nine consecutive weeks to the week of 28 November. This has fuelled volatility and accelerated the decline in oil futures prices. Between late October and the week of 28 November, hedge funds and other money managers sold an equivalent of 89 mb, after liquidating an equivalent of 204 mb in the previous month.

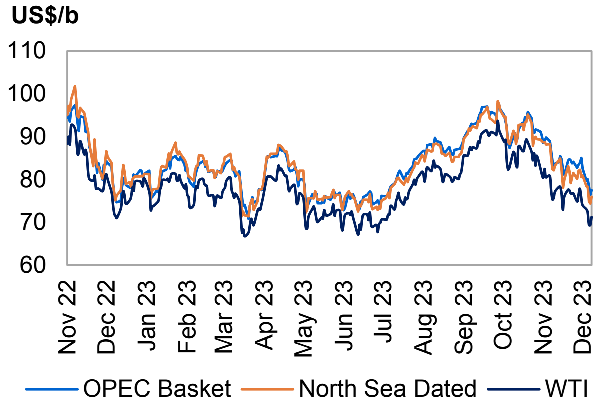
The market structure of all three crude benchmarks ─ ICE Brent, NYMEX WTI and DME Oman ─ weakened in November compared with the previous month, and the nearest time spreads of NYMEX WTI flipped into contango in the second half of the month for the first time since June. This development signals investors' perception of a short-term oversupply in the crude market. Selling pressure was more pronounced in the front-month contracts, which contributed to a weakening of the market structure.

Sweet-sour crude differentials showed mixed movement among regions. In Asia and the USGC, the spread narrowed on the high availability of light sweet crude, while in Europe, the sweet-sour crude spread widened as sour crude in Northwest Europe weakened more than lighter grades amid lacklustre demand.

Crude spot prices

Crude spot prices averaged lower in November, extending the previous month's losses. The decline in prices was more pronounced in light sweet benchmarks Brent and WTI, in a sign that the supply of light sweet crude in and around their respective trading hubs was higher than demand. This was also reflected in the market structure of WTI, which flipped into contango. Weak gasoline and naphtha crack spreads in the US added downward pressure on light sweet crudes.

Graph 1 - 1: Crude oil price movements



Sources: Argus, OPEC and Platts.

High crude supply availability in Northwest Europe, mainly supply from the US Gulf Coast (USGC), weighed on the value of crude differentials in the Atlantic Basin and pushed the value of the North Sea Dated benchmark lower. A large build in US crude stocks along with the rise of Cushing, Oklahoma, crude stocks, the delivery point of WTI futures, weighed on the value of WTI.The Dubai benchmark fell the least among the other benchmarks as demand from Asian refiners limited declined. The strength of the sour crude market in Asia was also reflected in the sharp decline of the front-month Brent/Dubai Exchange of Futures for Swaps (EFS), which dropped to a discount.

Spot prices declined more than futures prices, signalling a well-supplied crude market, specifically for prompt loading volumes. This was reflected in the narrowing of the North Sea Dated-ICE Brent spread, which flipped to a discount in the second half of November. On a monthly average, the **North Sea Dated-ICE Brent spread** fell by $1.40 in November, standing at a premium of $1.02/b, compared to a premium of $2.42/b in October.

Crude Oil Price Movements

Among spot benchmarks, North Sea Dated and WTI's front-month declined the most compared to sour benchmark Dubai, averaging, with **North Sea Dated** down $8.07, or 8.9%, to $83.05/b and **WTI** falling $8.20, or 9.6%, to stand at $77.37/b. **Dubai**'s front-month contract dropped $6.48, or 7.2%, to settle at $83.33/b.

Table 1 - 1: OPEC Reference Basket and selected crudes, US$/b

OPEC Reference Basket (ORB)	Oct 23	Nov 23	Change Nov 23/Oct 23	%	Year-to-date 2022	2023
ORB	**91.78**	**84.92**	***-6.86***	***-7.5***	**101.89**	**83.28**
Arab Light	93.39	87.30	*-6.09*	*-6.5*	103.34	85.25
Basrah Medium	90.19	83.80	*-6.39*	*-7.1*	99.21	80.94
Bonny Light	94.03	86.18	*-7.85*	*-8.3*	105.66	83.77
Djeno	83.67	75.60	*-8.07*	*-9.6*	95.49	75.50
Es Sider	92.12	83.35	*-8.77*	*-9.5*	103.38	82.59
Girassol	95.72	83.22	*-12.50*	*-13.1*	105.87	84.87
Iran Heavy	91.55	85.00	*-6.55*	*-7.2*	101.76	83.47
Kuwait Export	92.85	86.30	*-6.55*	*-7.1*	103.03	84.61
Merey	72.54	70.74	*-1.80*	*-2.5*	78.62	64.30
Murban	91.00	83.33	*-7.67*	*-8.4*	100.55	83.29
Rabi Light	90.66	82.59	*-8.07*	*-8.9*	102.48	82.49
Sahara Blend	93.27	84.80	*-8.47*	*-9.1*	106.12	84.05
Zafiro	92.52	84.45	*-8.07*	*-8.7*	104.89	83.76
Other Crudes						
North Sea Dated	91.12	83.05	*-8.07*	*-8.9*	102.94	82.95
Dubai	89.81	83.33	*-6.48*	*-7.2*	98.02	82.42
Isthmus	84.04	76.76	*-7.28*	*-8.7*	94.01	73.35
LLS	87.63	80.37	*-7.26*	*-8.3*	98.42	80.52
Mars	84.23	77.82	*-6.41*	*-7.6*	93.50	77.51
Minas	88.25	81.16	*-7.09*	*-8.0*	98.52	80.91
Urals	83.37	74.58	*-8.79*	*-10.5*	80.80	64.39
WTI	85.57	77.37	*-8.20*	*-9.6*	96.15	78.05
Differentials						
North Sea Dated/WTI	5.55	5.68	*0.13*	-	6.79	4.91
North Sea Dated/LLS	3.49	2.68	*-0.81*	-	4.52	2.44
North Sea Dated/Dubai	1.31	-0.28	*-1.59*	-	4.92	0.54

Sources: Argus, Direct Communication, OPEC and Platts.

Most **crude differentials** weakened in November, as high supply from the US, softer buying interest from some European and Asian buyers in the Atlantic Basin and mixed refining margins all weighed on the value of differentials.

Most **North Sea** crude differentials weakened in November on factors such as lower European demand, higher availability of alternative grades, and lower middle distillate product margins, including for diesel and jet/kerosene. Forties and Ekofisk crude differentials declined in November by 36¢ and $1.48 each, respectively, m-o-m to settle at premiums of $1.59/b and $3.06/b. Crude differentials for Johan Sverdrup fell the most against North Sea Dated on weak demand for the grade in the second half of the month. Johan Sverdrup's crude differential declined $4.03/b, m-o-m, in November to average at a discount of $1.28/b.

West African crude differentials weakened in November on lacklustre demand from European and Asian buyers and ample availability of US light sweet crude oil. Unsold volumes for November and December loadings weighed on crude differentials. On a monthly average, Bonny Light, Forcados and Qua Iboe crude differentials to North Sea Dated declined by $2.73, $3.62 and $2.35, respectively, to stand at premiums of 52¢/b, $1.36/b and $1.06/b. The crude differential of Cabinda also fell m-o-m in November by $1.75 on average, to a premium of $1.41/b, compared with a premium of $3.16/b in October. Likewise, in the Mediterranean, Saharan Blend crude differentials weakened last month, decreasing by $1.38 m-o-m to stand at a premium of 72¢/b. Azeri Light crude weakened against the North Sea Dated by 37¢ to stand at a premium of $4.55/b. However, Caspian light sour CPC Blend crude rose by 28¢ to stand at a $1.14/b discount to North Sea Dated.

In the **Middle East** spot market, several crude differentials fell against Dubai. The Oman crude differential declined by $1.25 m-o-m to a premium of $1.41/b.

In the **USGC**, the crude differentials of Light Louisiana Sweet (LLS) and Mars sour strengthened against the WTI benchmark, mainly because the value of NYMEX WTI fell more than all other benchmarks, including Brent and Dubai, making WTI-related grades more attractive. Moreover, news about an oil spill in the Gulf of Mexico lent some support. LLS and Mars sour crude differentials rose m-o-m in November against WTI at Cushing, increasing by 79¢ and $1.68 on a monthly average, respectively, to premiums of $2.85/b and 34¢/b.

OPEC Reference Basket (ORB)

The **ORB** value declined in November, dropping by $6.86/b, or 7.5%, to stand at $84.92/b, as all ORB component values decreased alongside their respective crude oil benchmarks. There were also lower crude differentials and official selling prices in all regions. On a yearly average, the ORB was down $18.61, or 18.3%, from $101.89/b in 2022 to an average of $83.28/b in 2023.

All **ORB component values** fell last month alongside their respective crude oil benchmarks. Lighter components fell the most. West and North African Basket components – Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro – declined by $8.83 or 9.6% m-o-m on average in November to $82.88/b. Multiple region destination grades – Arab Light, Basrah Light, Iran Heavy and Kuwait Export – fell by $6.40, or 7.0%, m-o-m to average $85.60/b. Murban crude declined by $7.67, or 8.4%, m-o-m to average $83.33/b, and the Merey crude component fell by $1.80, or 2.5%, m-o-m to average $70.74/b.

The oil futures market

In November, **crude oil futures prices** experienced a significant downturn, marked by heavy selloffs amidst a highly volatile futures market. Speculators played a major role in this trend, cutting their bullish positions sharply while increasing short positions. The market dynamic was fuelled by exaggerated concerns about oil demand growth, which negatively impacted market sentiment.

Throughout November, traders reacted to mixed signals, leading to a volatile market. Easing worries about oil flows, signs of a well-supplied market, and soft refining margins influenced market sentiment. The expected Fed's policy direction, along with disappointing economic data from China and Germany, also contributed to the downward pressure on oil prices. Data showed that China's industrial profits for October rose by 2.7% on the year, down from 11.9% growth in September.

The downward trend in crude oil futures prices persisted in the second half of November. This followed the release of EIA weekly data, which indicated a larger-than-expected build in US crude oil stocks. Data showed US crude oil stocks rising by 28 mb between the weeks of 27 October and 24 November. Additionally, US crude oil production remained at a record high level during the same period. The data also indicated a rise of 17.5 mb in US crude stocks over the last two weeks. Moreover, the market structure shifted to contango, and oil futures prices breached their 200-day moving average, leading to accelerated selling from non-commercial participants. The nearest time spreads of Brent slipped briefly into contango for the first time since last June, reflecting a shift in market perception.

Despite these challenges, positive demand outlooks from various monthly reports highlight robust short-term demand growth, a rally in the broader financial markets and a weakened US dollar, helped limit the overall decline in oil prices during November. Additionally, oil supply disruptions in the Caspian region caused by a storm exerted upward pressure on oil futures prices.

The **ICE Brent** front-month averaged $6.67, or 7.5%, m-o-m lower in November to stand at $82.03/b, and the **NYMEX WTI** fell by $8.09, or 9.5%, m-o-m to average $77.38/b. Y-t-d, ICE Brent was $18.03, or 17.9%, lower at $82.58/b, while NYMEX WTI was lower by $17.89, or 18.6%, at $78.07/b, compared with the same period a year earlier. **DME Oman** crude oil futures prices decreased in November by $6.25, or 7.0%, m-o-m to settle at $83.06/b. Y-t-d, DME Oman was lower by $15.60, or 15.9%, at $82.47/b.

Table 1 - 2: Crude oil futures, US$/b

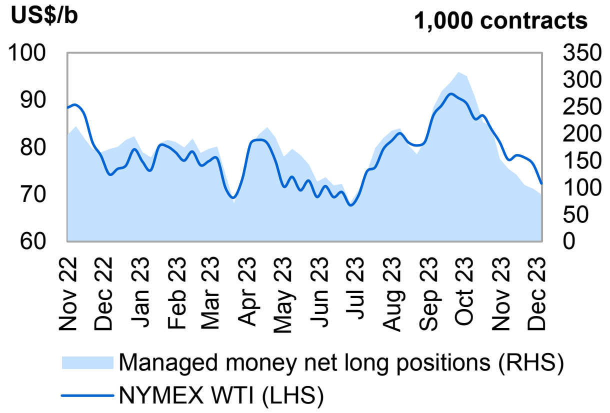
			Change		*Year-to-date*	
Crude oil futures	**Oct 23**	**Nov 23**	**Nov 23/Oct 23**	**%**	**2022**	**2023**
NYMEX WTI	85.47	77.38	-8.09	-9.5	95.96	78.07
ICE Brent	88.70	82.03	-6.67	-7.5	100.61	82.58
DME Oman	89.31	83.06	-6.25	-7.0	98.07	82.47
Spread						
ICE Brent-NYMEX WTI	*3.23*	*4.65*	*1.42*	*44.0*	*4.65*	*4.51*

Note: Totals may not add up due to independent rounding.
Sources: CME, DME, ICE and OPEC.

The **Brent-WTI futures spread** widened further in November to well above $4/b, as the WTI futures contract declined more than ICE Brent. WTI futures prices were under more pressure as selling from money managers was more pronounced in NYMEX WTI futures and options. Moreover, the high supply availability of light sweet crude in the US and a large build in US crude stocks also weighed on NYMEX WTI, specifically crude stocks at Cushing, which increased from the low levels registered in the previous month. The front-month ICE Brent/NYMEX WTI spread widened by $1.42 to an average of $4.65/b. This, along with a wider spread between Dated Brent and WTI Midland in the USGC, contributed to making US crude arbitrage economics to Europe and Asia more favourable.

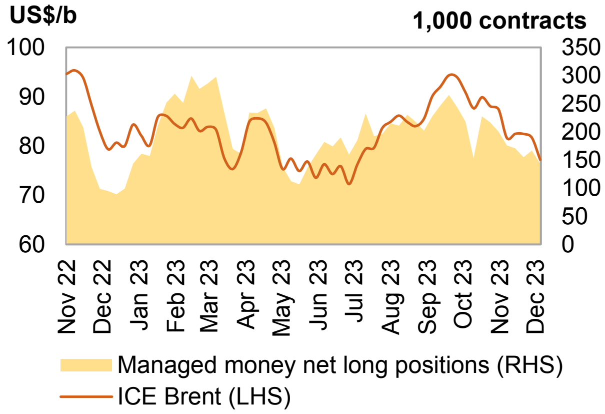
Hedge funds and other money managers turned more bearish about crude oil, closing a large volume of bullish futures and options positions, specifically in the NYMEX WTI market. At the same time, they raised bearish positions for nine consecutive weeks to the week of 28 November. This fuelled volatility and accelerated the decline in oil futures prices. Combined futures and options net long positions in ICE Brent and NYMEX WTI dropped to their lowest level since early July 2023. Between late October and the week of 28 November, hedge funds and other money managers sold an equivalent of 89 million barrels of oil equivalent, after liquidating an equivalent of 204 mb in the previous month. Selling was more pronounced in NYMEX WTI, as related net long positions fell by 36.1% in November, while net long positions declined by 16.8% in ICE Brent. Total open interest declined by 8.7% during the same period, driven by the declines in both WTI and Brent open interest, which dropped by 8.6% and 8.8%, respectively.

Graph 1 - 2: NYMEX WTI vs. Managed Money net long positions



Sources: CFTC, CME and OPEC.

Graph 1 - 3: ICE Brent vs. Managed Money net long positions



Sources: ICE and OPEC.

In November, **money managers** cut their bullish **NYMEX WTI** positions heavily, selling an equivalent of 55 mb, following the liquidation of 161 mb in October, in a sign of shifting perceptions among speculators. Speculators reduced net long positions by 55,337 lots, or 36.1%, between the weeks of 31 October and 28 November, to stand at 98,137 contracts, the lowest level since July 2023, according to the US Commodity Futures Trading Commission (CFTC). The drop in net long positions was mainly driven by a sharp rise in gross short positions by 40,392 lots, or 53.6%, to 115,788 contracts. During the same period, gross long positions declined by 14,945 lots, or 6.5%, to 213,925 contracts.

Money managers sold the equivalent of about 34 mb of the **ICE Brent** contract in November. Combined futures and options net long positions related to Brent fell by 33,548 lots, or 16.8%, over the month, to stand at 166,735 contracts in the week of 28 November, according to the ICE Exchange. This was due to a rise in short positions by 4,863 lots, or 9.4%, to stand at 47,137 contracts, while long positions decreased by 6,767 lots, or 3.3%, to 213,872 contracts over the same period.

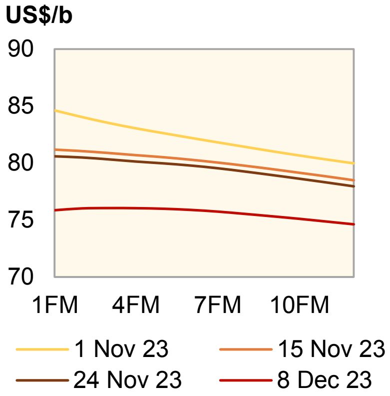
The **long-to-short ratio** of speculative positions in the NYMEX WTI contract declined to 2:1 in the week of 28 November, compared with 3:1 in the week of 31 October. The ICE Brent long-to-short ratio also fell to 5:1 in the week of 28 November, compared to 6:1 in the week of 31 October.

Open interest volumes related to NYMEX WTI futures and options fell sharply in November by 8.8%, or 198,467 lots, to stand at 2.05 million contracts in the week ending 28 November. Open interest volumes related to ICE Brent futures and options also fell by 8.6%, or 241,720 contracts, m-o-m to stand at 2.58 million contracts in the week ending 28 November.

The futures market structure

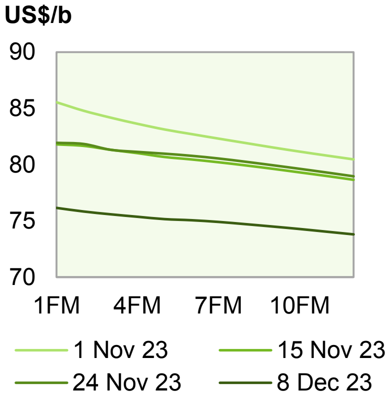
The **market structure** of all three crude benchmarks ─ ICE Brent, NYMEX WTI and DME Oman ─ weakened in November compared with the previous month, and the nearest time spreads of NYMEX WTI flipped into contango in the second half of the month for the first time since June. This development signalled investors' perceptions of a short-term oversupply in the crude market. The market structure shifted, although the global economy remained resilient and crude market fundamentals had not changed dramatically compared to the previous months. Selling pressure was more pronounced in the front-month contracts, which contributed to weakening the market structure. Selling pressure from money managers, as well as a build in US crude stocks and data showing record US crude production weighed on the value of front-month contracts. Signs of a well-supplied physical crude market in the Atlantic Basin and the availability of unsold volumes weighed on prompt-month contracts.

Graph 1 - 4: ICE Brent forward curves



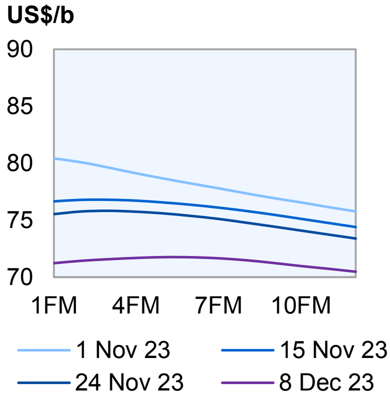
Sources: ICE and OPEC.

Graph 1 - 5: DME Oman forward curves



Sources: DME and OPEC.

Graph 1 - 6: NYMEX WTI forward curves



Sources: CME and OPEC.

The **ICE Brent** crude futures structure deteriorated in November, with the nearest inter-month time spread – the ICE Brent M1-M2 spread – flipping into contango in several sessions last month. High crude supply availability in the Atlantic Basin, including in Northwest Europe, was boosted by the arrival of WTI Midland from the USGC amid tepid demand from European refiners, which weighed on the value of the light-sweet benchmark Brent. While the ICE Brent M1-M3 spread remained in backwardation on average, it narrowed significantly last month by $1.80 to stand at a backwardation of 55¢/b. Opening west-to-east arbitrages alleviated the pressure on Brent somewhat and limited further narrowing of the backwardation. ICE Brent's M1-M6 spread also weakened but stayed at a backwardation of $1.33/b on average in November, falling by $3.04 m-o-m from a backwardation of $4.37/b in October.

The **DME Oman** price backwardation also narrowed last month, as prompt-month prices came under downward pressure due to softer demand in the East of Suez spot market, including from Asian refiners. Improving west-to-east arbitrage opportunities, reflected in narrow EFS Dubai, which should increase crude flows from the Atlantic Basin to Asia, weighed on the value of Dubai-linked grades. On a monthly average, the DME Oman M1/M3 spread narrowed by $3.19 m-o-m to a backwardation of 72¢/b in November.

The front end of the **NYMEX WTI** forward curve weakened the most as crude stocks in the US, including at Cushing, rose, and selloffs were more pronounced in the NYMEX WTI futures market, which weighed on the nearest futures contracts. The NYMEX WTI M1/M3-month spread flipped into contango in the second half of November, but on a monthly average, the M1-M3 spread remained in a backwardation of 10¢/b after falling by $2.27 from the October level.

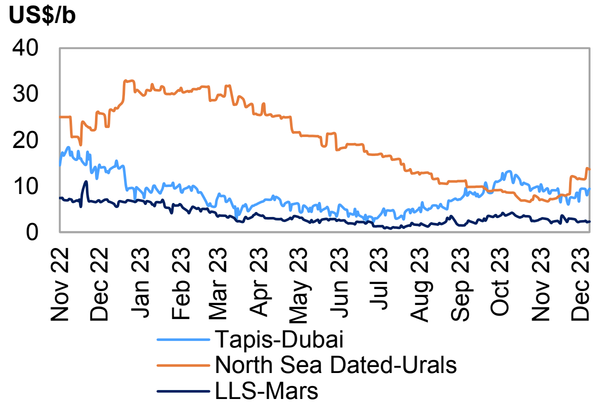
In terms of the **M1/M3 structure**, the North Sea Brent M1/M3 spread narrowed in November on a monthly average by $2.56 to a backwardation of 57¢/b, compared with $3.13/b in October. The Dubai M1-M3 and WTI M1-M3 spreads also narrowed on average last month by $1.12 and $2.32, respectively, to a backwardation of $1.57/b and 3¢/b, compared to a backwardation of $2.69/b and $2.35/b in October.

Crude spreads

The **sweet-sour crude differentials** showed mixed movement among regions. In Asia and the USGC, the spread narrowed on a weak light sweet market and the high availability of light sweet crude, while in Europe, the sweet-sour crude spread widened as sour crude in Northwest Europe weakened more than lighter grades amid lacklustre demand.

In **Europe**, the sour market eased more than the light sweet market, amid tepid demand from European refiners and ample supply, including for the Johan Sverdrup grade. High freight rates also weighed on the value of Urals, mainly exported to Asia. Higher naphtha and gasoline cracks in November along with further weakening of the crack of high sulphur fuel oil contributed to a widening of sweet-sour crude differentials. The crack spread of high sulphur fuel oil against Brent in Northwest Europe dropped to a discount of $14/b in November, its lowest since April 2023. Meanwhile, naphtha margins in Northwest Europe rose by nearly $4/b m-o-m. Urals crude differentials against North Sea Dated in the Mediterranean and Northwest Europe fell by 73¢ and $1.77 m-o-m, respectively, to stand at discounts of $8.48/b and $12.89/b in November.

Graph 1 - 7: Differentials in Asia, Europe and USGC



Sources: Argus, OPEC and Platts.

The spread between Ekofisk and Johan Sverdrup also widened by $2.55 m-o-m to average $4.35/b, as Johan Sverdrup crude differentials dropped to their lowest since last January.

In **Asia**, the sweet-sour crude differential represented by the Tapis-Dubai spread narrowed in November, as the decline in sour crude prices was limited amid healthy demand from Asian refiners and higher heavy fuel oil margins in Singapore. A further narrowing in west-to-east arbitrage which encouraged the flow of light sweet crude from the Atlantic Basin to Asia contributed to pushing the value of sweet crudes in the Asia Pacific lower. Competitive Brent-related grades weighed on the value of light sweet crude in the Asia Pacific. The Brent-Dubai spread narrowed by $1.59 in November, flipping to a discount of 28¢/b, making Brent-related crude more competitive in the East of Suez market. The Brent-Dubai exchange of futures for swaps (EFS) also narrowed last month by $1.76 to 37¢/b. The Tapis/Dubai spread narrowed by $2.66 in November to a premium of $8.30/b, from a $10.97/b premium in October.

In the **USGC**, the value of light sweet crude also weakened last month against the value of sour crude amid ample supply of light sweet crude and a jump in crude stocks. Meanwhile, the sour crude market was supported by demand from USCG refiners. Weak gasoline margins also weighed on the value of light sweet crudes, including LLS. The LLS premium over medium sour Mars narrowed in November by 86¢ to an average of $2.54/b.

Commodity Markets

There was a divergence in selected commodity price indices in November. The energy price index experienced another monthly decline, while non-energy price indices rebounded, m-o-m.

In the futures market, the total net long positions of money managers fell for a second consecutive month in November. Open interest rose for a third consecutive month, but the monthly increase was moderate amid persistent bearish sentiment.

Commodity prices continued to experience downward pressure from softer market fundamentals during the month, but this was partly offset by lower inflationary pressures in both the US and the EU, a decline of the US dollar and China's industrial activity improvements in November.

Trends in selected commodity markets

The **energy price index** declined for a second consecutive month in November, falling by 8.2% m-o-m, to its lowest level since July 2023. All of the index components fell led by further sharp declines in coal prices. The index was down by 23.9%, y-o-y.

Table 2 - 1: Commodity prices

Commodity	Unit	*Monthly averages*			*% Change*	*Year-to-date*	
		Sep 23	Oct 23	Nov 23	Nov 23/Oct 23	2022	2023
Energy*	Index	**117.7**	**115.7**	**106.2**	**-8.2**	**154.5**	**107.6**
Coal, Australia	US$/mt	162.5	142.1	126.8	-10.8	341.8	175.6
Crude oil, average	US$/b	92.2	89.1	81.4	-8.7	98.8	81.2
Natural gas, US	US$/mbtu	2.6	3.0	2.7	-9.4	6.4	2.5
Natural gas, Europe	US$/mbtu	11.5	14.6	14.5	-0.6	40.7	13.3
Non-energy*	Index	**109.4**	**107.2**	**109.0**	**1.7**	**125.2**	**110.4**
Base metal*	Index	**105.4**	**102.4**	**103.8**	**1.4**	**123.1**	**109.4**
Precious metals*	Index	**145.3**	**144.6**	**149.9**	**3.7**	**136.7**	**146.8**

*Note: * World Bank commodity price indices (2010 = 100).*
Sources: World Bank and OPEC.

Average crude oil prices fell for a second consecutive month to a four-month low, declining by 8.7% m-o-m in November. Selling pressure from speculators and softer market fundamentals remained a drag on prices amid global macroeconomic headwinds. Prices were down by 6.9%, y-o-y.

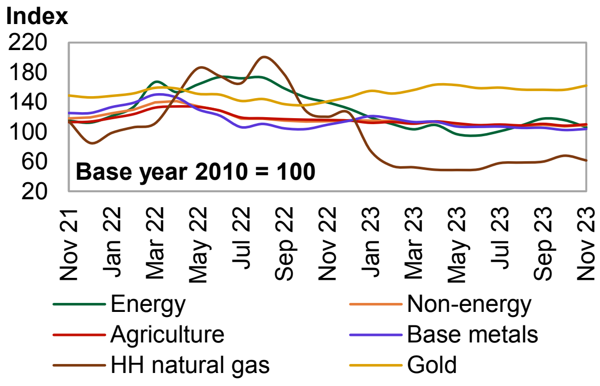
Henry Hub's natural gas prices receded in November after five consecutive monthly increases. Prices fell m-o-m by 9.4% as mounting pressure from continuing US inventory builds and robust domestic production offset a seasonal demand increase. According to estimates from the US Energy Information Administration, as of November 24, underground storage sites were around 8.9% higher than at the same time last year and 7.9% above the five-year average. Moreover, US LNG demand in other regions, particularly Europe, softened amid healthy inventories. Prices were down by 48.7%, y-o-y.

Natural gas prices in Europe receded after three consecutive monthly increases. The **average Title Transfer Facility (TTF) price** fell from $14.6/mmbtu in October to $14.5/mmbtu in November, a 0.6% m-o-m drop. Lower volatility of the geopolitical risk premium eased pressure on prices, but it remained elevated. Data from Gas Infrastructure showed EU inventories at over 95.0% capacity as of 30 November. However, the moderate m-o-m decline indicates that significant upside risks remain. Prices were down by 59.5%, y-o-y.

Australian thermal coal prices fell sharply for a second consecutive month in November, declining by 10.8%, m-o-m. Lower natural gas prices weighed on coal demand, particularly in Europe. Moreover, major Asian consuming nations, particularly China and India, have ramped up domestic coal production, further reducing the need for imports. Prices were down by 63.5%, y-o-y.

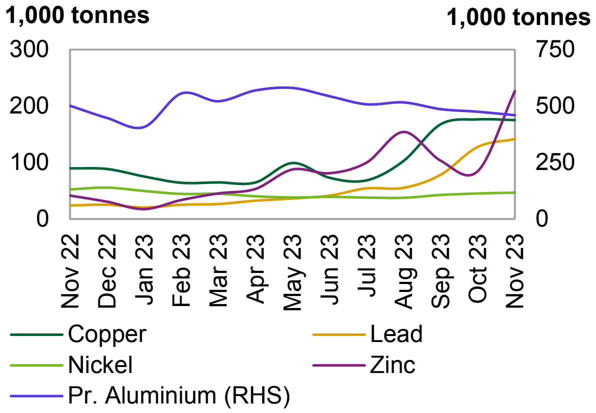
The **non-energy price index** recovered from the previous month's decline, increasing by 1.7% m-o-m in November. The rise in the index was driven by a m-o-m rebound in all of the sub-indices, led by precious metals. Y-oy, the index was down by 4.6%, driven by declines in the base and agriculture index, but this was partially offset by a rise in the precious metals index.

Graph 2 - 1: Major commodity price indices



Sources: World Bank, S&P Goldman Sachs, Haver Analytics and OPEC.

Graph 2 - 2: Inventories at the LME



Sources: LME, Thomson Reuters and OPEC.

The **base metal index** rebounded in November, rising by 1.4%, m-o-m. All the index components advanced m-o-m except for nickel. Most base metal prices were supported by a m-o-m improvement in global industrial activity, particularly notable in China. China's purchasing manager's index (PMI) for manufacturing moved into expansion territory, rising from 49.5 in October to 50.7 in November. The global PMI also improved to 49.3 over the same period, but remained below expansion territory, which underscores the downside risks to base metal prices outside of China. The index was down by 5.2%, y-o-y.

Aluminium prices rose for a third consecutive month in November, increasing by 0.5%, m-o-m. The London Metal Exchange (LME) warehouses reported a second consecutive monthly drop in inventories, which fell by 2.6%, m-o-m. However, cancelled warrants at the LME fell by 8.6% m-o-m over the same period, which partially offset bullish price sentiment. Prices were down by 6.7%, y-o-y.

Average monthly copper prices rebounded in November after three consecutive monthly losses, rising by 3.2%, m-o-m. LME inventories experienced moderate m-o-m declines of 0.7%. At the same time, cancelled warrants were higher by 3.4%, m-o-m. Prices were up by 1.7%, y-o-y.

Lead prices advanced in November, rising by 2.6%, m-o-m. A significant increase (over 100% m-o-m) in cancelled warrants at the LME-supported prices, but a rise in inventories (up by 10.9% m-o-m) over the same period partially offset the bullish signal from cancelled warrants. Prices were up by 4.2%, y-o-y.

Nickel prices fell for a seventh consecutive month in November, falling by 6.9% m-o-m. LME inventories increased by 3.2%, m-o-m. At the same time, cancelled warrants fell by 4.4%, m-o-m. Prices were down by 33.4%, y-o-y.

Zinc prices recovered from the previous monthly decline, increasing by 3.9% in November. Inventories at the LME rose sharply (over 100%) m-o-m in November. At the same time, cancelled warrants fell sharply by 36.1% m-o-m. Prices were down by 13.5%, y-o-y.

Iron ore prices rose sharply m-o-m in November by 10.2%, underpinned by China's industrial activity. China's steel industry PMI rebounded from 45.6 in October to 48.2 in November. Prices were up by 40.4%, y-o-y.

The **precious metals index** rebounded in November after three consecutive monthly declines, rising by 3.7% m-o-m. All of the index components advanced, led by **silver,** which rose by 5.0% m-o-m, followed by **gold** and **platinum,** which rose m-o-m by 3.5% and 1.6%, respectively. Precious metal prices were supported by increased safe-haven appeal amid geopolitical developments and a m-o-m retraction of the US dollar and US treasury yields. The index was up by 14.2%, y-o-y. Gold and silver prices were up y-o-y by 15.0% and 15.8% respectively, while platinum prices were down by 8.4%.

Investment flows into commodities

Total money managers' net length fell for a second consecutive month in November, decreasing sharply by 40.9%, m-o-m. The decline in net long positions was driven by crude oil and followed by natural gas, but this was partially offset by increases in gold and copper.

Total open interest (OI) rose for a third consecutive month in November, increasing by 0.9%, m-o-m. Gold led the increase in OI, followed by natural gas, but this was partially offset by a drop in copper and crude oil.

Table 2 - 2: CFTC data on non-commercial positions, 1,000 contracts

Selected commodity	Open interest		Long		Short		Net length			
	Oct 23	Nov 23	Oct 23	Nov 23	Oct 23	Nov 23	Oct 23	% OI	Nov 23	% OI
Crude oil	2,288	2,173	271	220	38	104	233	10	116	5
Natural gas	1,195	1,308	170	207	175	286	-5	0	-78	-6
Gold	675	731	129	172	85	57	44	7	114	16
Copper	234	213	55	52	69	52	-14	-6	0	0

Note: Data on this table is based on a monthly average.
Open interest includes both commercial and non-commercial positions.
Sources: CFTC and OPEC.

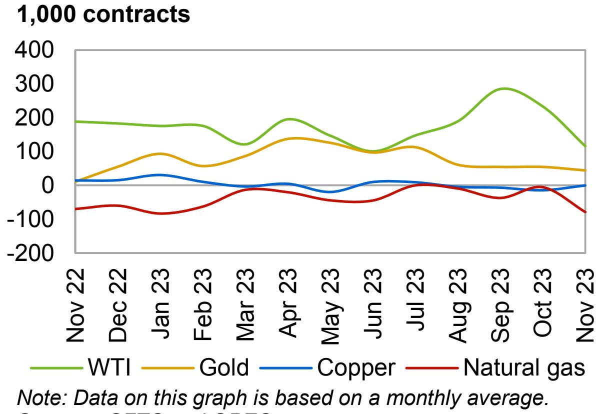
Total crude oil (WTI)'s OI dropped for a second consecutive month in November, falling by 5.4%, m-o-m. Money managers' net length also experienced a consecutive monthly decline, falling sharply by 54.2%, m-o-m. Money managers' sentiment remained bearish.

Total Henry Hub natural gas's OI rose for a second consecutive month, increasing by 9.6% m-o-m in November. Meanwhile, money managers sharply cut long positions (down by 22.1% m-o-m) while increasing short positions (up by 63.0% m-o-m) over the same period. This underscores the bearish sentiment on natural gas.

Gold's OI rose in November after three consecutive monthly falls, rising by 10.6%, m-o-m. Money managers also increased long positions (up by 32.8% m-o-m) while decreasing short positions over the same period. Safe-haven status drove flows into gold amid geopolitical developments.

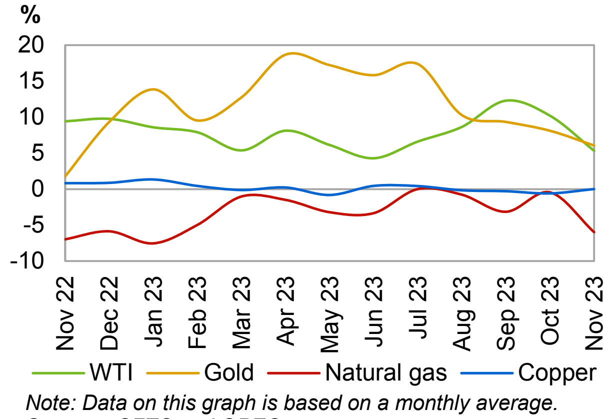
Copper's OI fell by 8.7% m-o-m in November, erasing gains made the previous month. However, money managers increased net length sharply over the same period. The net length increase was driven mainly by a reduction in short positions (down by 24.9% m-o-m). A reduction in long positions (down by 5.5% m-o-m) was on the back of profit taking.

Graph 2 - 3: Money managers' activity in key commodities, net length



Note: Data on this graph is based on a monthly average.
Sources: CFTC and OPEC.

Graph 2 - 4: Money managers' activity in key commodities, as % of open interest



Note: Data on this graph is based on a monthly average.
Sources: CFTC and OPEC.

World Economy

Global economic growth resiliently continued throughout 3Q23. Adjustments were made this month to incorporate the latest economic dynamics, in line with recently released figures from several economies. Consequently, the global economic growth forecast for 2023 was revised up slightly to 2.9%, while the projection for 2024 remains unchanged at 2.6%.

At the same time, growth dynamics remain diverse among economies. In major economies, 3Q23 indicators from the US, India and China indicate steady growth. Moreover, Russia and Brazil appear to be sustaining an improving growth trend over the same period. In contrast, European economies face more challenging conditions, with Germany experiencing a slowing dynamic this year and challenges in the industrial sector also affecting France and Italy. The Eurozone saw persistently low growth over the first three quarters. In Japan, a downward revision in economic growth for 2Q23 and a decline in 3Q23 suggest a more subdued trend in the economy in 2H23 and possibly in 2024.

Near-term support for global economic growth may arise from a less pronounced inflationary environment, enabling major central banks to consider relatively more accommodative monetary policies. Emerging economies in Asia, notably India, along with Brazil and Russia, could exceed expectations with improvements in domestic demand and external trade. Additionally, a potentially more robust growth trajectory in China, supported by further government-led stimulus measures, has the potential to support global economic growth in the near term. Additionally, sustained momentum in the US in 4Q23 and throughout 2024 could lead to economic growth surpassing initial expectations.

Nevertheless, there are a few challenges to economic growth, including persistently high, albeit declining, core inflation rates and ongoing stringent monetary policies. Moreover, labour market constraints in advanced economies and ongoing geopolitical tensions are factors that warrant close monitoring in the near term.

Table 3 - 1: Economic growth rate and revision, 2023–2024*, %

	World	OECD	US	Eurozone	UK	Japan	China	India	Brazil	Russia
2023	**2.9**	**1.5**	**2.4**	**0.2**	**0.4**	**1.7**	**5.2**	**6.5**	**2.5**	**2.2**
Change from previous month	0.1	0.1	0.1	0.0	0.2	-0.2	0.0	0.3	0.0	0.3
2024	**2.6**	**0.9**	**1.0**	**0.5**	**0.6**	**0.9**	**4.8**	**5.9**	**1.2**	**1.3**
Change from previous month	0.0	0.0	0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.1

*Note: * 2023 and 2024 = Forecast. The GDP numbers have been adjusted to reflect 2017 ppp.*

Source: OPEC.

Update on the latest global developments

The **economic growth reports of major economies** up to 3Q23 affirm the continuation of a better-than-expected growth trend in the global economy, albeit marked by varying dynamics. The upwardly revised US economic growth number underscores robust momentum throughout 2023 in the economy. Conversely, Japan and the Eurozone faced more challenging situations during this period. European economies, particularly Germany, encountered challenges, with a stagnant economy in 1Q23, low growth in 2Q23 and a decline in 3Q23. Difficulties in Germany's industrial sector – mirrored in France and Italy – contributed to subdued growth in the Eurozone. Japan's economic growth in 1H23 was steady and with the latest announcement of fiscal stimulus measures, the economy is expected to receive tangible support in the near term. However, a downward revision in Japan's economic growth for 2Q23 and a decline in 3Q23 suggest a somewhat subdued trend in the economy going forward. China's 3Q23 economic growth surpassed expectations, highlighting an ongoing sound growth dynamic and indicating that targeted growth of 5% for this year may be achieved.

Significantly, India's statistical office recently reported strong growth in 3Q23, supported by robust government spending and increased investment, leading to a substantial upward revision in annual growth for 2023. Furthermore, the ongoing positive growth trend observed in 1H23 in Brazil and Russia continued into 3Q23, with Russia seeing its highest economic growth figures in 3Q23 since 2021.

On another positive note, recent data reveals the sustained easing of **core inflation** in most advanced economies. However, core inflation remains relatively high for the G4 central banks, the decision-making of which is being closely monitored. It stands at 4% in the US, 4.3% in the Eurozone, 5.7% in the UK, and a somewhat more moderate 2.8% in Japan. So, while a clear softening trend is evident, inflation remains a concern in the G4 monetary policy setting. Consequently, these key central banks have opted to persist with their stringent monetary policies for the time being. Additionally, the Bank of Japan (BoJ) continued its measured tightening process, most recently making a slight adjustment to its bond yield control policy, while maintaining its current low-interest rate policy.

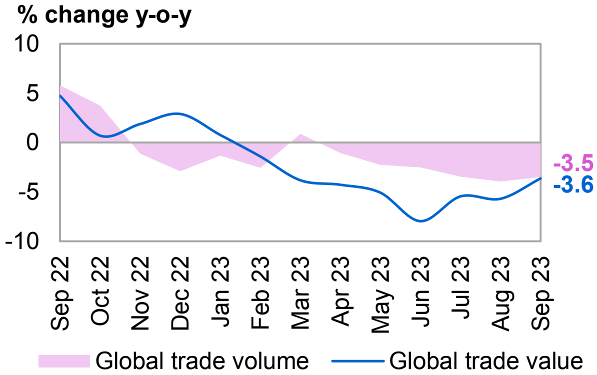
In the context of elevated interest rates in advanced economies, there is a growing concern about **high debt and rising levels** in major economies, encompassing both sovereign and private debt. During 1H23, over 80% of debt build-up originated from mature markets, with significant increases observed in the US, Japan, the UK and France. In emerging markets, the rise was more pronounced in China, India and Brazil. Currently, the global debt-to-GDP ratio stands at around 336%. From 2Q22 to 2Q23, the global debt level increased by around $10 trillion, reaching a new all-time high of $307 trillion – a $100 trillion increase from a decade ago, as reported by the Institute of International Finance (IIF).

In the meantime, **global trade** showed a gradual improvement in volume and value terms.

Trade in value terms declined by 3.6% y-o-y in September, following a decline of 5.7% y-o-y in August and 5.5% y-o-y in July, based on the CPB World Trade Monitor Index, provided by the CPB Netherlands Bureau for Economic Policy Analysis.

Trade in volume terms fell by 3.5% y-o-y in September, compared with 3.9% y-o-y in August and 3.5% y-o-y in July.

Graph 3 - 1: Global trade



Sources: Netherlands Bureau for Economic Policy Analysis, and Haver Analytics.

Near-term global expectations

Thus far this year, and notably up to 3Q23, **global economic growth** exhibited greater resilience than initially expected, with the latest reported 3Q23 economic growth numbers confirming a steady upward growth trend on a global scale.

Following a robust 1H23 global economic growth trend, a steady, albeit diverse, growth dynamic persisted into 3Q23. Estimated global growth rates for 1Q23 stood at 2.7% and rose to a substantial 3.5% y-o-y in 2Q23. Estimated 3Q23 global economic growth is at 3% y-o-y, compared with the previous month's estimate of 2.6% y-o-y, bolstered by strong 3Q23 economic growth figures in major economies. However, while global growth momentum remains robust, the current 4Q23 forecast suggests a slight easing to growth of 2.5% y-o-y. A better-than-expected services sector dynamic is expected to support momentum in 4Q23, albeit a moderation in the sector's activity is forecast, a trend anticipated to extend into 2024. The industrial sector's impact on the global economy is expected to improve gradually in relative terms in the coming months, although this trend has yet to fully materialize, given the ongoing challenges faced by the industrial sector and global goods trading, as evidenced in the latest PMIs.

Looking ahead, inflation, particularly in key economies, and corresponding **monetary policies** by major central banks, will play a vital role. While the current consensus suggests that G4 central banks may pursue a more accommodative monetary policy by 2H24, uncertainties about the near-term path continue, particularly regarding the persistence of core inflation. Moreover, in Japan, there are indications that the BoJ may consider tightening its monetary policies in the coming months to address the rising inflation trend.

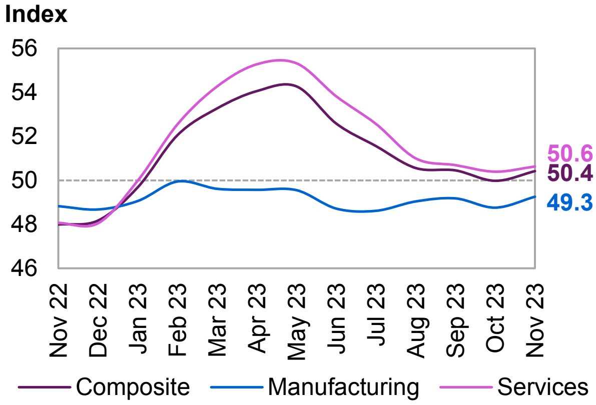
The prevailing market consensus is that elevated interest rates and their resulting dampening effect will endure throughout much of 2024, with key policy rates projected to reach their peak by year's end and remain steady in 1H24. In this context, it is expected that headline inflation will continue to recede further in 4Q23 and into 2024. However, core inflation in major economies is expected to remain relatively persistent, with some moderation projected for 2024.

Global purchasing managers' indices (PMIs) in October reflected some stabilisation in the services sector and an improving, though still challenging, situation in manufacturing.

The global **manufacturing PMI** improved to its highest level in the past six months in November to stand at 49.3, compared with 48.8 in October and 49.2 in September. However, it has remained in contractionary territory since September of last year.

The global **services sector PMI** rose to stand at 50.6 in November, compared with 50.4 in October and 50.7 in September. Although it has stabilised over the past three months, it continued its overall slowing trend since 1Q23.

Graph 3 - 2: Global PMI



Sources: JP Morgan, S&P Global and Haver Analytics.

In light of the resilient global economic growth trend through 3Q23, and considering recently released economic growth figures from several economies, the **2023 global economic growth forecast** was revised up slightly to stand at 2.9%.

Global economic growth for **2024** remains at 2.6%, unchanged from the previous month.

Table 3 - 2: World economic growth rate and revision, 2023–2024*, %

	World
2023	**2.9**
Change from previous month	0.1
2024	**2.6**
Change from previous month	0.0

*Note: * 2023 and 2024 = Forecast.*

Source: OPEC.

OECD

OECD Americas

US

Update on the latest developments

The latest economic growth figures released by the Bureau of Economic Analysis (BEA) confirmed sustained and notably stronger-than-expected momentum in 3Q23 for the **US economy**, with 5.2% quarter-on-quarter (q-o-q) at a seasonally adjusted annual rate (SAAR), surpassing the previously reported 4.9% q-o-q SAAR. Economic growth for 2Q23 and 1Q23 was reported at 2.2% q-o-q SAAR and 2.1% q-o-q SAAR, respectively. Private household consumption was reported at 3.6% q-o-q SAAR, slightly below last month's estimate of 4%, while it stood at 0.8% q-o-q SAAR in 2Q23. Investments, as indicated by growth in gross capital formation, expanded considerably by 10.4% q-o-q SAAR. However, it should be noted that within the investment category, the rise in inventories contributed significantly, an indication of possibly lower investment growth in the coming quarters.

By taking the 3Q23 built-in inventories, the high-interest rates, and persistent core inflation into consideration, it should not come as a surprise that 4Q23 is estimated to have slowed somewhat, with the Atlanta branch of the US Federal Reserve (Fed) – a widely observed indicator – currently suggesting 4Q23 GDP growth of 1.2% q-o-q SAAR. This estimate, along with other output indicators, such as a slowdown in industrial output and manufacturing orders, indicates a likely easing of growth towards the end of the year and into the beginning of 2024. Industrial output declined by 0.8% y-o-y in October, following a 0.1% decline in September manufacturing orders declined by 1.4% y-o-y in October, after a rise of 2.1% y-o-y was seen in September.

Moreover, political challenges persist following a temporary agreement on budgetary issues that averted a **government shutdown** last month, an agreement that will need to be extended in 1Q24.

In the meantime, the **consumer confidence index,** as reported by the Conference Board, increased to stand at 102 in November, compared with a reading of 99.1 in October and following an index level of 104.3 in September.

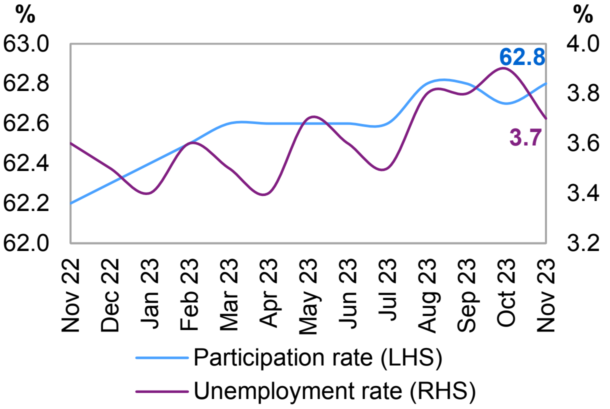
Headline **inflation** fell to 3.2% y-o-y in October, compared with 3.7% y-o-y in September. Core inflation slowed to 4% in October after reaching 4.1% y-o-y in September. While core inflation remains a persistent phenomenon in the US, akin to other advanced economies, this figure represents the lowest core inflation level in around two years. Furthermore, the Fed is guided by core personal consumption expenditures (PCE), pointing to a level of 3.4% y-o-y in October, down from 3.6% y-o-y in September and 3.7% y-o-y in August.

The labour market maintained a relatively healthy state in October but softened somewhat thereafter. The **unemployment rate** fell to 3.7% in November, after reaching 3.9% in October and 3.8% in September.

The **participation rate** rebounded slightly, standing at 62.8% in November, following 62.7% in October, and 62.8% in September.

Earnings also remained sound. **Hourly earnings growth** remains at a level of 4% y-o-y in November.

Graph 3 - 3: US monthly labour market



Sources: Bureau of Labor Statistics and Haver Analytics.

Near-term expectations

Following a period of robust growth up to 3Q23, the US economy is forecast to moderate towards the end of the year, extending into 2024, as indicated by several leading indicators. Several challenges for near-term growth are evident, including the potential for a political gridlock regarding the US budget in 1Q24, which could lead to a government shutdown after a temporary agreement was reached in November. Additionally, elevated interest rates and persistent core inflation are likely to contribute to a moderation in US economic growth in 4Q23, with rising interest rates impacting corporate borrowing costs and potentially increasing the burden on households to repay loans.

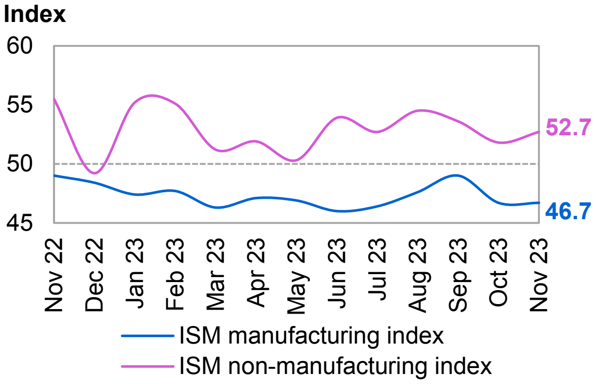
After steady growth of 2.2% q-o-q SAAR was seen in 1Q23 and 2.1% q-o-q SAAR in 2Q23, economic growth surged to 5.2% q-o-q SAAR in 3Q23. However, 4Q23 growth is expected to be only slightly positive at 0.5% q-o-q SAAR, reflecting a low-growth trend that is forecast to persist into 2024. Growth rates for 2024 are projected to be lower than the average quarterly growth seen in 2023, but a slight acceleration in economic growth is anticipated in 2H24. While quarterly growth rates in 1H24 are expected to average around 0.3%, the forecast for 2H24 anticipates a figure of around 0.4% q-o-q SAAR, with this 2H24 upswing likely to be supported primarily by a more accommodative monetary policy. Key policy rates are expected to reach their peak at 5.5% by the end of 2023, and it is expected that the Fed will transition to a more accommodative policy stance by 2H24, contingent upon the assumption that following inflation of around 4.2% for 2023, price developments normalise to an inflation level of approximately 3% in 2024.

November **PMI** levels, as provided by the Institute for Supply Management (ISM), indicated a slightly improving trend in the services sector, while the manufacturing sector continued to face ongoing challenges.

The November **manufacturing PMI** was unchanged at 46.7, remaining below the growth-indicating level of 50.

The index level for the **services sector**, representing around 70% of the US economy, expanded to reach 52.7 in November, marking an improvement from 51.8 in October and 53.6 in September.

Graph 3 - 4: US-ISM manufacturing and non-manufacturing indices



Sources: Institute for Supply Management and Haver Analytics.

Considering sound momentum in 1H23 and strong growth in 3Q23, the **2023 economic growth forecast** has been revised up to stand at 2.4%.

The US economic growth estimate for **2024** is anticipated to moderate. However, with some positive momentum from 2023 expected to carry over into 2024, the forecast has been adjusted slightly upward to stand at 1%.

Table 3 - 3: US economic growth rate and revision, 2023–2024*, %

	US
2023	**2.4**
Change from previous month	0.1
2024	**1.0**
Change from previous month	0.1

*Note: * 2023 and 2024 = Forecast.*

Source: OPEC.

OECD Europe

Eurozone

Update on the latest developments

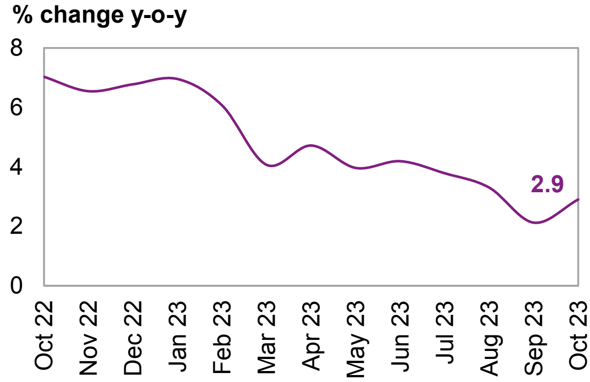
The **Eurozone** remains in a challenging situation, but positively, the 3Q23 decline was recently revised upward from -0.4% q-o-q SAAR, to -0.2% q-o-q SAAR. Notably, inflation has significantly decreased, primarily driven by lower energy prices this year, while core inflation has also dropped. Challenges persist in the Eurozone's industrial sector, especially in Germany, which is impacting the Eurozone’s overall economic growth momentum. Industrial production (IP) witnessed a substantial 6.4% y-o-y decline in September, marking the largest drop this year and continuing the sector’s downturn since March. This decline was significantly influenced by a 4.7% y-o-y decrease in industrial output in Germany, the largest economy in the Eurozone. Despite these challenges, positive signals such as improvements in leading indicators like PMIs, an uptick in bank lending activity, and a gradual enhancement in consumer confidence are observable. As a result, economic momentum in 4Q23 is estimated to have stabilized at a modest level.

Inflation witnessed a notable deceleration in November, reaching 2.4% y-o-y in contrast to 2.9% y-o-y in October and a peak of 4.3% y-o-y in September. Core inflation also retracted but maintained an elevated level, standing at 4.2% y-o-y down from 5% y-o-y in October and 5.5% y-o-y in September.

The **labour market** remained relatively tight, despite weakness in the economy. According to the latest numbers from Eurostat, the unemployment rate held steady at 6.5% in October, remaining unchanged from both September and August.

Growth in **retail sales** in value terms rebounded in October, expanding by 2.9% y-o-y, following an increase of 2.1% y-o-y in September and 3.3% y-o-y in August.

Graph 3 - 5: Eurozone retail sales



Sources: Statistical Office of the European Communities and Haver Analytics.

Near-term expectations

The Eurozone’s **economic growth** is expected to persist at a low level in the near term. After recording GDP growth of 0.2% q-o-q SAAR in 1Q23 and 0.6% q-o-q SAAR in 2Q23, there was a decline of 0.2% in 3Q23. A gradual improvement is forecast for 4Q23, with growth accelerating to 0.8% q-o-q SAAR. This forecast is underpinned by expectations of stabilized bank lending and a rebound in industrial activity in the short term, with a slowdown in the services sector expected to stabilize.

Furthermore, **inflation** is anticipated to continue its slowdown towards the year-end, stabilizing at around 2% in 2024. This could provide the European Central Bank (ECB) with room for a relatively more accommodative monetary policy in around 2H24. However, the persistent soft Euro-US-dollar relationship may continue to impact inflation, as ongoing US dollar strength is likely to lead to sustained high prices for imported goods. Notably, core inflation is forecast to exceed 5% y-o-y in 2023, retracting to slightly over 2% in 2024. With these assumptions, the ECB is forecast to continue its tight monetary policy towards the end of the year and in 1H24, maintaining the main key policy rate at least at the current 4.5%. The projected slowdown in lending activities is anticipated to have diverse effects, potentially impacting sectors like real estate and broader business-related investments to some extent.

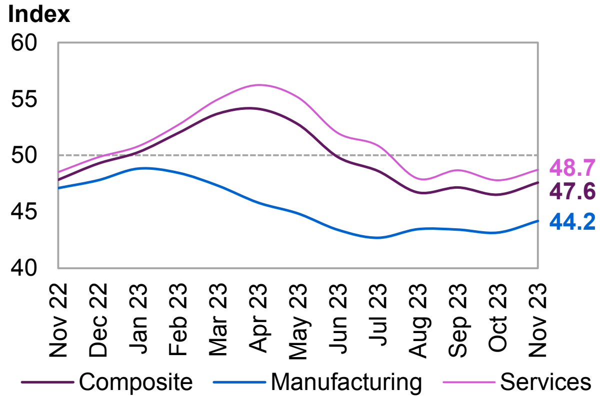
Quarterly growth in 2024 is likely to remain within a relatively close range, reaching 0.6% annualized quarterly averages in 1H24 and accelerating to 1% annualized quarterly average growth rates in 2H24. The forecast for 2024 anticipates gradual progress in the industrial sector, driven by both domestic and external demand, particularly in 2H24. However, the expected recovery in industrial production (IP) remains contingent on external factors. Additionally, close attention is warranted to Italy's sovereign debt situation, with the sovereign-debt-to-GDP ratio standing at over 140% in 2Q23 compared to slightly above 137% in 1Q23.

The **Eurozone's November PMIs** showed improvement, albeit both the manufacturing and services sectors continued to face challenges, as indicated by the indices remaining in contractionary territory.

The **PMI for services**, the largest sector in the Eurozone, remained below the growth indicating level of 50, registering 48.7 in November, compared to 47.8 in October and 48.7 in September.

The **manufacturing PMI** showed a slight improvement in November, although it remained significantly below the growth threshold, standing at 44.2. This comes after an index level of 43.1 in October and 43.4 in September.

Graph 3 - 6: Eurozone PMIs



Sources: S&P Global and Haver Analytics.

Economic growth for 2023 remains unchanged at 0.2% this month, accounting for the subdued growth in 1H23, and notably the contraction in 3Q23. Various factors contributed to the decline, such as inflation and ongoing monetary tightening. The projection also factors in a potential rebound in 4Q23.

With some carry-over of this 2H23 activity, the **2024** economic growth is forecast to improve slightly, remaining at 0.5%.

Table 3 - 4: Eurozone economic growth rate and revision, 2023–2024*, %

	Eurozone
2023	**0.2**
Change from previous month	0.0
2024	**0.5**
Change from previous month	0.0

*Note: * 2023 and 2024 = Forecast.*

Source: OPEC.

OECD Asia Pacific

Japan

Update on latest developments

Japan's economic growth exhibited strength in 1H23, although a downward revision in 2Q23 and a notable decline in 3Q23 indicate selective challenges. Persistently high inflation, influencing real income and potentially impacting household spending adversely, is anticipated to be mitigated in the near term following the government's announcement of fiscal stimulus measures in November. The ¥37.4 trillion stimulus package, encompassing long-term projects and private sector participation, aims to address economic challenges. The Ministry of Economy, Trade and Industry (METI) reported that economic growth in 1Q23 was 3.7% q-o-q SAAR, surpassing the previous second estimate of 3.2% q-o-q SAAR, and the initial first estimate of 2.7%. In 2Q23, economic growth was reported at 4.5% q-o-q SAAR, slightly below the previous estimate of 4.8% q-o-q SAAR. However, 3Q23 witnessed a decline of 2.1% q-o-q SAAR, indicating a contraction in economic activity during that period.

Recent indicators suggest slowing 2H23 momentum in the Japanese economy, following robust growth in 1H23. In addition to the 3Q23 decline in economic growth, the industrial sector contracted but showed a slight recovery in October, with industrial output declining by 0.9% y-o-y, following -3.4% y-o-y in September and a decline of 4.4% y-o-y in August. This translates to monthly IP growth of 1% m-o-m in October, compared with growth of 0.5% m-o-m in September. Inflation has remained historically high and saw a slight increase in October, reaching a level of 3.3% y-o-y, compared to 3% y-o-y in September and 3.2% y-o-y in August.

In comparison to the overall inflationary trend, core inflation – which excludes food and energy and serves as a key metric for central bank policies – also increased, reaching 2.7% y-o-y in October, up from 2.6% in September.

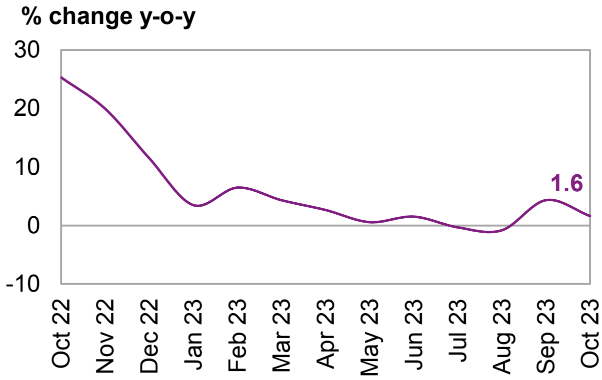
While the BoJ has initiated changes to its ultra-accommodative monetary policies, it has maintained its negative key policy rate, at a level of -0.1%. In the meantime, it has reintroduced a tightening approach to yield curve control (YCC). Given the high and increasing inflation, how the BoJ will navigate an exit from its current loose monetary policy framework remains uncertain. A disorderly exit could have adverse consequences in Japanese government bond markets, potentially affecting foreign treasury bonds and causing further repercussions on Japanese asset markets and the overall economy.

Goods exports sustained modest growth, increasing by 1.6% y-o-y in October, a decline from the 4.3% y-o-y growth observed in September.

Retail sales exhibited a slight contraction in growth but continued to follow an expanding trend, driven by strong domestic demand in October. Retail sales grew by 4.2% y-o-y in October, moderating from the 6.2% y-o-y growth in September and the 7% y-o-y growth in August, based on non-seasonally adjusted value terms.

Consumer confidence remained sound and experienced a marginal increase, with the consumer confidence index reaching 35.5 in November, up from 35.4 in October and 35.2 in September.

Graph 3 - 7: Japan's exports



Sources: Ministry of Finance, Japan Tariff Association and Haver Analytics.

Near-term expectations

While Japan experienced robust growth in 1H23, surpassing its growth potential, the subsequent 3Q23 saw a decline in economic activity. Forecasts indicate a normalizing growth trend towards the economy's average growth levels, estimated to be around 1%, in the near term. The initial two quarters of 2023 witnessed substantial growth rates of 3.7% q-o-q SAAR in 1Q23 and 4.5% q-o-q SAAR in 2Q23. However, 3Q23 exhibited a notable decrease, with a 2.1% q-o-q SAAR contraction. Projections for 4Q23 anticipate a recovery with a growth rate of 0.5% q-o-q SAAR. Moving into 1H24, growth rates are anticipated to stabilize at approximately 1%. A resurgence in activity is expected in the latter part of 2024, supported by fiscal stimulus measures and in alignment with global growth expectations. Forecasts for 2H24 indicate growth rates of around 2% on an annualized quarterly average basis.

The significant growth experienced in 1H23 was notably driven by pent-up demand in contact-intensive sectors, particularly in areas like tourism. However, the services sector's momentum decelerated in 3Q23, and this trend is expected to persist through the year-end and into 2024. Despite this, there is optimism regarding the potential stabilization and expansion of Japan's growth trajectory, given the gradual uptick anticipated in IP and exports in the short term. The recent announcement of fiscal stimulus measures is poised to provide essential support to the Japanese economy, counteracting the prevailing slowdown to some extent. According to analysis from Goldman Sachs, the overall contribution to economic growth from this comprehensive package is estimated to be approximately 0.5% of GDP over both fiscal years of 2023 and 2024.

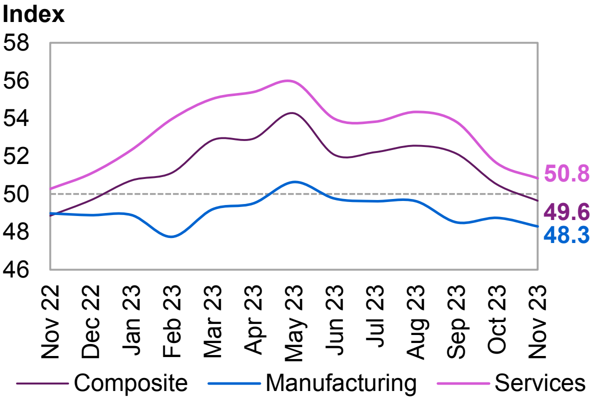
Given the persistent weakness of the yen and rising inflation, among other factors, the BoJ is anticipated to continue its path of gradual tightening. This trajectory may involve a sustained emphasis on its YCC policies. Further insights into these developments are expected to be unveiled during the BoJ's December meeting. The BoJ may adopt a more decisive stance in the near term, especially if the relative economic strength observed in 1H23, along with ongoing inflation and the recent depreciation of the yen, persists. Inflation is projected to remain relatively high, reaching around 3% by year-end and therefore adding complexity to the BoJ's position, particularly in light of the recent softness in overall output. The central bank faces a challenging situation in balancing these factors and determining an appropriate course of action.

November's PMI numbers indicate a further softness in the manufacturing sector, continuing to experience a contractionary trend. Conversely, the services sector, while experiencing a deceleration based on the latest available figures, remained above the growth-indicating threshold of 50.

The **services sector PMI**, which constitutes around two-thirds of the Japanese economy, retracted to 50.8 in November, following 51.6 in October, 53.8 in September and 54.3 in August.

The **manufacturing PMI** contracted to a level of 48.3 in November, compared with 48.7 in October, following a level of 48.5 in September and 49.6 in August.

Graph 3 - 8: Japan's PMIs



Sources: S&P Global and Haver Analytics.

After strong growth in 1H23 and a decline in 3Q23, the **2023 economic growth forecast** for Japan is revised down to 1.7%. Growth is forecast to be underpinned by domestic demand, primarily driven by the services sector, coupled with a gradual and ongoing improvement in exports.

The projection for **2024** was revised down slightly and stands at 0.9%, influenced by a carry-over of impacts from the subdued performance in 2H23.

Table 3 - 5: Japan's economic growth rate and revision, 2023–2024*, %

	Japan
2023	**1.7**
Change from previous month	-0.2
2024	**0.9**
Change from previous month	-0.1

*Note: * 2023 and 2024 = Forecast.*

Source: OPEC.

Non-OECD

China

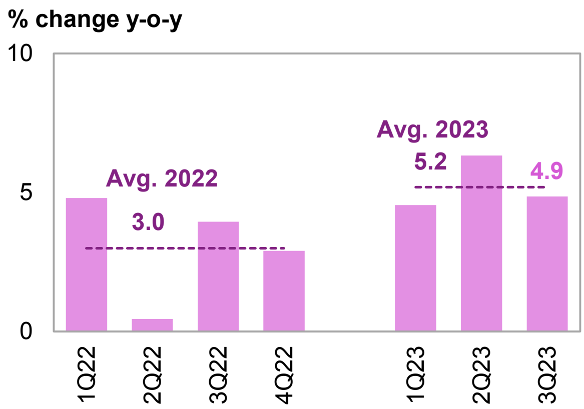
Update on the latest developments

China has sustained its recovery with a gradual improvement in domestic demand, a rebound in industrial production, and positive sentiment indicators, all indicating the likelihood of steady growth in 4Q23. This follows robust economic growth of 4.9% y-o-y in 3Q23, after growth rates of 6.3% y-o-y in 2Q23 and 4.5% y-o-y in 1Q23.

The momentum observed in 1H23 was notably driven by pent-up demand in the services sector, particularly in contact-intensive areas such as leisure, tourism, and transportation, which received substantial support. Although the services sector is expected to experience a somewhat decelerating trend, an improvement in industrial production is forecast to counterbalance the deceleration in the services sector. However, while China's overall economic activity has experienced a positive upturn, challenges in the property sector persist.

Retail trade growth has seen further improvement, building on the positive momentum observed in September, which saw y-o-y growth of 5.5%. The most recent data for October indicates an even more robust performance, with retail trade expanding by 7.6% y-o-y.

Graph 3 - 9: China's economic growth



Sources: National Bureau of Statistics and Haver Analytics.

In a similarly positive trend, **Industrial Production (IP)** increased by 4.6% y-o-y in October, following growth rates of 4.5% in both September and August. Recent developments in external trade suggest an increasingly favourable situation.

Export volumes showed a continued recovery in October and September, rising by 7.4% y-o-y and 7.9% y-o-y, respectively. This follows growth of 5.9% y-o-y in August, marking a rebound after a period of declining exports from May to July, according to data reported by China's General Administration of Customs.

Consumer price trends have remained deflationary in recent months, persisting in October. The headline **inflation rate** retreated again, re-entering deflationary territory, with a decline of 0.2% y-o-y in October. The closely monitored inflation rate for urban areas also fell by 0.1% y-o-y in October, following growth of 0.1% y-o-y in September.

Near-term expectations

Given the sustained and steady momentum in China, the outlook for **economic growth** remains positive towards the end of this year and into 2024. Following y-o-y growth of 4.5% in 1Q23, 2Q23 saw economic growth rise to 6.3%, followed by robust growth of 4.9% y-o-y in 3Q23. This trend is expected to continue, with 5% growth projected in 4Q23. Looking ahead to 2024, growth is anticipated to slightly decelerate. Quarterly growth is expected to be distributed relatively evenly throughout the year, with a relative acceleration around mid-year before a gradual slowdown towards the end of the year. Recent stimulus measures underscore the government's commitment to achieving its growth target of around 5% for the current year and addressing areas of economic weakness, particularly the real estate sector. Further monetary policy and financial-sector-related support measures are likely, including a potential round of key policy rate cuts of around 10 basis points, bringing the one-year loan prime rate to 3.35% by year-end. Additionally, another 25 basis points cut in the reserve ratio requirement (RRR) until year-end is anticipated. The RRR for financial institutions stood at around 7.4% by the beginning of December. Maintaining accommodative liquidity conditions will be important to providing support for the economy, especially for property developers.

Sector-wise, recent dynamics in industrial production suggest modest improvements in the manufacturing sector in 4Q23 and throughout 2024. However, the services sector is expected to experience a gradual slowdown into 2024, while continuing to provide overall support. Challenges persist in the housing sector, which has witnessed continued contraction. On a positive note, improvements in exports are anticipated to contribute to economic growth towards the end of this year and throughout 2024, building on the recent improving trend.

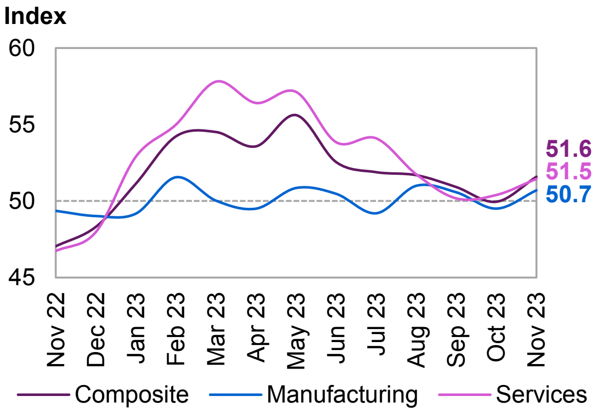
Inflation is forecast to sustain low growth dynamics up to the end of the year, with expectations of a gradual increase in 2024. The headline CPI is projected to almost reach 0% in 4Q23, before rising to approximately 0.5% y-o-y in 1Q24, and maintaining an average of slightly below 2% throughout 2024. This projection is expected to provide the government with additional flexibility to implement economic support measures through both monetary and fiscal channels.

November PMI readings, as provided by S&P Global, show that activity in the services sector continued to expand. The manufacturing sector exhibited a tangible recovery, surpassing the expansionary level of 50.

The **manufacturing PMI** increased to 50.7 in November, marking a recovery from the October level of 49.5.

The **services sector index** rose to 51.5 in November, indicating further expansion compared to the October level of 50.4.

Graph 3 - 10: China's PMI



Sources: Caixin, S&P Global and Haver Analytics.

The **2023 economic growth forecast** remains unchanged at 5.2%. This projection takes into account the anticipation of sustained pent-up demand and a continuation of the rebound in exports in 4Q23. Moreover, authorities are expected to implement additional measures to support economic growth, particularly in the real estate sector.

Economic growth in **2024** is forecast to decelerate from the level observed this year and remains unchanged at 4.8%.

Table 3 - 6: China's economic growth rate and revision, 2023–2024*, %

	China
2023	**5.2**
Change from previous month	0.0
2024	**4.8**
Change from previous month	0.0

*Note: * 2023 and 2024 = Forecast.*

Source: OPEC.

Other Asia

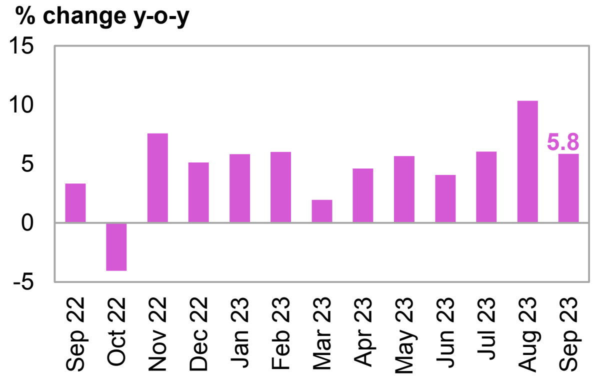
India

Update on the latest developments

India's economy continued its significant expansion, registering y-o-y growth of 7.6% in 3Q23. This robust expansion received support from an array of factors, each contributing to varying degrees. Government-led capital expenditure (capex) growth was the main driver, alongside the expansion of credit in the financial sector and substantial momentum in the manufacturing sector's quarterly dynamics. Government expenditure surged by 14.7% y-o-y and private household consumption also held up well, albeit expanding at a more moderate rate of 2.9% y-o-y. India's economic growth demonstrated strength in 1H23, reaching 6.1% y-o-y in 1Q23, and accelerating further to 7.8% y-o-y in 2Q23. After a mid-year spike in inflation, price trends began to normalize up to October. However, persistent inflationary uncertainties and significant momentum continuing in the economy have deterred the central bank from adopting a more accommodative monetary policy stance. Another factor introducing uncertainty, particularly concerning inflation and crucial food prices, is the El Niño phenomenon. This may bring unforeseen challenges to food output due to potentially volatile weather conditions, leading to unexpected price swings in this important CPI category.

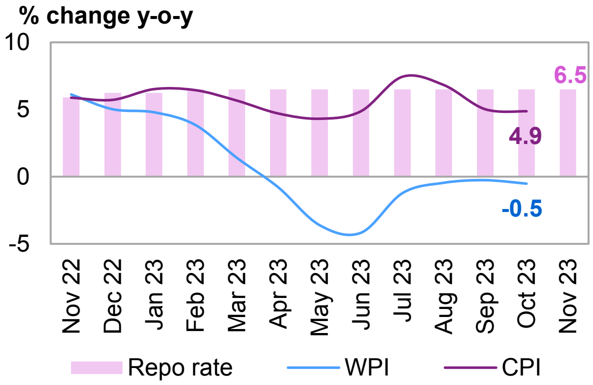
The ongoing strong trajectory in economic growth up to 3Q23 is reinforced also for 4Q23 based on recent output figures and leading indicators. While the Indian economy's growth has been buoyed by a broad-based expansion across major sub-sectors, the services sector is anticipated to remain the primary driver of growth. With a sustained increase in industrial production and improvements in related leading indicators, support from India's manufacturing sector is expected to persist. Industrial production grew by 5.8% y-o-y in September, following a substantial rise of 10.3% y-o-y in August and 6% y-o-y in July.

Graph 3 - 11: India's industrial production



Sources: Ministry of Statistics and Program Implementation of India and Haver Analytics.

Graph 3 - 12: Repo rate and inflation in India



Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

While **inflation** in India experienced an increase during the summer months, it has since been on a declining trend, particularly in the latest available month of October. The general CPI rose by 4.9% y-o-y in October, down from 5% y-o-y in September and 6.8% y-o-y in August. Food and beverage inflation, which contributed to the spike in overall inflation during the monsoon-related period in the summer months, remained stable in October, registering a y-o-y increase of 6.3%, the same level as in September.

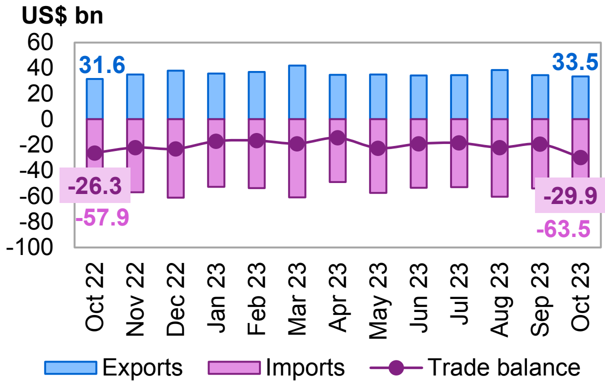
Core inflation, excluding fuel, food, and electricity, saw a further decline, standing at 4.3% y-o-y in October, compared to 4.5% y-o-y in September and 4.8% y-o-y in August.

India's **trade balance** posted a growing deficit of approximately $29.9 billion, compared to $26.3 billion in the same month last year.

Monthly **exports** amounted to $33.5 billion in October, an increase from $31.6 billion in October of the previous year.

Monthly **imports** stood at $63.5 billion in October, up from $57.9 billion in October of the previous year.

Graph 3 - 13: India's trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

Near-term expectations

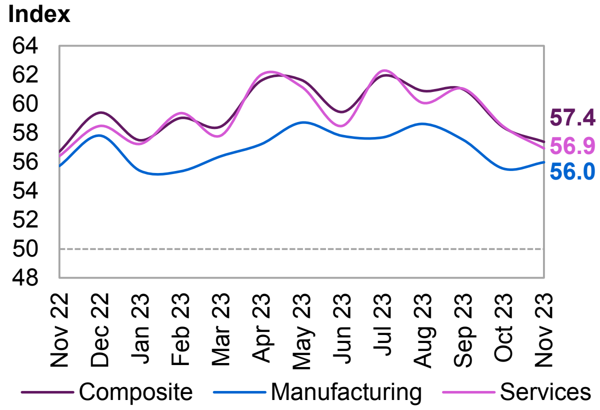
Benefiting from the robust momentum sustained in 3Q23 and extending into 4Q23, India's economy is expected to maintain **sound growth** toward the year-end, albeit with the expectation of a decelerating trend. This moderating trend is expected to continue into 2024, although the economy is projected to outpace other comparable key economies. The services sector is expected to remain the primary driver of economic growth until the end of the year. Following substantial y-o-y growth of 6.1% in 1Q23 and 7.8% in 2Q23, 3Q23 exhibited notably better-than-expected growth at 7.6% y-o-y. However, this pace is forecast to moderate to 4.8% y-o-y in 4Q23. Some uncertainty persists regarding inflationary developments and the potential impact of the El Niño phenomenon on agricultural output. Additionally, the extent to which the robust rise in 3Q23 food-related inflation of 8.7% y-o-y may impact households' disposable income in 4Q23 remains to be seen. Government spending is expected to continue providing support, as observed in 3Q23.

Despite the recent moderation in general **inflation**, core inflation remains relatively high. This, coupled with robust economic growth in India, is likely to prompt the Reserve Bank of India (RBI) to maintain its interest rates at the current level. The RBI's Monetary Policy Committee (MPC) voted to hold policy rates at 6.5% in its most recent meetings. While there is an expectation that inflation will adjust to considerably lower levels, primarily due to a reversal in vegetable prices, the RBI is expected to exercise careful oversight of price levels before considering a shift toward a more accommodative monetary policy, as observed in recent months.

The **S&P Global Manufacturing PMI** remained indicative of robust expansion, with the index level increasing to 56 in November, compared with 55.5 in October and 57.5 in September.

The **Services PMI** indicated ongoing steady dynamics in October but experienced a retraction from the very high levels of the previous months. It recorded a level of 56.9 in November, following 58.4 in October and 61 in September.

Graph 3 - 14: India's PMIs



Sources: S&P Global and Haver Analytics.

Considering robust growth in 3Q23, and the solid foundation for growth in 4Q23, the **economic growth forecast for 2023** is revised up to stand at 6.5% y-o-y, compared with the previous estimate of 6.2%. The key drivers behind this year's growth are the services sector, fiscal stimulus initiatives, and some support in consumption, albeit at a decelerating pace, during 2H23.

Table 3 - 7: India's economic growth rate and revision, 2023–2024*, %

	India
2023	**6.5**
Change from previous month	0.3
2024	**5.9**
Change from previous month	0.0

*Note: * 2023 and 2024 = Forecast.*
Source: OPEC.

With an expectation that some of the supportive dynamics will extend into **2024**, the growth forecast for the next year remains unchanged at 5.9%, consistent with the assessment of the previous month.

Latin America

Brazil

Update on latest developments

Brazil's economy has continued to expand at a steady pace in 3Q23, growing by 2.5% y-o-y on a seasonally adjusted (SA) base. 1Q23 growth was revised up to stand at 3.7% y-o-y SA and at 3.4% y-o-y SA in 2Q23. This compares to previous estimates of 3.4% y-o-y SA and 3.3% y-o-y SA, respectively. In 3Q23 private household consumption exhibited a healthy growth of 3.2% y-o-y SA while exports surged robustly by 12.1% y-o-y SA. Although recent data for 4Q23 suggests a slight deceleration, the overall momentum of Brazil's economic growth is expected to remain stable towards the end of the year. Positive indicators include a rebound in PMIs, a pick-up in consumer confidence, and slowing inflation after a recent uptick.

Additionally, industrial production is on an upward trajectory, and domestic demand has shown signs of robust growth, collectively indicating a sustained and healthy growth trend in 4Q23.

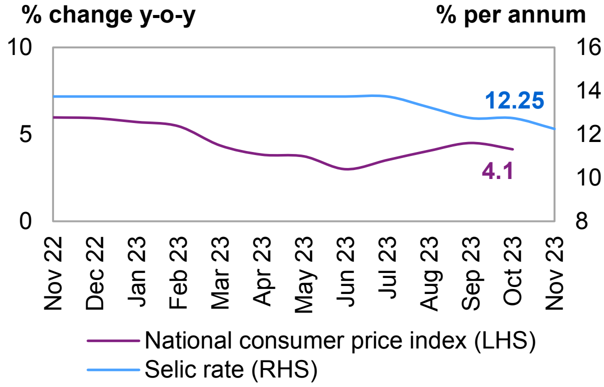
From a sectoral perspective, 1H23 dynamics were substantially driven by agriculture, and also by the services sector. While industrial output also witnessed improvement, there appears to have been a shift in momentum during 3Q23 with rising support from the industrial sector. According to the latest monthly GDP index data (October) from the Fundação Getúlio Vargas Institute, the services sector's growth for 3Q23 stood at 1.3% y-o-y following 2.6% in 2Q23 and 2.8% in 1Q23, based on the Institute's GDP index. Similarly, the industrial sector demonstrated growth, expanding by 1.9% y-o-y in 3Q23, up from 1.6% in 2Q23 and 1.2% in 1Q23 based on the GDP index. Notably, as indicated in the GDP numbers, the most significant contributor in 1H23 was the agricultural sector, with strong growth rates of 15.4% y-o-y in 1Q23 and 14.1% y-o-y in 2Q23.

The **consumer confidence** index, as measured by the Fundação Getúlio Vargas Institute, remained nearly unchanged as demonstrated by the latest available November data, sustaining an index level of 93 following a level of 93.2 in October. It is noteworthy that the quarterly 3Q23 level stood at 96.2, i.e. the latest dynamic indicates a deceleration.

Following the Banco Central do Brazil (BCN) decision to reduce the **SELIC key policy rate** by half a percentage point in August and September, the central bank sustained its monetary easing approach in November, further lowering the key policy rate by an additional 50 basis points to 12.25%. These rate adjustments aimed at supporting the economy were in response to a significant decrease in the inflation rate in prior months which, in turn, was the result of robust monetary tightening measures initiated in 2021.

Inflation retracted to stand at 4.1% y-o-y in October, followed by 4.5% in September and 4.1% in August. Meanwhile, core inflation continued to ease, reaching 5.6% y-o-y in October, down from 6% in September and 6.1% in August. The BCN's inflation target for 2023 remains at 3.25%.

Graph 3 - 15: Brazil's inflation vs. interest rate



Sources: Banco Central do Brasil, Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

The ongoing positive developments in the Brazilian economy had a sustained and favourable impact on the labour market in October. Based on the usual three-month moving average, Brazil's **unemployment rate** saw a decline, reaching 7.6% in October, compared to 7.7% in September, 7.8% in August, and 7.9% in July. This trend is expected to add a supportive element to private household consumption in the months ahead.

Near-term expectations

Following robust growth in the initial three quarters of this year, **economic growth** is expected to remain steady but at the same time decelerate towards the end of the current year and into 2024. An increasingly accommodative monetary policy is expected to bolster growth while the interest rate level is projected to remain relatively high. Despite an estimated drop to slightly less than 1% growth in 4Q23 after an average growth of more than 3% in the preceding quarters, recent rebounds in key indicators indicate strong upside potential. There is a possibility of a healthy carry-over of momentum into 2024. The growth outlook is anticipated to be well-supported by the improving dynamics in industrial activity and sustained, albeit slowing, growth in the services sector. However, there is a note of uncertainty concerning the fiscal discipline of the current administration. This factor introduces an element of uncertainty concerning the economic landscape.

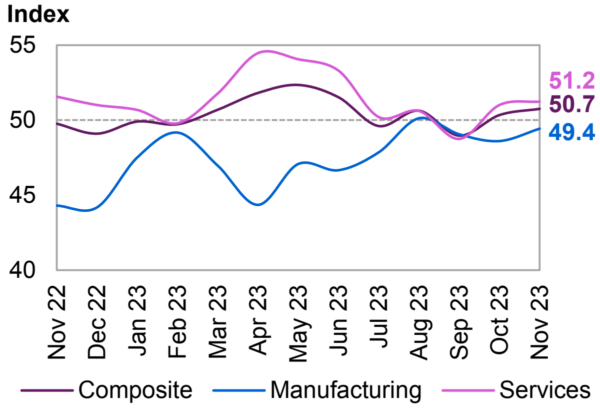
The potential for additional **monetary easing** in 2024 and the improving outlook for Brazil's investment environment are poised to bolster robust growth in the coming year. The SELIC rate is expected to remain stable at the current level of 12.25% up to the end of this year. Subsequently, it is anticipated to decline to approximately 10% by the end of 2024, reflecting a notable deceleration in the inflation trend, particularly in core inflation. This contrasts with expectations of higher interest rates in the preceding months. The forecast anticipates inflation averaging around 4% in 2023, marking a downward revision compared to previous expectations. Looking ahead to 2024, inflation is expected to stabilize at approximately 3.5%, suggesting a favourable trajectory in the inflationary landscape.

November PMI indices indicate ongoing support from the services sector, accompanied by an improving trend in the manufacturing sector, although the latter remains in contractionary territory.

The **manufacturing PMI** increased to 49.4 in November, up from 48.6 in October and following 49 in September.

The **services PMI** showed a modest expansion, reaching 51.2 in November, compared to 51 in October and 48.7 in September.

Graph 3 - 16: Brazil's PMIs



Sources: HSBC, S&P Global and Haver Analytics.

The **economic growth forecast for 2023** remains unchanged at 2.5%. This assessment factors in the sound base from 1H23 and the steady dynamics in 3Q23 and 4Q23. The sustained strength in domestic demand towards the end of the year has the potential to exceed current expectations and provide support for further growth.

Table 3 - 8: Brazil's economic growth rate and revision, 2023–2024*, %

	Brazil
2023	**2.5**
Change from previous month	0.0
2024	**1.2**
Change from previous month	0.0

*Note: * 2023 and 2024 = Forecast.*

Source: OPEC.

The steady, albeit decelerating, growth momentum, from 1H23 is expected to carry over into **2024**, resulting in an unchanged economic growth forecast of 1.2% compared with the previous month. The projection for 2024 anticipates a moderation in the central banks' tight monetary policy alongside sustained robust domestic demand.

Africa

South Africa

Update on the latest developments

While **South Africa's economy** managed ongoing challenges relatively well in 1H23, it experienced a decline again in 3Q23. Economic growth contracted by 0.5% y-o-y in 3Q23, contrasting with growth of 0.2% y-o-y in 1Q23 and 1.5% y-o-y in 2Q23. Although private consumption expenditures expanded by 0.5% y-o-y the economy slipped into negative territory, primarily due to supply-side shortages and consequent inventory drawdowns. The agricultural sector, facing challenges, witnessed a decline of more than 20% y-o-y in 3Q23. This added to existing issues in the electricity sector, which contracted by 3.5% y-o-y.

The acceleration in headline **inflation** to 5.9% y-o-y in October lifted the prospect of ongoing monetary tightening by the South African Reserve Bank (SARB) in the near term. The current key policy rate stands at 8.25%, already high. There is no expectation for the central bank to cut rates anytime soon, given that inflation has moved away from the midpoint of the bank's target range, set between 3% and 6% for both 2023 and 2024. In this context, core inflation remains relatively stable, registering an almost unchanged level of 4.4% y-o-y in October, compared with 4.5% y-o-y in September and 4.8% y-o-y in August.

A particular weakness was recorded in **manufacturing** in September, when a y-o-y decline of 4.3% was seen, marking the lowest level since 1Q23, when power shortages significantly dampened the sector's output. On a positive note, there was a recovery in electricity production in October, with a y-o-y increase of 1.6%. This development, compared with preceding months of decline up to September, suggests a recovery in this important sector of South Africa's economy.

Near-term expectations

Following the weakness observed in 3Q23, a **gradual rebound** is projected for 4Q23, supported by an improving situation in the electricity sector. Further improvements are anticipated in 2024. However, the outcome of the upcoming general election, which will likely be held in May, and the associated policies, will be a defining element in the year. It remains to be seen whether the African National Congress (ANC), South Africa's long-term ruling party, will maintain its majority in the National Assembly.

Furthermore, the **budget** for the fiscal year 2024 and 2025, set to be presented in February of 2024, will provide additional guidance for next year's growth. The Treasury anticipates the deficit to narrow to 4.6% of GDP in the upcoming fiscal year, compared with an expected deficit of 4.9% of GDP in the current fiscal year 2023 to 2024, as outlined in the medium-term budget policy statement. However, this gradual improvement is subject to uncertainty, contingent on revenue and ongoing spending demands. Gross government debt is projected to reach almost 78% of GDP by the end of the fiscal year ending in 2026, primarily due to a substantial US$14 billion bailout for Eskom, the South African electricity provider. Consequently, the rising debt-servicing burden limits fiscal flexibility.

Despite these challenges, an improved economic environment is forecast for 2024, driven by an expansion in household spending. This growth is expected to be facilitated by easing inflation and a potential decrease in currently high-interest rates in the next year. The anticipated reduction in interest rates, coupled with a slowdown in inflation, could boost household consumption and credit uptake in the coming year. However, the economy may remain susceptible to challenges such as power shortages, transport bottlenecks, higher interest rates, and fluctuations in commodity prices. The seasonally adjusted Purchasing Managers' Index rose to 50 in November, up from 48.9 in October, indicating some improvement in the economy.

The **2023 economic growth forecast** remains unchanged to stand at 0.6%, considering improvements in 2Q23, a slight decline in 3Q23 and the expectation of a gradual rebound of the economy in 4Q23.

The growth forecast for **2024** remains at 0.8%, reflecting expectations of improvements in both domestic conditions and external demand. These positive trends are fuelled by anticipated enhancements in domestic demand dynamics and a gradual increase in commodity exports.

Table 3 - 9: South Africa's economic growth rate and revision, 2023–2024*, %

	South Africa
2023	**0.6**
Change from previous month	0.0
2024	**0.8**
Change from previous month	0.0

*Note: * 2023 and 2024 = Forecast.*

Source: OPEC.

Russia and Central Asia

Russia

Update on the latest developments

In 3Q23, **Russia's economic growth** exhibited significant strength and hit 5.5% y-o-y. This followed growth of 4.9% y-o-y in 2Q23 and a decline of 1.8% y-o-y in 1Q23. This robust growth level, the highest since 2021, can be attributed to government-led support measures and an improved situation for exports, consequently sustaining robust domestic demand. Despite persistent external challenges, the economy appears to be receiving substantial support from an improving domestic environment and a solid underlying growth dynamic from both private households and the government.

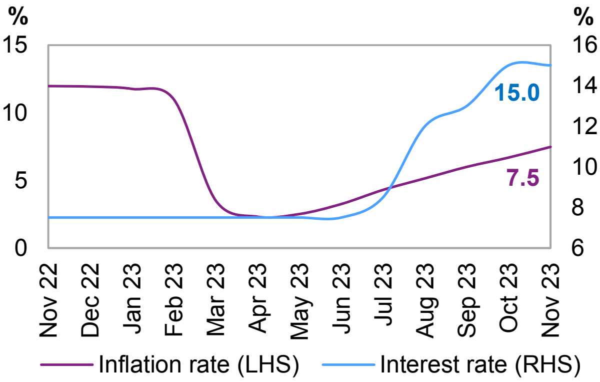
Industrial production continued to see steady growth, increasing by 5.3% y-o-y in October, compared to 5.6% in September and 5.4% in August. Manufacturing played a significant role, rising by 9.5% y-o-y, followed by 10.9% in September and 10.3% in August. Furthermore, the balance of payments dynamics are favourable to the rouble. The reintroduction of capital controls in October prompted major exporters to repatriate a substantial portion of their export earnings to the domestic market, easing limitations on foreign exchange liquidity.

Robust domestic demand, coupled with rising import prices, has contributed to an upward trajectory for inflation. However, recent monetary policy tightening and interest rate hikes by the Central Bank of Russia are anticipated to mitigate demand for imports, potentially resulting in a further appreciation of the rouble.

Although the central bank maintained interest rates in November, the preceding month saw a **key interest rate** increase to 15%, which extended the monetary tightening measures that were initiated by a 1.5% hike in September and a significant 3.5% increase in mid-August. The central bank's decision primarily reflects concerns about inflationary pressures on the Russian economy, driven by domestic demand outpacing the available capacity. The evolving situation warrants close observation and the possibility of additional interest rate hikes cannot be ruled out.

Consumer inflation climbed to 7.5% y-o-y in November, compared to 6.7% in October and 6% in September. This is the highest level since 1Q23. Core consumer prices experienced an acceleration, reaching 6.4% y-o-y in November, up from 5.5% in October and 4.6% in September.

Graph 3 - 17: Russia's inflation vs. interest rate



Sources: Federal State Statistics Service, Central Bank of Russian Federation and Haver Analytics.

Russia's **unemployment rate** was at a historically low level of 2.8% in October, followed by 3% in September and 3.1% in August.

Near-term expectations

Following robust growth in 2Q23 and 3Q23, Russia's economic momentum is expected to remain well-supported in 4Q23, although some deceleration is forecast towards the year-end, with a subsequent carry-over of this trend into 2024. Income levels remain resilient, and consumer spending continues its steady momentum, with private household expenditures expected to further drive this trend. Government-led initiatives are also anticipated to play a mitigating role in addressing ongoing economic challenges.

Russia's economic growth momentum suggests a steady trajectory in 2024, supported by robust exports of hydrocarbons and the favourable impact of an improving domestic situation, including healthy growth in government expenditures. The positive trend is expected to be sustained by double-digit growth in nominal wages, ensuring robust household spending in 4Q23, particularly through consumer spending and mortgage lending. Nominal wages expanded by 15.1% y-o-y in 3Q23, following 15.3% growth in 2Q23, and this trend is forecast to persist at around the same level in 4Q23.

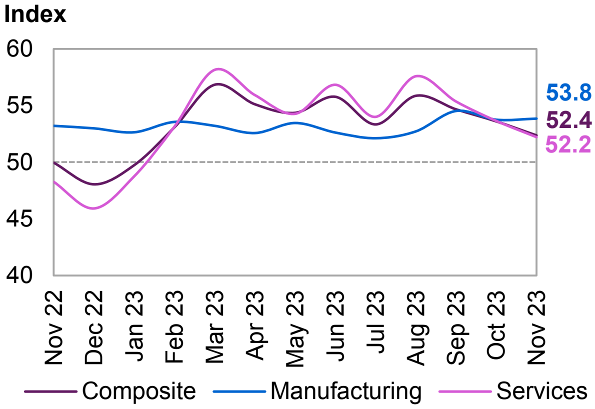
Inflation is anticipated to stay elevated on the back of buoyant consumption. After the substantial increase in inflation to 7.5% y-o-y in November, annual inflation is projected to be at around 6% on average in 2023, aligning with the latest central bank projections. Price developments are expected to slow in 2024, with annual inflation forecast at around 5% in the coming year. This provides the central bank with the flexibility to potentially implement a more accommodating monetary policy in 2024.

The **PMI index** for both the manufacturing and services sectors continued to show a supportive dynamic in November.

The S&P Global **manufacturing PMI** maintained a level of 53.8 in November, unchanged from October, but slightly below the level of 54.5 in September.

The **services PMI** experienced a slight drop to 52.2 in November, following 53.6 in October and 55.4 in September.

Graph 3 - 18: Russia's PMI



Sources: HSBC, S&P Global and Haver Analytics.

Considering the ongoing improving trend, Russia's **economic growth in 2023** is revised up to stand at 2.2%. While the forecast carries an upside risk, there remains a high degree of uncertainty amid the ongoing challenges for the Russian economy.

Looking ahead to **2024**, economic growth is forecast to remain well-supported, with next year's expected level lifted slightly to stand at 1.3%.

Table 3 - 10: Russia's economic growth rate and revision, 2023–2024*, %

	Russia
2023	**2.2**
Change from previous month	0.3
2024	**1.3**
Change from previous month	0.1

*Note: * 2023 and 2024 = Forecast.*

Source: OPEC.

OPEC Member Countries

Saudi Arabia

The latest estimate of **Saudi Arabia**'s 3Q23 GDP growth stood at -4.4% y-o-y, a slight improvement from the previous estimate of -4.5%, based on data by Saudi Arabia's statistical office This follows the growth of 1.2% y-o-y in 2Q23 and 3.8% y-o-y in 1Q23. Notably, private consumption expenditures expanded by 6% y-o-y indicating robust domestic growth. Gross capital formation, i.e. investments, also increased by 7% y-o-y. The contraction in GDP was mainly attributed to the oil sector, which declined by 13.2% y-o-y, while the non-oil private sector grew by 3%. The Riyadh Bank PMI in Saudi Arabia demonstrated resilience, maintaining a robust level of 57.5. This reflects the continued strength of the private non-oil sector, following its standing of 58.4 in October and 57.2 in September. Moreover, annual inflation eased further for the fifth consecutive month, registering at 1.6% y-o-y in October. This represents a further decrease from 1.7% in September and 2% in August. The October figure marks the lowest rate of inflation since February 2022.

Nigeria

Nigeria's economic growth in 3Q23 exceeded expectations, registering a robust 3.1% y-o-y increase, surpassing the 2.6% y-o-y growth in 2Q23 and 2.4% y-o-y in 1Q23. This positive performance is attributed to strong activity in the non-oil sectors, especially in services and agriculture. However, there are concerns about inflationary pressures in Nigeria, with the inflation rate reaching 27.3% y-o-y. This acceleration is largely attributed to persistent second-round effects following the removal of petrol subsidies and the devaluation of the naira. The current inflation rate compares to 26.7% y-o-y in September and 25.8% in August. The annual core inflation rate, excluding farm produce, rose to 22.7% y-o-y in October, compared to 22.1% in September and 21.5% in August. Meanwhile, monthly consumer prices increased by 1.7% m-o-m in October, following a rise of 2.1% in September and a surge of 3.2% in August. The November Stanbic IBTC Bank of Nigeria PMI dropped to 48, compared to 49.1 in October and 51.1 in September, indicating a challenging economic situation ahead.

The United Arab Emirates (UAE)

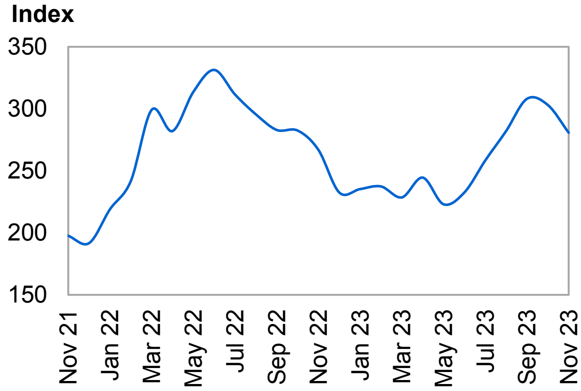
The **United Arab Emirates**' non-oil economic activities have maintained their robust performance, a trend that is anticipated to persist into 2024. The economy demonstrated strong underlying dynamics, resulting in economic growth of 3.7% y-o-y in 2Q23. Recent PMI readings for November and October further underscored the sustained strength of the non-oil sectors in the UAE. The PMI registered 57.7 in October, reaching its highest level since the onset of the coronavirus pandemic in 2020. Subsequently, it remained nearly unchanged at 57 in November. Fuelled by robust demand, inflation rose to 4.8% y-o-y in December, reaching a three-month high, primarily driven by the leisure sector and transportation. The upward trajectory in non-oil activities is expected to persist, contributing to continued growth in the coming year. Prospects for the UAE's non-oil GDP indicate ongoing momentum, supported by increased business confidence, government reforms, and an expansion in household spending.

The impact of the US dollar (USD) and inflation on oil prices

The **US dollar (USD) index** receded in November after three consecutive months of gains, falling by 1.8% m-o-m. The USD was pressured by a retraction in US treasury yields, a slowdown of inflationary pressures, and softer key macroeconomic indicators, which helped solidify market expectations of lower interest rates. Y-o-y, the index was down by 3.3%.

On **developed market (DM) currencies**, the USD fell by 2.2% and 1.9% m-o-m in November against the euro and the pound respectively. At the same time, it rose marginally by 0.1% m-o-m against the yen. The USD was down by 5.7% and 5.6% y-o-y against the euro and the pound respectively. Meanwhile, it was up by 4.9% against the yen over the same period.

Graph 3 - 19: The Modified Geneva I + US$ Basket (base June 2017 = 100)



Sources: IMF and OPEC.

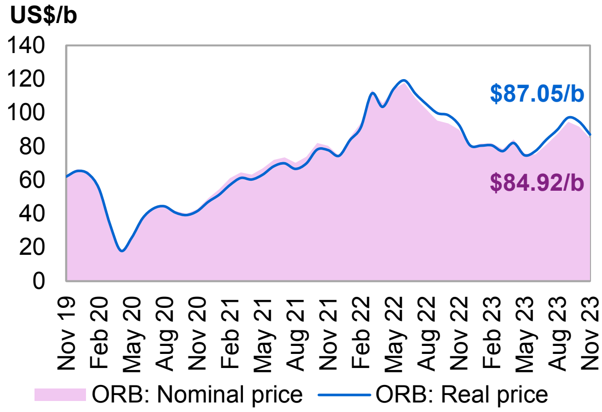
In terms of **emerging market (EM) currencies**, the USD rose marginally by 0.1% m-o-m in November against the rupee, but fell by 1.0% and 3.2% m-o-m against the yuan and the real respectively over the same period. The USD was up by 1.8% and 0.8% y-o-y against the rupee and yuan respectively; however, it was down by 7.0% against the real over the same period.

The differential between nominal and real **ORB** prices narrowed m-o-m. **Inflation** (nominal price minus real price) went from a discount of $2.92/b in October, to a discount of $2.13/b in November, a 27.1% decline m-o-m.

In **nominal terms**, accounting for inflation, the ORB price went from $91.78/b in October to $84.92/b in November, a 7.5% decrease m-o-m. The ORB was down by 5.4% y-o-y in nominal terms.

In **real terms** (excluding inflation), the ORB went from $94.70/b in October to $87.05/b in November, an 8.1% decrease m-o-m. The ORB was down by 6.1% y-o-y in real terms.

Graph 3 - 20: Impact of inflation and currency fluctuations on the spot ORB price (base June 2017 = 100)



Source: OPEC.

World Oil Demand

The forecast for world oil demand growth in 2023 remains unchanged from last month's assessment at 2.5 mb/d. Oil demand was adjusted lower in 3Q22 and 4Q23 in the OECD Europe and Asia Pacific. This was offset by an upward revision in OECD Americas, due to better-than-expected growth, mainly from Canada. In non-OECD countries, downward revisions to the Middle East and Africa in 3Q23 and 4Q23 were offset by upward revisions in China, Other Asia, and Latin America. Total world oil demand is expected to average 102.1 mb/d in 2023, primarily driven by requirements from non-OECD countries.

In 2024, world oil demand growth is forecast at 2.2 mb/d for an average of 104.4 mb/d, unchanged from the previous assessment. Oil demand is expected to be supported by resilient global GDP growth, amid continued improvements in economic activity in China. The OECD is expected to grow by 0.3 mb/d to reach 46.1 mb/d. Oil demand in the OECD is not expected to surpass 2019 consumption levels. OECD Americas is seen as leading growth, while OECD Europe and Asia Pacific are expected to recover from their 2023 contraction, primarily supported by transportation fuels, particularly gasoline and jet/kerosene. In non-OECD, oil demand is projected to grow by a healthy 1.9 mb/d, at 58.3 mb/d. Continuous improvements in economic activity, steady manufacturing, and transportation activity mostly in China, Other Asia, and the Middle East, as well as in India and Latin America, are expected to account for the bulk of oil consumption.

In terms of oil products, transportation fuels – jet/kerosene, gasoline, and diesel – are expected to drive demand growth. Petrochemical feedstock is also expected to support oil demand in the non-OECD region. However, the forecast is subject to global economic developments, particularly uncertainties about the OECD's manufacturing and petrochemical sectors.

Table 4 - 1: World oil demand in 2023*, mb/d

							Change 2023/22	
World oil demand	**2022**	**1Q23**	**2Q23**	**3Q23**	**4Q23**	**2023**	**Growth**	**%**
Americas	24.87	24.52	25.21	25.47	24.94	25.04	0.17	0.68
of which US	*20.16*	*19.92*	*20.50*	*20.47*	*20.05*	*20.24*	*0.08*	*0.38*
Europe	13.51	13.10	13.54	13.67	13.34	13.41	-0.09	-0.70
Asia Pacific	7.38	7.81	6.96	7.07	7.65	7.37	-0.01	-0.12
Total OECD	**45.75**	**45.43**	**45.71**	**46.20**	**45.93**	**45.82**	**0.07**	**0.14**
China	14.95	15.73	16.06	16.27	16.37	16.11	1.16	7.75
India	5.14	5.40	5.40	5.17	5.50	5.37	0.23	4.48
Other Asia	9.06	9.33	9.48	9.12	9.18	9.28	0.22	2.37
Latin America	6.44	6.60	6.70	6.75	6.68	6.68	0.25	3.83
Middle East	8.30	8.63	8.32	8.82	8.73	8.63	0.33	3.98
Africa	4.40	4.59	4.24	4.27	4.83	4.48	0.08	1.85
Russia	3.70	3.83	3.59	3.74	4.01	3.79	0.09	2.40
Other Eurasia	1.15	1.24	1.21	1.02	1.23	1.17	0.02	2.03
Other Europe	0.77	0.79	0.77	0.75	0.83	0.79	0.02	2.29
Total Non-OECD	**53.90**	**56.15**	**55.76**	**55.92**	**57.35**	**56.29**	**2.39**	**4.44**
Total World	**99.66**	**101.57**	**101.47**	**102.12**	**103.28**	**102.11**	**2.46**	**2.47**
Previous Estimate	99.66	101.58	101.47	102.11	103.28	102.11	2.46	2.47
Revision	0.00	-0.01	0.00	0.01	0.00	0.00	0.00	0.00

*Note: * 2023 = Forecast. Totals may not add up due to independent rounding.*

Source: OPEC.

Table 4 - 2: World oil demand in 2024*, mb/d

World oil demand	2023	1Q24	2Q24	3Q24	4Q24	2024	*Change 2024/23* Growth	%
Americas	25.04	24.70	25.38	25.67	25.10	25.22	0.18	0.72
of which US	*20.24*	*20.06*	*20.64*	*20.62*	*20.19*	*20.38*	*0.14*	*0.70*
Europe	13.41	13.16	13.60	13.74	13.38	13.47	0.06	0.41
Asia Pacific	7.37	7.84	6.97	7.10	7.65	7.39	0.02	0.29
Total OECD	**45.82**	**45.70**	**45.96**	**46.51**	**46.13**	**46.08**	**0.26**	**0.56**
China	16.11	16.30	16.52	16.89	17.04	16.69	0.58	3.60
India	5.37	5.63	5.64	5.40	5.69	5.59	0.22	4.10
Other Asia	9.28	9.60	9.73	9.48	9.54	9.59	0.31	3.34
Latin America	6.68	6.79	6.88	6.97	6.84	6.87	0.19	2.84
Middle East	8.63	8.91	8.76	9.38	8.98	9.01	0.38	4.40
Africa	4.48	4.70	4.42	4.44	4.96	4.63	0.15	3.35
Russia	3.79	3.89	3.70	3.89	4.08	3.89	0.10	2.65
Other Eurasia	1.17	1.27	1.24	1.08	1.28	1.22	0.04	3.77
Other Europe	0.79	0.81	0.78	0.77	0.84	0.80	0.01	1.75
Total Non-OECD	**56.29**	**57.90**	**57.68**	**58.29**	**59.25**	**58.28**	**1.99**	**3.53**
Total World	**102.11**	**103.60**	**103.64**	**104.80**	**105.38**	**104.36**	**2.25**	**2.20**
Previous Estimate	102.11	103.60	103.64	104.79	105.38	104.36	2.25	2.20
Revision	0.00	-0.01	0.00	0.01	0.00	0.00	0.00	0.00

*Note: * 2024 = Forecast. Totals may not add up due to independent rounding.*

Source: OPEC.

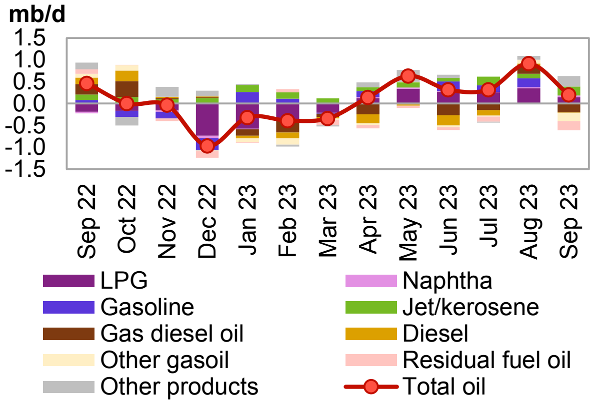
OECD

OECD Americas

Update on the latest developments

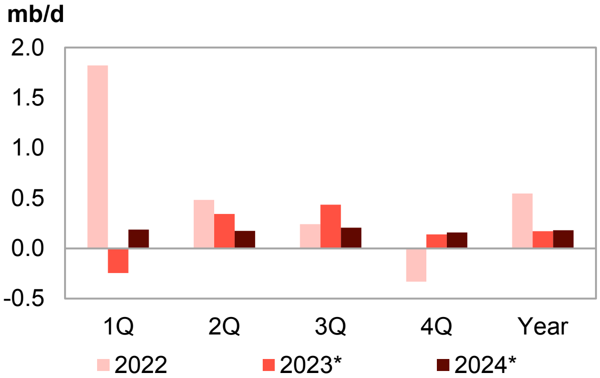
Oil demand in OECD Americas increased by 202 tb/d, y-o-y, in September. The increase in demand is almost entirely from Canada, as US oil demand softened marginally by 40 tb/d, y-o-y. Details of the contribution of various products show that the 'other products' category led demand growth in the region with 238 tb/d, y-o-y. On the back of healthy air travel demand, jet kerosene increased by 207 tb/d, y-o-y. In terms of petrochemical feedstock requirements, LPG posted 147 tb/d y-o-y growth and naphtha increased 35 tb/d. However, diesel and residual fuels declined by 197 tb/d and 212 tb/d, respectively, in September and gasoline demand remained flat.

Graph 4 - 1: OECD Americas oil demand by main petroleum product category, y-o-y change



Sources: IEA, JODI, OPEC and national sources.

Graph 4 - 2: OECD Americas oil demand, y-o-y change



*Note: * 2023 and 2024 = Forecast.*
Source: OPEC.

Oil demand in the **US** softened marginally by 40 tb/d, y-o-y, in September. Oil demand was subdued amid large declines in diesel and residual fuels.

Data from the Federal Highway Administration shows that miles travelled on all roads increased by 0.9%, y-o-y in September. However, the seasonally adjusted vehicle miles travelled for September declined by 0.30% (0.8 billion vehicle miles) compared with August 2023.

In terms of air travel, American Airlines' domestic revenue passenger-kilometres (RPKs) grew by 5.5% y-o-y and by 6.1% over the pre-COVID levels in September 2019 according to a report from the International Air Travel Association (IATA). Regarding airline capacity, available seat kilometres (ASKs) climbed by 9.6% y-o-y, while revenue passenger-kilometres (RPKs) increased by 11.2% y-o-y.

Residual fuels and diesel sustained declines of 244 tb/d and 166 tb/d, y-o-y, respectively, and gasoline softened by 15 tb/d.

On the positive side, oil demand growth was led by the 'other products' category, growing by 194 tb/d. On the back of healthy air travel activity, jet/kerosene expanded by 159 tb/d, y-o-y, up from 58 tb/d y-o-y growth seen in the previous month. In terms of petrochemical feedstock requirement, naphtha demand increased 23 tb/d, y-o-y, and LPG saw 12 tb/d y-o-y growth.

Table 4 - 3: US oil demand, mb/d

			Change	*Sep 23/Sep 22*
By product	**Sep 22**	**Sep 23**	**Growth**	**%**
LPG	3.16	3.17	0.01	0.4
Naphtha	0.13	0.15	0.02	17.8
Gasoline	8.85	8.83	-0.01	-0.2
Jet/kerosene	1.54	1.70	0.16	10.3
Diesel	4.09	3.92	-0.17	-4.1
Fuel oil	0.47	0.22	-0.24	-52.5
Other products	2.19	2.39	0.19	8.8
Total	**20.42**	**20.38**	**-0.04**	**-0.2**

Note: Totals may not add up due to independent rounding.

Sources: EIA and OPEC.

Near-term expectations

In **2024**, economic activity in the US is expected to remain healthy, supported by private household consumption.

In 1Q24, the US GDP growth is forecast to continue to bolster oil demand. Specifically, further improvements in air travel are expected to support jet/kerosene demand. Heating fuels are also expected to see an uptick due to seasonal winter demand. However, industrial output has been on a prolonged downward trend, and road transportation is expected to soften during the winter season, thus dampening diesel and gasoline demand. Nevertheless, oil demand is projected to increase by about 135 tb/d y-o-y in 1Q24, mostly supported by demand for jet/kerosene and LPG.

Overall, US oil demand in 2024 is expected to expand by 143 tb/d, mostly supported by transportation fuels and light distillates.

OECD Europe

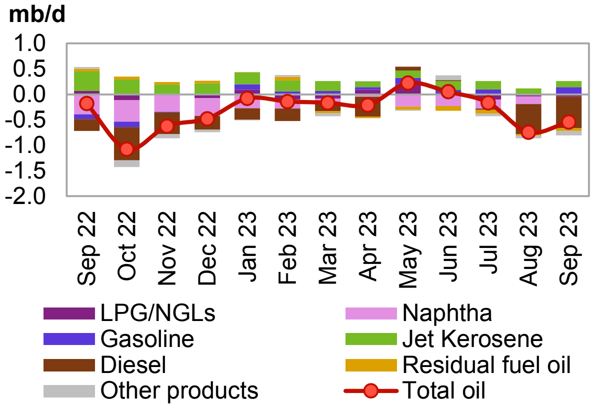
Update on the latest developments

Oil demand in OECD Europe remained under pressure from weak manufacturing and petrochemical activity in the region. Oil demand declined for the third consecutive month by 542 tb/d, y-o-y, in September, albeit an improvement from a 743 tb/d decline seen in August. Manufacturing activity in the big economies of the region remains sluggish.

The German economy has the weakest outlook. The country's manufacturing PMI has seen fifteen consecutive months of contraction and was at 39.6 points in September. Similarly, France's PMI has been in contraction for eight months. In September, the country's PMI fell to 44 points. Other countries in the region, such as Italy, Spain, and the UK, have all experienced similar weaknesses in their manufacturing sectors in recent months.

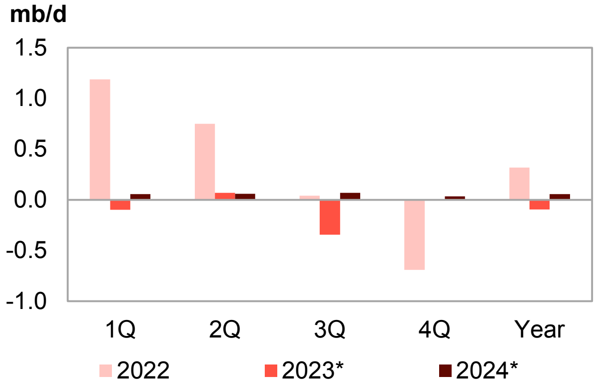
In addition, persistently high core inflation in the region compounded the problem. Eurozone annual inflation stood at 4.3%, y-o-y, in September, albeit an improvement from 5.2% seen in the previous month. Despite this, inflation remains above the 2% target set by the ECB. The services PMI in the region was also below expansion territory at 48.6 points in September.

Graph 4 - 3: OECD Europe's oil demand by main petroleum product category, y-o-y change



Sources: IEA, JODI, OPEC and national sources.

Graph 4 - 4: OECD Europe's oil demand, y-o-y change



*Note: * 2023 and 2024 = Forecast.*
Source: OPEC.

Subdued by weak manufacturing activity in the region, diesel demand recorded the largest contraction of 616 tb/d, y-o-y, compared with a 586 tb/d decline in the previous month. Prolonged deceleration in petrochemical activities weighed on LPG, which declined by 44 tb/d, y-o-y. Nevertheless, naphtha has recovered by 19 tb/d, from an annual decline of 150 tb/d in August. Furthermore, demand for the 'other product' category and residual fuels softened by 80 tb/d and 61 tb/d, respectively, y-o-y.

On the positive side, healthy transportation activity supported transportation fuels demand to remain steady. Gasoline surged further by 123 tb/d, y-o-y, from 13 tb/d growth in the previous month. Jet/kerosene also expanded by 120 tb/d, y-o-y, up from 106 tb/d recorded in August.

Near-term expectations

Looking ahead to **2024**, the region's economy is expected to show a gradual recovery. Furthermore, activity in the manufacturing sector is expected to see some improvement. Oil demand is projected to see growth of 57 tb/d, y-o-y, in 1Q24, mainly supported by regional jet/kerosene and gasoline consumption on the back of air and road travel and transportation activity. However, ongoing weak manufacturing and petrochemical activity are anticipated to weigh on industrial fuels and petrochemical feedstock.

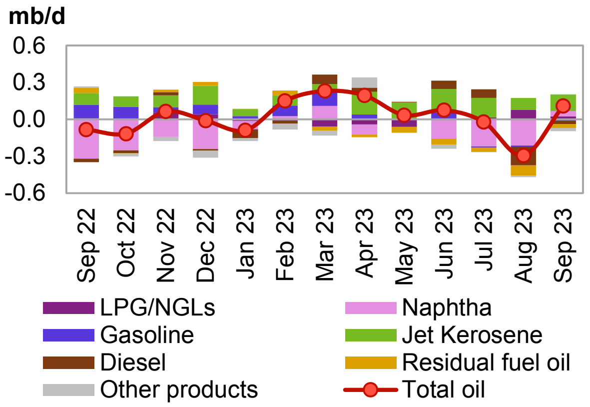
For the year, the region is expected to see growth of 55 tb/d, y-o-y, mostly supported by transportation fuels. Moreover, an expected gradual recovery in manufacturing activity is expected to bolster diesel demand in the region.

OECD Asia Pacific

Update on the latest developments

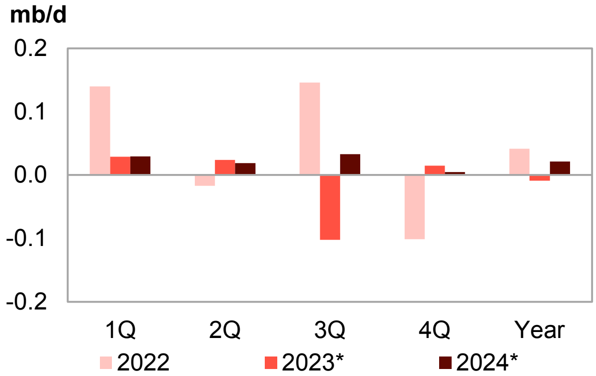
Oil demand in OECD Asia Pacific recovered by 108 tb/d, y-o-y, in September after two successive months of decline. The demand recovery was supported by jet/kerosene which grew by 25%, y-o-y. Similarly, healthy petrochemical feedstock requirements also supported demand.

Graph 4 - 5: OECD Asia Pacific oil demand by main petroleum product category, y-o-y change



Sources: IEA, JODI, METI and OPEC.

Graph 4 - 6: OECD Asia Pacific oil demand, y-o-y change



*Note: * 2023 and 2024 = Forecast.*
Source: OPEC.

According to a report by IATA, the international revenue passenger-kilometres (RPKs) in the Asia Pacific region surged 93% y-o-y in September. This brought traffic for the region's carriers within 20% of their 2019 levels.

Jet/kerosene led September oil demand growth by 137 tb/d, y-o-y, up from 98 tb/d observed in the previous month. The demand for jet/kerosene was healthy across all three major consuming countries in the region. After a long dismal performance, petrochemical feedstock demand in the region has shown signs of recovery, with naphtha growing by 43 tb/d, y-o-y from the decline of 212 tb/d seen in August. Similarly, LPG inched up by 24 tb/d, y-o-y albeit slowing from 77 tb/d growth observed in August.

However, gasoline demand in the region softened by 12 tb/d, although South Korea and Japan saw an increase in gasoline demand of 11 tb/d and 13 tb/d, respectively. Similarly, diesel also saw an annual decline of 26 tb/d, albeit an improvement from the 127 tb/d decline in the previous month. The decline in diesel demand was in Australia and Japan, as South Korea posted 12 tb/d, y-o-y, growth. Finally, residual fuels and the 'other products' category saw annual declines of 26 tb/d and 32 tb/d, respectively.

Near-term expectations

Looking ahead to **2024**, the region's economy is expected to grow modestly, albeit with variations among the region's countries. The forward-looking indicators – services and manufacturing PMIs – have also been in variance among the major oil-consuming countries of the region.

Despite being in the expansionary zone for over a year, Japan's service PMI slightly retracted to 51.6 points in October, from 53.2 points in September. The GDP of Japan is also forecast to slightly decelerate. The manufacturing PMI has also been below an expansionary trajectory for a prolonged period.

Similarly, services and manufacturing PMIs in Australia were in contraction in both September and October. Nevertheless, the South Korean manufacturing PMI saw an uptick. It rose from 50.5 in October to 51.2 in November.

Steady air traffic recovery amid healthy driving activity and petrochemical industry operations are anticipated to support oil demand to grow by 30 tb/d y-o-y in 1Q24. Moreover, following expected temperature declines during the winter season, extended government energy subsidies in Japan are also expected to support oil demand.

Despite the expected slowdown in economic momentum in the region, a healthy air travel dynamic and recovering petrochemical sector requirements are expected to support oil demand growth. As a result, OECD Asia Pacific is expected to grow by 22 tb/d, y-o-y, in 2024.

Non-OECD

China

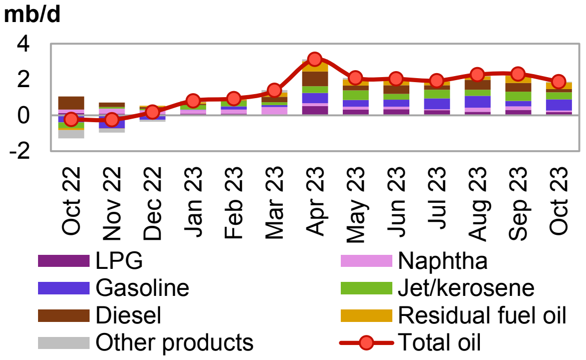
Update on the latest developments

Oil demand in China remained firm at about 2.0 mb/d, y-o-y, growth in October. Incremental demand was almost the same as in the previous month. The growth was partly supported by a weak baseline comparison and healthy economic activity amid a steady petrochemical feedstock requirement.

The forward-looking indicators show that China's services PMI was at 50.4 points in October, slightly above the 50.2 points seen in September. Manufacturing PMI retracted to 49.5 points in October, from 50.6 in September. Transportation activity in China surged during the Golden Week public holiday. According to China's National Bureau of Statistics, passenger traffic in terms of 100 million person-kilometres recorded 23.5% y-o-y growth in October, up from 20.9% seen in September. Similarly, according to the China Association of Automobile Manufacturers (CAAM), Chinese vehicle sales increased by 13.8%, y-o-y, in October.

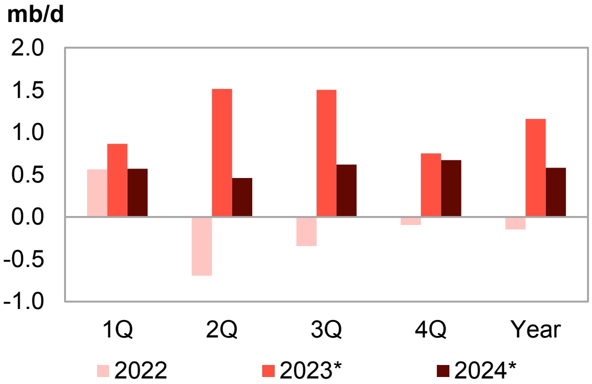
Furthermore, air travel activity also remained healthy. According to a report by China's Civil Aviation Authority, activities on domestic routes jumped 220% y-o-y in October, while international routes recorded a 78% increase. The significant rise in traffic in early October was due to a surge in international travels during the Golden Week public holiday, as passengers travelling out of or into China jumped by 85% compared to the same period in 2019 and almost three times that of a year ago, data from the National Immigration Administration (NIA) showed.

Graph 4 - 7: China's oil demand by main petroleum product category, y-o-y change



Sources: Chinese Petroleum Data Monthly, Chinese National Bureau of Statistics, JODI, Non-OECD Energy Statistics, Argus Global Markets, Argus China, and OPEC.

Graph 4 - 8: China's oil demand, y-o-y change



*Note: * 2023 and 2024 = Forecast.*
Source: OPEC.

On the back of surging transportation activity amidst a low baseline, gasoline demand increased 618 tb/d, y-o-y, in October, up from growth of 383 tb/d in the previous month. Meanwhile, jet/kerosene saw growth of 392 tb/d, y-o-y, supported by the low baseline, but was below the 520 tb/d recorded in September. Since mid-October, domestic flights have fallen back to 2019 levels after rising by as much as 20% above these during the end-September to early-October holiday week.

Residual fuels increased by 370 tb/d, y-o-y. Diesel demand grew by 186 tb/d, y-o-y, below September's growth of 478 tb/d. In terms of petrochemical feedstock, LPG posted 183 tb/d y-o-y, growth, down from 310 tb/d in the previous month, and naphtha increased by 88 tb/d, y-o-y, down from 190 tb/d the month before. Finally, the 'other products' category increased by 40 tb/d, y-o-y, with growth subdued by a high baseline comparison.

Table 4 - 4: China's oil demand*, mb/d

By product	Oct 22	Oct 23	Change Oct 23/Oct 22 Growth	%
LPG	2.62	2.80	0.18	7.0
Naphtha	1.87	1.95	0.09	4.7
Gasoline	3.23	3.84	0.62	19.2
Jet/kerosene	0.39	0.78	0.39	100.6
Diesel	4.67	4.86	0.19	4.0
Fuel oil	0.62	0.99	0.37	59.5
Other products	2.18	2.21	0.04	1.8
Total	**15.57**	**17.45**	**1.88**	**12.1**

*Note: * Apparent oil demand. Totals may not add up due to independent rounding.*
Sources: Argus Global Markets, China OGP (Xinhua News Agency), Facts Global Energy, JODI, National Bureau of Statistics China and OPEC.

Near-term expectations

Despite the current healthy economic and services sector activity, recent Chinese economic indicators have highlighted a slowing trend in industrial production. Accordingly, the momentum of oil demand is anticipated to slow from the strong growth experienced in 4Q23. Nevertheless, growing petrochemical capacity in China's Shandong-based Yulong Petrochemical plant – which should start its 400 tb/d refining complex in 1Q24 – is expected to strengthen petrochemical feedstock demand, boosting demand for naphtha in the near term. Additionally, China's jet fuel demand is expected to increase on the prospect of rising air transportation demand. Forward-looking indicators also point towards a healthy oil demand in the near term, with services PMI inching up from 50.4 points in October to 51.5 points in November. Similarly, manufacturing PMI rose from 49.5 points in October to 50.7 points in November. Accordingly, oil demand in China is anticipated to grow by a healthy 571 tb/d, y-o-y, in 1Q24.

Overall, in **2024**, despite an expected easing in the momentum of China's GDP growth compared to 2023, oil demand is expected to be supported by sustained healthy services sector activity, a recovery in manufacturing activity, and petrochemical sector requirements. Moreover, a further surge in international air travel is expected as China has lifted the ban on overseas group tours. This could encourage more people to travel abroad. Furthermore, demand for light distillates is also expected to continue rising on the back of a sustained expansion of the petrochemical industry. Increased transportation activity is expected to boost demand for gasoline and diesel. For the year, China's oil demand is anticipated to expand by 580 tb/d, y-o-y.

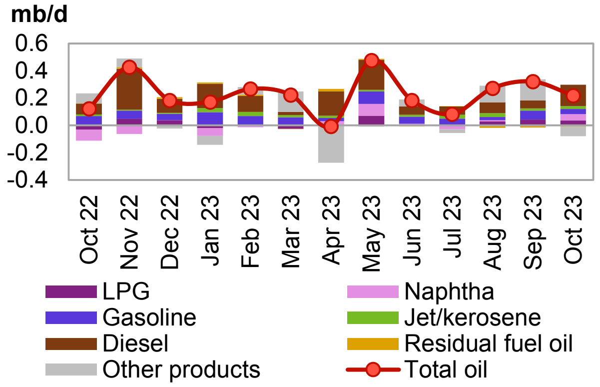
India

Update on the latest developments

Oil demand in India in October was firm at 218 tb/d, y-o-y, growth, slightly below the 320 tb/d growth recorded in the previous month. Diesel was the main driver of growth in October.

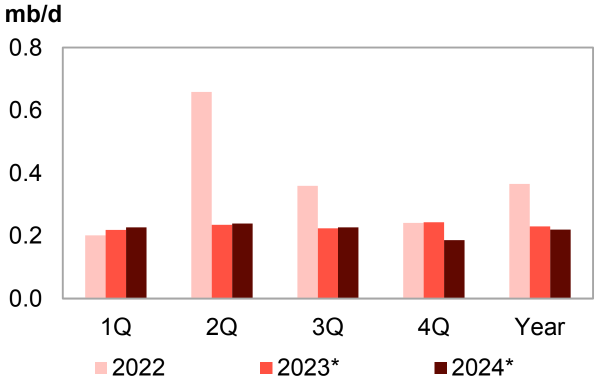
A report from the Ministry of Statistics and Program Implementation shows industrial production in India climbed 5.9%, y-o-y, in September 2023. Similarly, India's annual retail inflation eased to a four-month low of 4.9% in October from 5.0% in September. According to the Federation of Automobile Dealers Association, vehicle sales in India also increased by 12% in October, up from 3.5% recorded in September 2023. Indian domestic air traffic stood above pre-pandemic levels for the seventh consecutive month, as revenue passenger-kilometres (RPKs) increased 6.7% in September over 2019 levels. In October, India's services PMI stood at 58.4 points and manufacturing PMI was at 55.5 points.

Graph 4 - 9: India's oil demand by main petroleum product category, y-o-y change



Sources: PPAC, JODI, Non-OECD Energy Statistics and OPEC.

Graph 4 - 10: India's oil demand, y-o-y change



*Note: * 2023 and 2024 = Forecast.*
Source: OPEC.

In terms of oil products, diesel oil demand grew by 157 tb/d, y-o-y, in October. Diesel consumption increased 14.8%, m-o-m, supported by rising industrial activity and the onset of the festival season amid the sowing of winter crops. Furthermore, trucking activities also increased in October due to the need to transport goods along the supply chain as sellers stocked up to meet the rising demand for goods during the festival season. In terms of petrochemical sector requirements, naphtha saw 45 tb/d, y-o-y, growth from a decline of 32 tb/d in the previous month. LPG increased by 36 tb/d, y-o-y, in October, from 43 tb/d in September. LPG slightly declined by 5% m-o-m after the government raised LPG cylinder prices in October. Higher demand during the Diwali festival season, amid increased economic activity, supported gasoline and jet/kerosene to grow by 39 tb/d, y-o-y, and 19 tb/d, y-o-y. However, the 'other products' category and residual fuels declined by 71 tb/d and 8 tb/d, respectively.

Table 4 - 5: India's oil demand, mb/d

By product	Oct 22	Oct 23	*Change Oct 23/Oct 22* Growth	%
LPG	0.90	0.94	0.04	4.0
Naphtha	0.28	0.32	0.05	16.4
Gasoline	0.82	0.86	0.04	4.8
Jet/kerosene	0.17	0.18	0.02	11.6
Diesel	1.70	1.85	0.16	9.3
Fuel oil	0.12	0.11	-0.01	-6.9
Other products	1.09	1.02	-0.07	-6.5
Total	**5.07**	**5.29**	**0.22**	**4.3**

Note: Totals may not add up due to independent rounding.

Sources: JODI, Petroleum Planning and Analysis Cell of India and OPEC.

Near-term expectations

In the near term, ongoing strong economic activity combined with robust manufacturing activity, amid the Indian government's proposed increase in capital spending on construction, are expected to support India's oil demand in 1Q24. Moreover, the post-monsoon harvesting season and construction activity are also expected to provide additional support to demand growth. Furthermore, forward-looking indicators show healthy manufacturing and services PMIs, suggesting strong prospects for oil demand in the near term.

In 1Q24, oil demand is projected to grow by a healthy 227 tb/d, y-o-y. Distillates are expected to be the driver of oil demand growth, supported by harvesting, construction and manufacturing activities. Additionally, annual traditional festivities and the influx of travellers are expected to support transportation activity and boost gasoline and jet/kerosene demand. Overall, in **2024**, India is expected to see a healthy oil demand growth of 220 tb/d, y-o-y.

Latin America

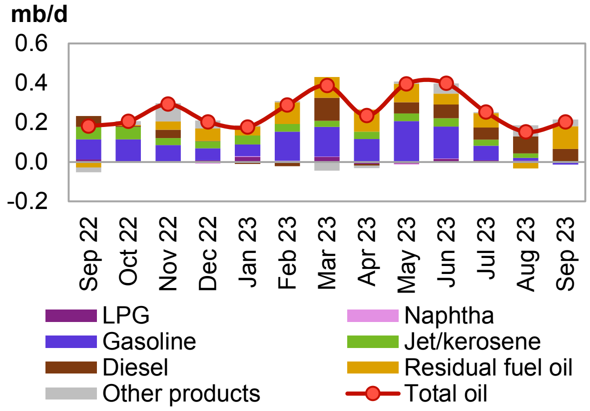
Update on the latest developments

Oil demand in Latin America expanded by 201 tb/d, y-o-y, in September from 152 tb/d growth in August. Oil demand in the region was led by diesel requirements from Brazil for the second consecutive month.

The Brazilian services PMI retracted to 48.7 points in September, following 50.6 points in August. At the same time, the Brazilian manufacturing PMI retracted to 49 points in September from 50.1 points in August.

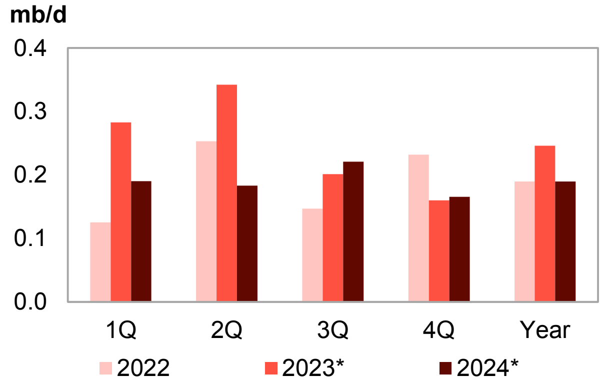
In terms of air travel, according to IATA, Latin American carriers expanded their recovery beyond pre-COVID levels in September, with a remarkable 26.8% annual growth in international RPKs.

Graph 4 - 11: Latin America's oil demand by main petroleum product category, y-o-y change



Sources: JODI, Non-OECD Energy Statistics and OPEC.

Graph 4 - 12: Latin America's oil demand, y-o-y change



*Note: * 2023 and 2024 = Forecast.*
Source: OPEC.

In terms of specific product demand, residual fuel was the main driver of demand in September with y-o-y growth of 114 tb/d, up from 33 tb/d in August. Diesel grew by 61 tb/d, y-o-y, slightly below the 84 tb/d growth seen in the previous month. In addition, the ´other products´ category expanded by 34 tb/d, y-o-y, from 57 tb/d growth in August. Jet/kerosene saw 5 tb/d growth, y-o-y, down from 23 tb/d growth recorded a month earlier. However, gasoline softened by 10 tb/d, y-o-y, from the 14 tb/d growth in August. Finally, in terms of petrochemical feedstock, the demand for both LPG and naphtha has remained broadly flat for three consecutive months.

Near-term expectations

Looking ahead, in the near term, oil demand in the region is expected to remain relatively strong amid projected healthy economic growth, a steady recovery in air travel, and ongoing support from the services and manufacturing sectors. These are anticipated to support regional oil demand to grow by 190 tb/d, y-o-y, in 1Q24.

Overall, in **2024**, continued healthy economic activity combined with improvements in both manufacturing activity and air travel are expected to support oil demand to expand by 190 tb/d, y-o-y. The outlook for oil demand growth sees transportation fuel demand expanding the most, followed by diesel and petrochemical feedstock.

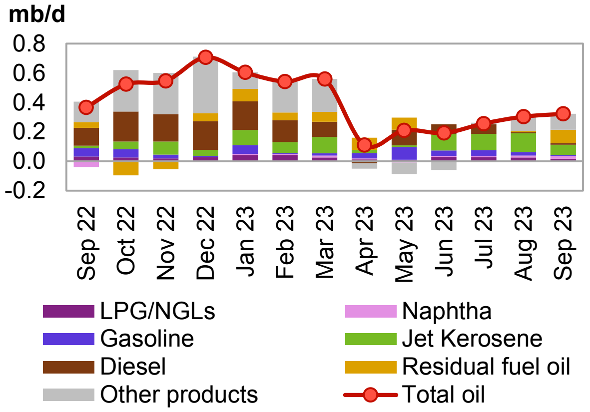
Middle East

Update on the latest developments

Oil demand in the Middle East in September expanded by 323 tb/d, y-o-y. The growth was mostly supported by demand for the ´other products´ category from Iraq and Saudi Arabia.

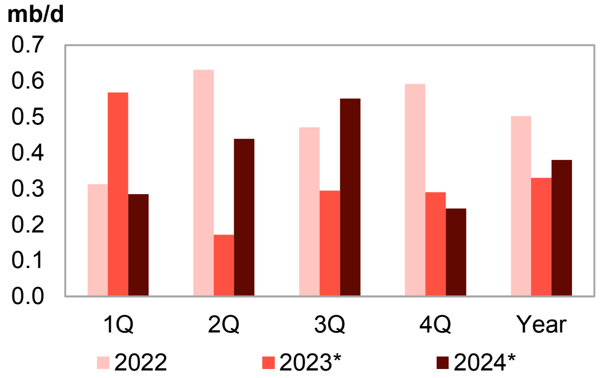
Ongoing strong oil demand in the region is supported by healthy economic activity. The composite PMIs in Saudi Arabia and the UAE have been consistently on an expansionary trajectory for more than one year. In September, the composite PMI in Saudi Arabia and the UAE were at 57.1 points and 56.6 points. Moreover, in terms of air travel, IATA reported that Middle Eastern carriers saw 26%, y-o-y, growth in international RPKs in August, and traffic levels are only 5% below a full recovery.

Graph 4 - 13: Middle East's oil demand by main petroleum product category, y-o-y change



Sources: JODI, Non-OECD Energy Statistics and OPEC.

Graph 4 - 14: Middle East's oil demand, y-o-y change



Note: * 2023 and 2024 = Forecast.
Source: OPEC.

In terms of specific product demand, the 'other products' category led demand growth by 109 tb/d y-o-y, which was higher than the 100 tb/d seen in the previous month. Residual fuels posted 91 tb/d growth, y-o-y, from zero growth seen last month. On the back of healthy air travel activity, jet/kerosene recorded 68 tb/d, y-o-y growth, slightly below 131 tb/d growth seen the previous month. In terms of petrochemical feedstock, LPG posted 17 tb/d growth, y-o-y, and naphtha saw growth of 20 tb/d, y-o-y. Finally, gasoline expanded by 8 tb/d, y-o-y.

Table 4 - 6: Iraq's oil demand, mb/d

			Change	*Oct 23/Oct 22*
By product	**Oct 22**	**Oct 23**	**Growth**	**%**
LPG	0.06	0.07	0.00	7.6
Naphtha	0.00	0.01	0.01	890.6
Gasoline	0.19	0.20	0.01	4.6
Jet/kerosene	0.01	0.04	0.03	227.9
Diesel	0.17	0.17	0.00	0.1
Fuel oil	0.22	0.30	0.08	37.2
Other products	0.18	0.17	-0.01	-7.0
Total	**0.83**	**0.95**	**0.12**	**14.4**

Note: Totals may not add up due to independent rounding.

Sources: JODI and OPEC.

Near-term expectations

Looking ahead, the current momentum of economic activity in the region is expected to be sustained into the 1Q24. In addition, strong international air traffic is expected to continue. Accordingly, these factors are expected to support oil demand growth in the region, which is forecast to expand by 285 tb/d y-o-y in 1Q24. Moreover, composite PMIs in Saudi Arabia and UAE point to healthy economic and business activity in the near term. The Composite PMI in Saudi Arabia increased to 59 points in October, up from 57 points in September. In the UAE, the Composite PMI rose from 56.5 in September to 58.4 in October, respectively.

Overall, in **2024**, the economic activity in the region is expected to remain healthy. GDP growth rates are forecast to surpass those of 2023. In addition, transportation activity is expected to remain healthy, supporting gasoline, transportation diesel and jet/kerosene. Accordingly, the Middle East is expected to see an average growth of 380 tb/d, y-o-y. The bulk of demand growth is expected to come from Iraq, Saudi Arabia, and the UAE.

World Oil Supply

Non-OPEC liquids production in 2023 is expected to grow by 1.8 mb/d, y-o-y, reaching 67.6 mb/d. Upward revisions to the forecasts for Latin America offset downward revisions to Other Asia, the UK and Other Eurasia.

US crude and condensate production as well as NGL output continue to reach new highs. Total US liquids output reached a record 21.6 mb/d in September due to persistent outperformance of onshore and offshore production. Accordingly, US liquids supply growth for 2023 is forecast at 1.3 mb/d. In addition to the US, the other main growth drivers for 2023 are expected to be Brazil, Kazakhstan, Norway, Guyana, Mexico and China. Nonetheless, there are still uncertainties with regard to weather-related disruptions and unplanned offshore maintenance for the rest of the year.

Non-OPEC liquids production in 2024 is forecast to grow by 1.4 mb/d to average 69.0 mb/d (including 50 tb/d in processing gains). OECD liquids supply is forecast to increase by 0.9 mb/d to average 33.4 mb/d, while non-OECD liquids supply is seen growing by 0.4 mb/d to average at 33.1 mb/d. The main drivers for the expected growth are the US, Canada, Guyana, Brazil, Norway and Kazakhstan. In addition to the US shale basins, accounting for about 48% of expected non-OPEC liquids supply growth, offshore project ramp-ups are expected to substantially support growth next year. At the same time, production is forecast to see the largest declines in Mexico and Malaysia.

OPEC NGLs and non-conventional liquids production in 2023 is forecast to grow by about 50 tb/d to average 5.4 mb/d and to increase by 65 tb/d to average 5.5 mb/d in 2024. OPEC-13 crude oil production in November decreased by 57 tb/d, m-o-m, to average 27.84 mb/d, according to available secondary sources.

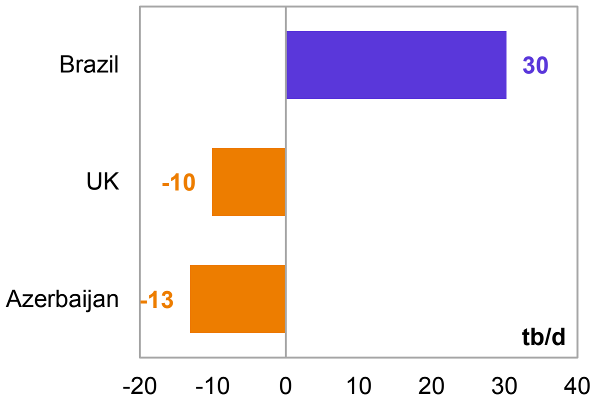
Non-OPEC liquids production in November, including OPEC NGLs, is estimated to have decreased by 0.4 mb/d, m-o-m, to average 73.9 mb/d. This represents an increase of 0.9 mb/d, y-o-y. As a result, preliminary data indicates that November's global oil supply was down by 0.43 mb/d, m-o-m, averaging 101.74 mb/d, and decreased by 0.15 mb/d, y-o-y.

Non-OPEC liquids production in 2023 is forecast to expand by 1.8 mb/d. This is broadly unchanged from the previous month's growth assessment.

Overall **OECD supply growth** for 2023 is marginally revised up. While OECD Europe sees a downward revision due to the UK, OECD Americas is revised up. OECD Asia Pacific's output growth is expected to remain largely unchanged.

The **non-OECD supply growth** forecast for 2023 remained broadly unchanged at 0.2 mb/d y-o-y. Latin America is expected to be the main growth driver in the non-OECD region followed by Other Eurasia and China.

Graph 5 - 1: Major revisions to annual supply change forecast in 2023*, MOMR Dec 23/Nov 23

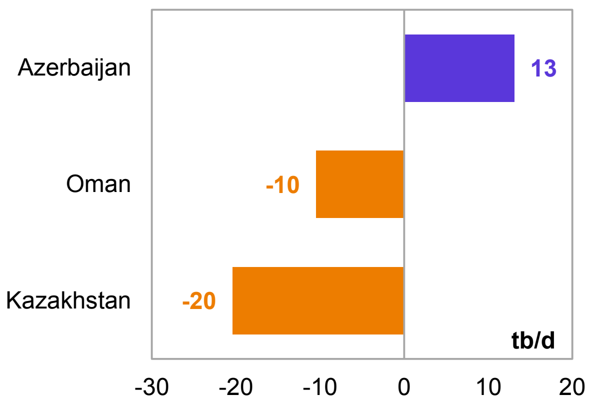


*Note: * 2023 = Forecast. Source: OPEC.*

The **non-OPEC liquids production** growth forecast in **2024** remains broadly unchanged compared with the previous month's assessment at 1.4 mb/d.

Downward revisions to the supply forecasts of Kazakhstan and Oman primarily offset by upward revisions to a few other countries.

Graph 5 - 2: Major revisions to annual supply change forecast in 2024*, MOMR Dec 23/Nov 23

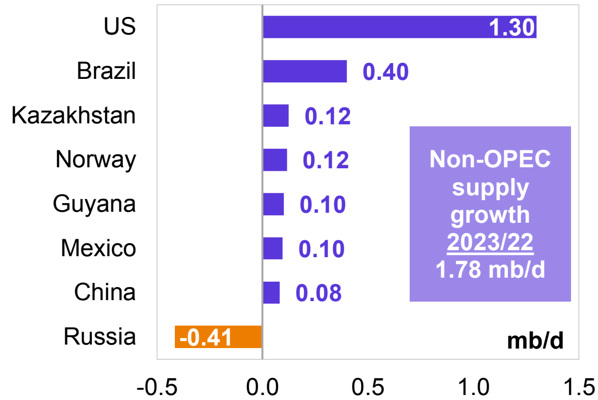


*Note: * 2024 = Forecast. Source: OPEC.*

Key drivers of growth and decline

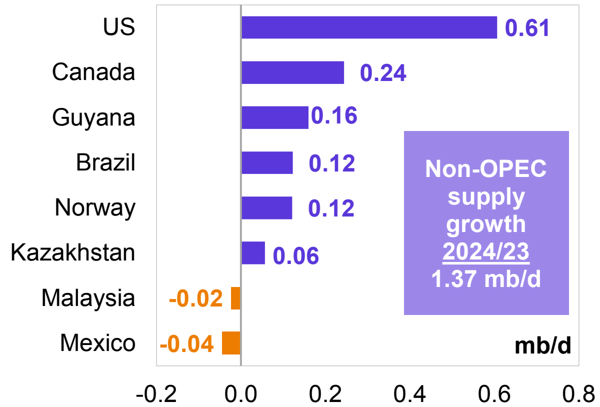
The **key drivers of non-OPEC liquids supply growth in 2023** are projected to be the US, Brazil, Kazakhstan, Norway, Guyana, Mexico and China, while oil production is forecast to see the largest decline in Russia.

Graph 5 - 3: Annual liquids production changes y-o-y for selected countries in 2023*



*Note: * 2023 = Forecast. Source: OPEC.*

Graph 5 - 4: Annual liquids production changes y-o-y for selected countries in 2024*



*Note: * 2024 = Forecast. Source: OPEC.*

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

Non-OPEC liquids production in 2023 and 2024

Table 5 - 1: Non-OPEC liquids production in 2023*, mb/d

							Change 2023/22	
Non-OPEC liquids production	**2022**	**1Q23**	**2Q23**	**3Q23**	**4Q23**	**2023**	**Growth**	**%**
Americas	26.91	27.90	28.18	29.02	28.24	28.34	1.42	5.29
of which US	*19.28*	*20.10*	*20.70*	*21.20*	*20.33*	*20.58*	*1.30*	*6.74*
Europe	3.58	3.69	3.65	3.54	3.69	3.64	0.06	1.72
Asia Pacific	0.48	0.45	0.45	0.44	0.47	0.45	-0.02	-4.95
Total OECD	**30.97**	**32.04**	**32.28**	**33.01**	**32.40**	**32.43**	**1.46**	**4.72**
China	4.48	4.63	4.63	4.49	4.49	4.56	0.08	1.82
India	0.77	0.76	0.78	0.78	0.77	0.77	0.00	0.05
Other Asia	2.30	2.31	2.25	2.24	2.27	2.27	-0.03	-1.41
Latin America	6.34	6.69	6.76	7.06	7.04	6.89	0.55	8.73
Middle East	3.29	3.27	3.29	3.27	3.29	3.28	-0.01	-0.25
Africa	1.29	1.24	1.27	1.27	1.28	1.27	-0.03	-2.04
Russia	11.03	11.19	10.86	10.78	9.66	10.62	-0.41	-3.75
Other Eurasia	2.83	2.99	2.93	2.82	2.95	2.92	0.10	3.37
Other Europe	0.11	0.11	0.10	0.10	0.10	0.10	0.00	-2.73
Total Non-OECD	**32.44**	**33.21**	**32.88**	**32.82**	**31.86**	**32.69**	**0.25**	**0.76**
Total Non-OPEC production	63.41	65.25	65.15	65.83	64.26	65.12	1.71	2.69
Processing gains	2.40	2.47	2.47	2.47	2.47	2.47	0.07	2.96
Total Non-OPEC liquids production	**65.81**	**67.72**	**67.62**	**68.29**	**66.73**	**67.59**	**1.78**	**2.70**
Previous estimate	65.81	67.72	67.63	68.11	66.92	67.59	1.78	2.70
Revision	0.00	0.00	0.00	0.19	-0.19	0.00	0.00	0.00

*Note: * 2023 = Forecast. Totals may not add up due to independent rounding.*

Source: OPEC.

Table 5 - 2: Non-OPEC liquids production in 2024*, mb/d

Non-OPEC liquids production	2023	1Q24	2Q24	3Q24	4Q24	2024	*Change 2024/23* Growth	%
Americas	28.34	28.80	28.84	29.31	29.62	29.14	0.81	2.84
of which US	*20.58*	*20.85*	*21.07*	*21.33*	*21.50*	*21.19*	*0.61*	*2.95*
Europe	3.64	3.85	3.73	3.68	3.82	3.77	0.13	3.48
Asia Pacific	0.45	0.46	0.43	0.44	0.43	0.44	-0.01	-2.92
Total OECD	**32.43**	**33.11**	**33.00**	**33.43**	**33.87**	**33.35**	**0.92**	**2.83**
China	4.56	4.59	4.58	4.55	4.54	4.56	0.00	0.07
India	0.77	0.79	0.79	0.79	0.78	0.79	0.01	1.70
Other Asia	2.27	2.25	2.23	2.21	2.21	2.22	-0.05	-2.08
Latin America	6.89	7.10	7.13	7.26	7.33	7.21	0.31	4.57
Middle East	3.28	3.29	3.32	3.31	3.31	3.31	0.03	0.86
Africa	1.27	1.26	1.26	1.31	1.35	1.30	0.03	2.16
Russia	10.62	10.49	10.65	10.66	10.66	10.62	0.00	-0.03
Other Eurasia	2.92	2.93	3.00	2.99	3.03	2.99	0.07	2.26
Other Europe	0.10	0.10	0.10	0.10	0.10	0.10	0.00	-1.15
Total Non-OECD	**32.69**	**32.79**	**33.07**	**33.17**	**33.32**	**33.09**	**0.40**	**1.23**
Total Non-OPEC production	65.12	65.90	66.07	66.60	67.18	66.44	1.32	2.03
Processing gains	2.47	2.52	2.52	2.52	2.52	2.52	0.05	2.03
Total Non-OPEC liquids production	**67.59**	**68.42**	**68.59**	**69.12**	**69.70**	**68.96**	**1.37**	**2.03**
Previous estimate	67.59	68.48	68.47	69.12	69.81	68.97	1.38	2.04
Revision	0.00	-0.06	0.12	0.00	-0.11	-0.01	-0.01	-0.02

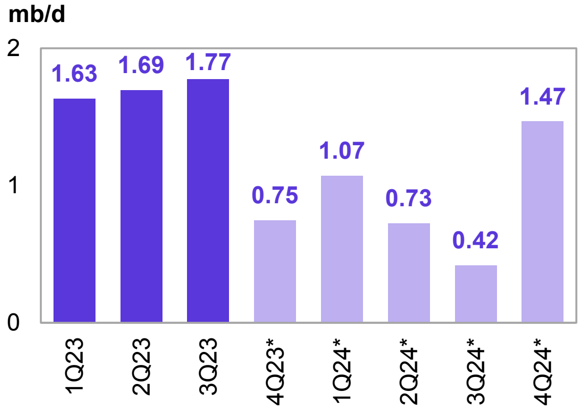
*Note: * 2024 = Forecast. Totals may not add up due to independent rounding.*
Source: OPEC.

OECD

OECD liquids production in 2023 is expected to expand by 1.5 mb/d to average 32.4 mb/d. A minor upward adjustment was applied following revisions in OECD Americas.

Growth is set to be led by OECD Americas, which is forecast to expand by 1.4 mb/d to average 28.3 mb/d. This remains broadly unchanged compared with the previous month's assessment. Yearly liquids production in OECD Europe is expected to grow by 0.1 mb/d to average 3.6 mb/d. This is largely unchanged compared with the previous assessment. OECD Asia Pacific is expected to decline by about 24 tb/d, y-o-y, to average 0.5 mb/d.

Graph 5 - 5: OECD quarterly liquids supply, y-o-y changes



*Note: * 4Q23-4Q24 = Forecast. Source: OPEC.*

For **2024**, OECD liquids production is likely to grow by 0.9 mb/d to average 33.4 mb/d. Growth will once again be led by OECD Americas, with an expected increase of 0.8 mb/d for an average of 29.1 mb/d. Yearly liquids production in OECD Europe is expected to grow by 0.1 mb/d to average 3.8 mb/d, while OECD Asia Pacific is expected to decline by 13 tb/d, y-o-y, to average 0.4 mb/d.

OECD Americas

US

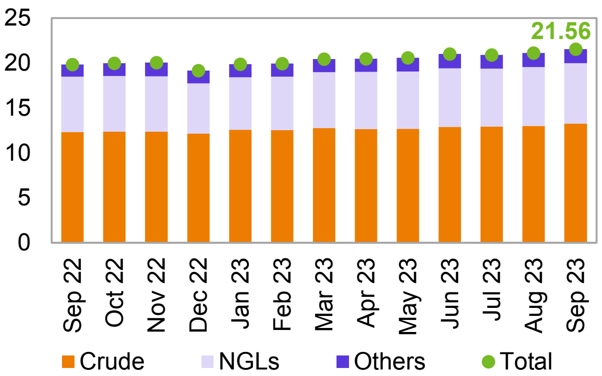
US liquids production in **September** jumped by 452 tb/d, m-o-m, to average 21.6 mb/d, the highest level on record. This was up by 1.7 mb/d compared with September 2022.

Crude oil and condensate production rose by 224 tb/d, m-o-m, to average 13.2 mb/d in **September**. This was up by 0.9 mb/d, y-o-y.

In terms of **crude and condensate production breakdowns by region (PADDs)**, production increased on the US Gulf Coast (USGC) by about 121 tb/d to average 9.5 mb/d. Production in the Midwest and West Coast regions rose by 83 tb/d and 19 tb/d, respectively. Output on the East Coast and Rocky Mountain remained broadly unchanged, m-o-m.

Production growth in the main regions was primarily driven by robust output in the offshore Gulf of Mexico (GoM), North Dakota and New Mexico producing wells, while output in other main producing basins was broadly stable.

Graph 5 - 6: US monthly liquids output by key component



Sources: EIA and OPEC.

NGL production was up by about 205 tb/d, m-o-m, for an average of 6.8 mb/d in September. This was higher by 0.6 mb/d, y-o-y. According to the US Department of Energy (DoE), the production of **non-conventional liquids** (mainly ethanol) rose by 23 tb/d, m-o-m, to average 1.6 mb/d. Preliminary estimates see non-conventional liquids averaging about 1.6 mb/d in October, broadly unchanged m-o-m.

GoM production rose by 108 tb/d, m-o-m, to average 2.0 mb/d in September, and was highly supported by new project ramp-ups. GoM production was higher in September due to the Shenzi North subsea tie-back project, the return of Mars volumes, and the continued ramp-up of Mad Dog Phase 2. In the **onshore Lower 48**, crude and condensate production increased by 97 tb/d, m-o-m, to average 10.8 mb/d in September.

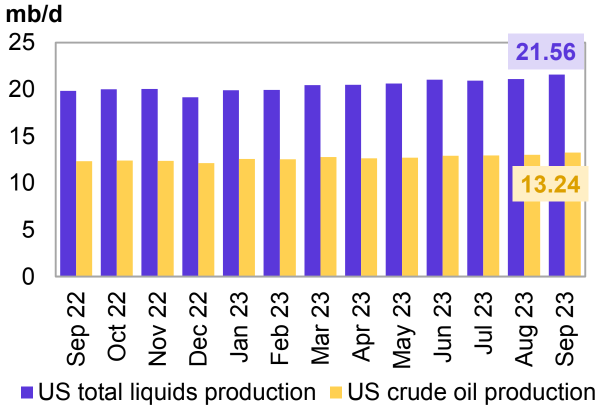
Table 5 - 3: US crude oil production by selected state and region, tb/d

				Change	
State	**Sep 22**	**Aug 23**	**Sep 23**	***m-o-m***	***y-o-y***
Texas	5,211	5,579	5,573	*-6*	*362*
Gulf of Mexico (GOM)	1,824	1,892	2,000	*108*	*176*
New Mexico	1,686	1,798	1,818	*20*	*132*
North Dakota	1,112	1,225	1,304	*79*	*192*
Colorado	438	462	459	*-3*	*21*
Oklahoma	417	428	424	*-4*	*7*
Alaska	430	396	415	*19*	*-15*
Total	**12,325**	**13,012**	**13,236**	***224***	***911***

Sources: EIA and OPEC.

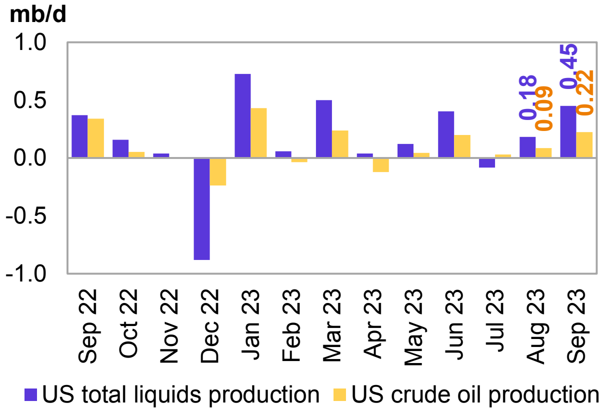
Looking at **individual US states**, New Mexico's oil production rose by 20 tb/d to average 1.8 mb/d, which is 132 tb/d higher than a year ago. Production from Texas was down by 6 tb/d to average 5.6 mb/d, which is 362 tb/d higher than a year ago. In the Midwest, North Dakota's production rose by 79 tb/d, m-o-m, to average 1.3 mb/d, up 192 tb/d, y-o-y, while Oklahoma production dropped by a minor 4 tb/d, m-o-m, to average 0.4 mb/d. Production in Alaska rose by 19 tb/d, while output in Colorado remained broadly unchanged m-o-m.

Graph 5 - 7: US monthly crude oil and total liquids supply



Sources: EIA and OPEC.

Graph 5 - 8: US monthly crude oil and total liquids supply, m-o-m changes



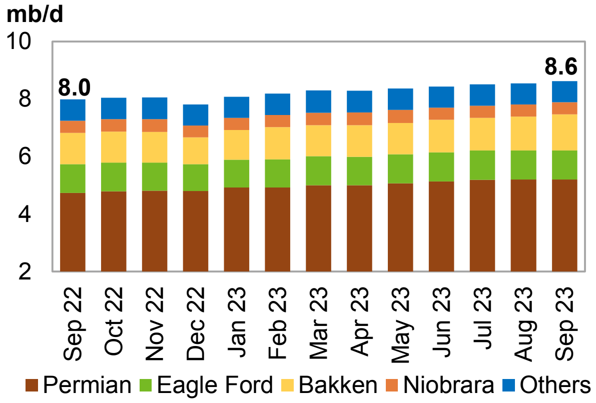
Sources: EIA and OPEC.

US tight crude output in **September** is estimated to have risen by 76 tb/d, m-o-m, to average 8.6 mb/d, according to the latest estimates. This was 0.6 mb/d higher than in the same month last year.

The m-o-m increase from shale and tight formations using horizontal wells came mainly from Bakken shale production in North Dakota, where output rose by 78 tb/d for an average of 1.3 mb/d. This was up by 174 tb/d, y-o-y.

In Texas and New Mexico, Permian shale oil output remained largely unchanged m-o-m averaging 5.2 mb/d, up by 468 tb/d, y-o-y. Tight crude output at Eagle Ford in Texas dropped by a minor 3 tb/d to average 1.0 mb/d, up by 7 tb/d, y-o-y. Production at Niobrara-Codell in Colorado and Wyoming was unchanged at an average of 422 tb/d.

Graph 5 - 9: US tight crude output breakdown

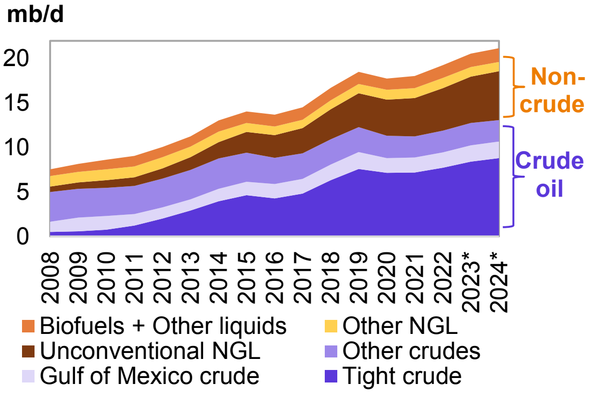


Sources: EIA and OPEC.

US liquids production in **2023**, excluding processing gains, is forecast to expand by 1.3 mb/d, y-o-y, to average 20.6 mb/d. This is largely unchanged compared with last month's assessment, however supported by stronger-than-expected output in recent months. Despite declining drilling activity since the start of this year, well productivity and operational efficiency as well as drilled-but-uncompleted wells' usage have helped boost production. In addition, it is assumed there will be fewer supply chain/logistical issues in major prolific shale sites for the remainder of 2023.

Given a sound level of oil field drilling and well completions, **crude oil and condensate** output is expected to increase by 0.8 mb/d, y-o-y, to average 12.8 mb/d. Average tight crude output in 2023 is forecast at 8.4 mb/d, up by 0.7 mb/d, y-o-y.

Graph 5 - 10: US liquids supply developments by component



*Note: * 2023 and 2024 = Forecast.*
Source: OPEC.

At the same time, NGL production and non-conventional liquids, particularly ethanol, are forecast to increase by 0.4 mb/d and 71 tb/d, y-o-y, to average 6.3 mb/d and 1.5 mb/d, respectively.

US liquids production in **2024**, excluding processing gains, is expected to grow by 0.6 mb/d, y-o-y, to average 21.2 mb/d, assuming a modest level of drilling activity and less supply chain issues at the prolific Permian, Bakken and Eagle Ford shale sites. Crude oil and condensate output is expected to jump by 0.3 mb/d, y-o-y, to average 13.1 mb/d. At the same time, NGL production and that of non-conventional liquids, particularly ethanol, are projected to increase by 0.2 mb/d and 30 tb/d, y-o-y, to average 6.5 mb/d and 1.5 mb/d, respectively.

Average tight crude output in 2024 is expected to reach 8.8 mb/d, up by 0.4 mb/d, y-o-y. The 2024 forecast assumes ongoing capital discipline and less inflationary pressure, as well as moderating supply chain issues and oil field service constraints (labour and equipment).

Table 5 - 4: US liquids production breakdown, mb/d

US liquids	2022	Change 2022/21	2023*	Change 2023/22	2024*	Change 2024/23
Tight crude	7.73	0.55	8.43	0.70	8.83	0.40
Gulf of Mexico crude	1.73	0.02	1.82	0.09	1.85	0.03
Conventional crude oil	2.45	0.07	2.51	0.06	2.42	-0.09
Total crude	**11.91**	**0.64**	**12.76**	**0.85**	**13.10**	**0.34**
Unconventional NGLs	4.78	0.47	5.22	0.44	5.47	0.26
Conventional NGLs	1.15	0.04	1.10	-0.05	1.07	-0.03
Total NGLs	**5.93**	**0.51**	**6.32**	**0.38**	**6.55**	**0.23**
Biofuels + Other liquids	1.44	0.08	1.51	0.07	1.54	0.03
US total supply	**19.28**	**1.23**	**20.58**	**1.30**	**21.19**	**0.61**

*Note: * 2023 and 2024 = Forecast.*

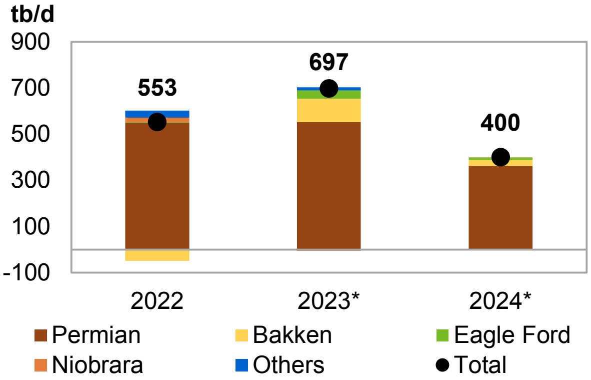
Sources: EIA, OPEC and Rystad Energy.

US tight crude production in the **Permian** during 2023 is expected to increase by 0.6 mb/d, y-o-y, to average 5.1 mb/d, while in 2024, it is forecast to grow by 0.4 mb/d, y-o-y, to average 5.5 mb/d.

In North Dakota, **Bakken** shale production is still expected to remain below the pre-pandemic average of 1.4 mb/d. In 2023, growth is forecast at 0.1 mb/d for an average of 1.1 mb/d. Growth of just 25 tb/d is expected for 2024 for an average of 1.2 mb/d, demonstrating signs of maturity in the basin.

The **Eagle Ford** in Texas saw output of 1.2 mb/d in 2019, followed by declines in 2020 and 2021 and no growth in 2022. With an expected growth of about 37 tb/d for 2023, output rests at an average of 1.0 mb/d. At the same time, minor growth of 10 tb/d is expected for 2024.

Graph 5 - 11: US tight crude output by shale play, y-o-y changes



*Note: * 2023 and 2024 = Forecast.*
Sources: EIA and OPEC.

Niobrara's production is expected to remain largely unchanged y-o-y in 2023 with an average of 428 tb/d. Meanwhile, no growth is expected for 2024. With a modest pace of drilling and completion activities, production in other tight plays is expected to show an increase of 13 tb/d in 2023, then remain steady in 2024.

Table 5 - 5: US tight oil production growth, mb/d

US tight oil	2022	Change 2021/20	2023*	Change 2023/22	2024*	Change 2024/23
Permian tight	4.57	0.55	5.12	0.55	5.49	0.36
Bakken shale	1.03	-0.05	1.13	0.10	1.16	0.02
Eagle Ford shale	0.96	0.00	1.00	0.04	1.01	0.01
Niobrara shale	0.43	0.02	0.43	-0.01	0.43	0.00
Other tight plays	0.73	0.03	0.74	0.01	0.74	0.00
Total	**7.73**	**0.55**	**8.43**	**0.70**	**8.83**	**0.40**

*Note: * 2023 and 2024 = Forecast.*

Source: OPEC.

US rig count, spudded, completed, DUC wells and fracking activity

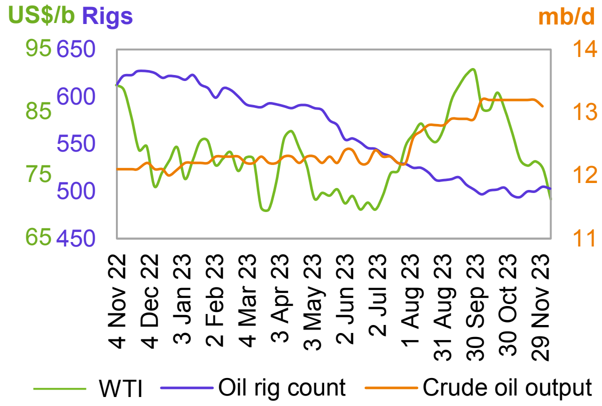
Total **active US drilling rigs** in the week ending 1 December 2023 rose by 3 to 625, according to Baker Hughes. This was 159 rigs less than a year ago. The number of active offshore rigs remained unchanged, w-o-w, at 21. This was higher by 3 compared with the same month a year earlier. Onshore oil and gas rigs were higher by 3, w-o-w, to stand at 603, with just 1 rig in inland waters. This is down by 160 rigs, y-o-y.

The **US horizontal rig count** rose by 5, w-o-w, to 559, compared with 711 horizontal rigs a year ago. The number of drilling rigs for oil increased by 5, w-o-w, to 505, while the number of gas-drilling rigs fell by 1, w-o-w, to 116.

The Permian's rig count rose by 3, w-o-w, to 314. Rig counts remained unchanged in Williston, Eagle Ford and Niobrara at 33, 50 and 14, respectively, while the number of rigs rose by 3, w-o-w, in Cana Woodford to 18.

Only 1 operating oil rig has been reported in the Barnett Basin since 17 November.

Graph 5 - 12: US weekly rig count vs. US crude oil output and WTI price



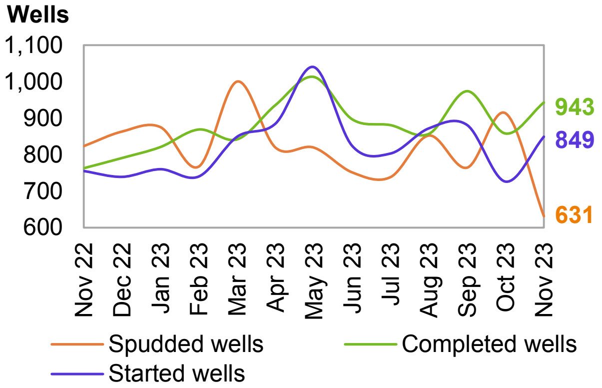
Sources: Baker Hughes, EIA and OPEC.

Drilling and completion (D&C) activities for spudded, completed and started oil producing wells in all US shale plays included 913 horizontal wells spudded in October (as per preliminary data), based on EIA-DPR regions. This is up by 149, m-o-m, and 3% higher than in October 2022.

Preliminary data for October indicates a lower number of completed wells at 858, up by 6%, y-o-y. The number of started wells is estimated at 726, which is 15% lower than a year earlier.

Preliminary data for November 2023 saw 631 spudded, 943 completed, and 849 started wells, according to Rystad Energy.

Graph 5 - 13: Spudded, completed and started wells in US shale plays

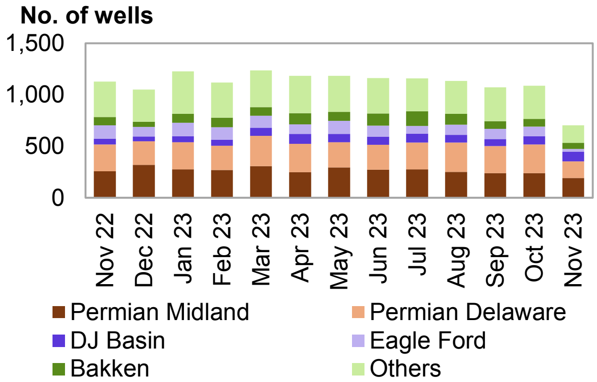


Note: Oct 23-Nov 23 = Preliminary data.
Sources: Rystad Energy and OPEC.

In terms of identified **US oil and gas fracking operations by region**, Rystad Energy reported that 1,073 wells were fracked in September. In October and November, it stated that 1,087 and 704 wells began fracking, respectively, according to preliminary numbers which are based on the analysis of high-frequency satellite data.

In regional terms, preliminary October data shows that 240 and 277 wells were fracked in Permian Midland and Permian Delaware, respectively. Compared with September, there was an increase of 2 wells in the Midland region and a rise of 12 in Delaware. Data also indicates that 80 wells were fracked in the DJ Basin, 94 in Eagle Ford and 75 in Bakken during October.

Graph 5 - 14: Fracked wells count per month



Note: Oct 23-Nov 23 = Preliminary data.
Sources: Rystad Energy Shale Well Cube and OPEC.

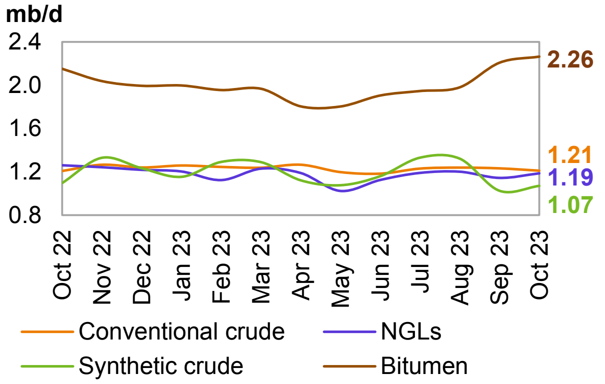
Canada

Canada's liquids production in **October** is estimated to have risen by 122 tb/d, m-o-m, to average 5.8 mb/d, as oil sands producers finished off maintenance work.

Conventional crude production dropped by 21 tb/d, m-o-m, in October to average 1.2 mb/d, while NGL output increased by 42 tb/d to average 1.2 mb/d.

Crude bitumen production output rose in October by 56 tb/d, m-o-m, while synthetic crude increased by 45 tb/d, m-o-m. Taken together, crude bitumen and synthetic crude production rose by 101 tb/d to 3.3 mb/d.

Graph 5 - 15: Canada's monthly liquids production development by type



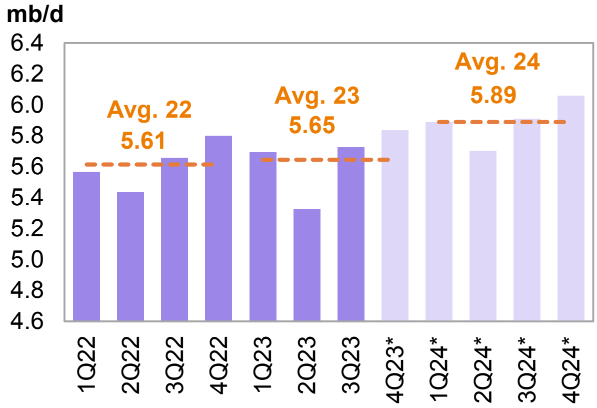
Sources: Statistics Canada, Alberta Energy Regulator and OPEC.

For **2023**, Canada's liquids production is forecast to increase by about 30 tb/d to average 5.6 mb/d. This is unchanged compared with the previous month's assessment.

In 3Q23, mining production increased with the completion of turnaround and maintenance activities. Within the large in situ projects, CNRL's Primrose and Kirby projects had significant production increases as new well pads came online earlier than anticipated.

For **2024**, Canada's liquids production is forecast to increase at a much faster pace compared with 2023, rising by 0.2 mb/d to average 5.9 mb/d. Incremental production is expected to come through oil sands project ramp-ups and debottlenecking in areas like Montney, Kearl and Fort Hills, in addition to some conventional field growth.

Graph 5 - 16: Canada's quarterly liquids production and forecast



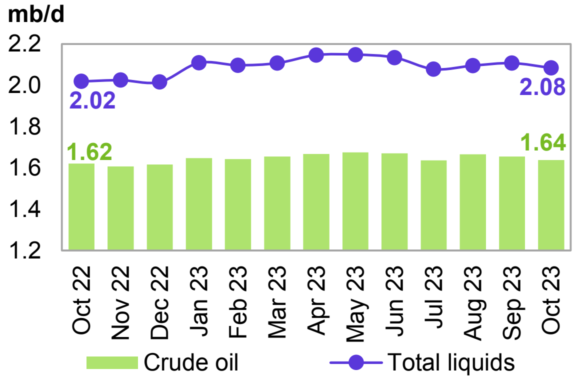
*Note: * 4Q23-4Q24 = Forecast. Source: OPEC.*

Mexico

Mexico's crude output decreased by 17 tb/d, m-o-m, in **October** to average 1.6 mb/d, and NGL output declined by a minor 6 tb/d. Mexico's total October liquids output dropped by 23 tb/d, m-o-m, to average 2.1 mb/d, according to the Comisión Nacional de Hidrocarburos (CNH). This was practically in line with previous expectations as production from Pemex's priority fields declined and private operators reported lower output.

For **2023**, liquids production is forecast to rise by about 0.1 mb/d for an average of 2.1 mb/d. This is broadly unchanged from the previous month's assessment. Declines from mature fields are expected to continue offsetting monthly gains from new fields in the coming months.

Graph 5 - 17: Mexico's monthly liquids and crude production development



Sources: Mexico Comision Nacional de Hidrocarburos (CNH) and OPEC

For **2024**, liquids production is forecast to decline by 45 tb/d to average 2.1 mb/d. In general, any gains from new projects are expected to be offset by declines from mature fields. Pemex's total crude production decline in mature areas like Ku-Maloob-Zaap and Integral Yaxche-Xanab is forecast to outweigh production ramp-ups in Area-1 and El Golpe-Puerto Ceiba, and from a few start-ups, namely TM-01, Paki and AE-0150-Uchukil.

OECD Europe

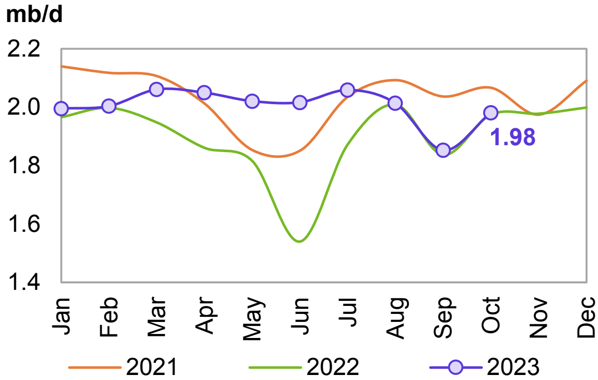
Norway

Norwegian liquids production in **October** rose by 129 tb/d, m-o-m, to average 2.0 mb/d due to the recovery from unplanned shutdowns and equipment failures on a number of platforms in September.

Norway's crude production increased by 101 tb/d, m-o-m, in October to average 1.8 mb/d, higher by 27 tb/d, y-o-y. Monthly oil production was 3.7% lower than the Norwegian Petroleum Directorate's (NPD) forecast.

Production of NGLs and condensate, meanwhile, rose by 28 tb/d, m-o-m, to average 0.2 mb/d, according to NPD data.

Graph 5 - 18: Norway's monthly liquids production development



Sources: The Norwegian Petroleum Directorate (NPD) and OPEC.

In **2023**, Norwegian liquids production is forecast to expand by 0.1 mb/d, remaining broadly unchanged compared with last month's forecast, for an average of 2.0 mb/d. Technical challenges, operational irregularities and periodical shut-downs have been the main causes of output declines in Norwegian fields. Norway's Aker BP recently announced a production start-up ahead of schedule from the Alvheim tie-in of projects Kobra East and Gekko (KEG), which hold an estimated 40 million boe in place.

For **2024**, Norwegian liquids production is forecast to grow by 120 tb/d to average 2.1 mb/d. Some small-to-large projects are scheduled to ramp up in 2024. At the same time, start-ups are expected at the Balder/Ringhorne, Eldfisk, Kristin, Alvheim FPSO, Hanz, Skarv Aasgard FPSO and PL636 offshore projects. Drilling continues for the Hanz project, a tieback to the Ivar Aasen platform in the Utsira High region of the North Sea, along with topside commissioning of the reception facilities. First oil should follow from Hanz in 1Q24, according to Aker BP. However, Johan Castberg is projected to be the main source of output increases next year, with first oil planned to be produced in 4Q24.

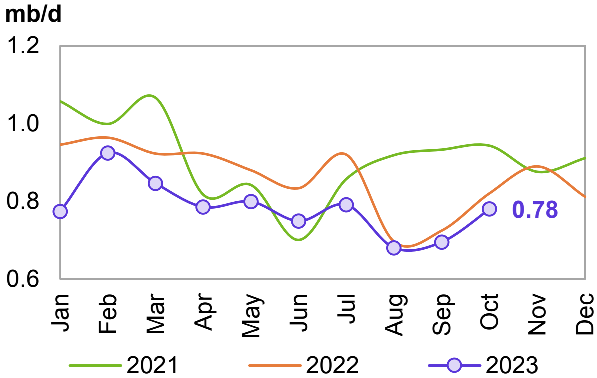
UK

In **October**, **UK liquids production** rose by 85 tb/d, m-o-m, to average 0.8 mb/d. Crude oil output increased by 87 tb/d, m-o-m, to average 0.6 mb/d, lower by 40 tb/d, y-o-y, according to official data. NGL output remained largely unchanged to average 68 tb/d. UK liquids output in October was down by 5% compared with October 2022, mainly due to natural declines.

For **2023**, UK liquids production is forecast to drop by almost 70 tb/d to average 0.8 mb/d, down by about 10 tb/d from the previous month's assessment, mainly due to lower-than-expected October output.

For **2024**, UK liquids production is forecast to stay steady at an average of 0.8 mb/d. Production ramp-ups will be seen at the ETAP and Clair sites, as well as at the Anasuria and Captain enhanced oil recovery (EOR) start-up projects. The Penguins FPSO is currently in the final stages of commissioning and is due to be towed out to the UK North Sea field in 1Q24.

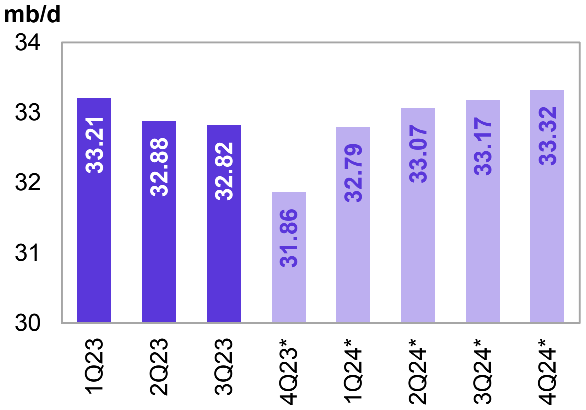
Graph 5 - 19: UK monthly liquids production development



Sources: UK Department for Business, Energy and Industrial Strategy and OPEC.

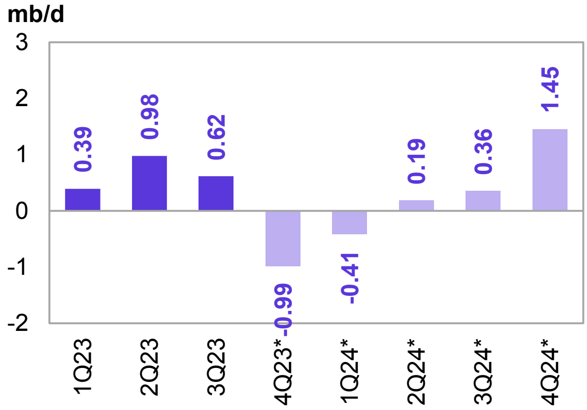
Non-OECD

Graph 5 - 20: Non-OECD quarterly liquids production and forecast



*Note: * 4Q23-4Q24 = Forecast. Source: OPEC.*

Graph 5 - 21: Non-OECD quarterly liquids supply, y-o-y changes

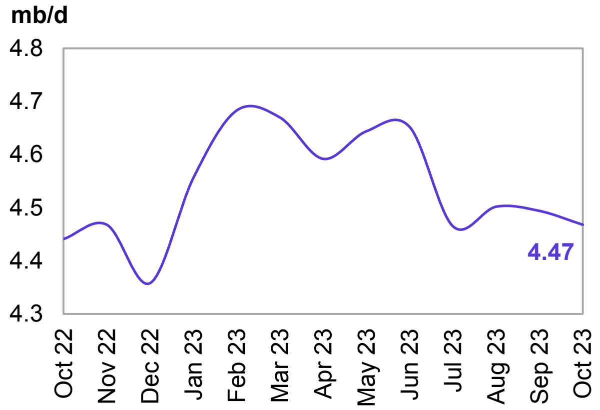


*Note: * 4Q23-4Q24 = Forecast. Source: OPEC.*

China

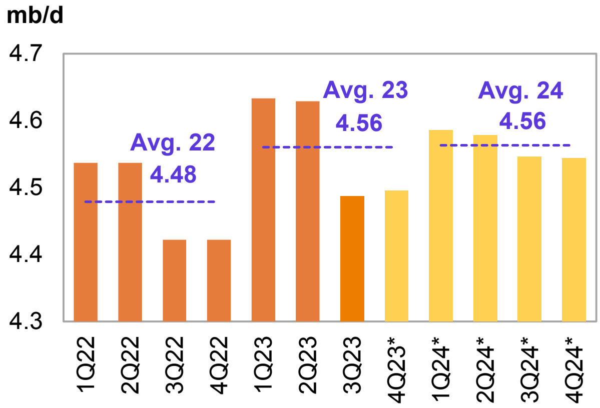
China's liquids production fell by 26 tb/d, m-o-m, to average 4.5 mb/d in **October**. This is up by 27 tb/d, y-o-y, according to official data. Crude oil output in October averaged 4.1 mb/d, down by 26 tb/d compared with the previous month, and higher by 59 tb/d, y-o-y. NGL and condensate production was largely stable, m-o-m, averaging 48 tb/d.

Graph 5 - 22: China's monthly liquids production development



Sources: CNPC and OPEC.

Graph 5 - 23: China's quarterly liquids production and forecast



*Note: * 4Q23-4Q24 = Forecast. Sources: CNPC and OPEC.*

For **2023**, y-o-y growth of about 80 tb/d is forecast for an average of 4.6 mb/d. This is roughly unchanged from the previous month's assessment. Natural decline rates are expected to be offset by additional growth through more infill wells and EOR projects amid efforts made by state-owned oil companies to safeguard energy supplies. Production from Weizhou 5-7 is expected to start up this year, and Lufeng 12-3, Enping 18-6, Penglai 19-3 and Bozhong 28-2 are all expected to continue ramping up in the coming months.

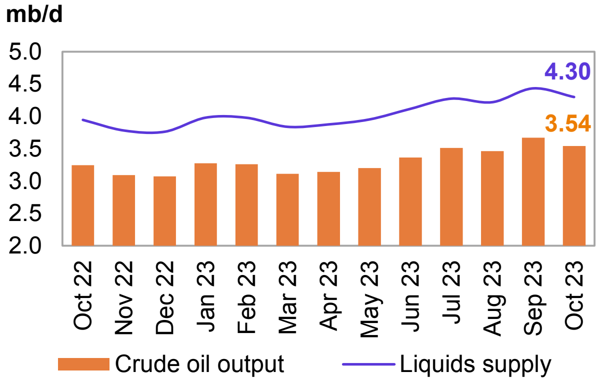
For **2024**, Chinese liquids production is expected to remain steady, y-o-y, and is forecast to average 4.6 mb/d. For next year, Lingshui 17-2, Lufeng, Liuhua 11-1, Xi'nan, Shayan and Liuhua 4-1 (redevelopment) are planned to come on stream by CNOOC, PetroChina and Sinopec. At the same time, key ramp-ups are expected from Changqing, Kenli 10-2, Wushi 17-2 and Kenli 6-4.

Latin America

Brazil

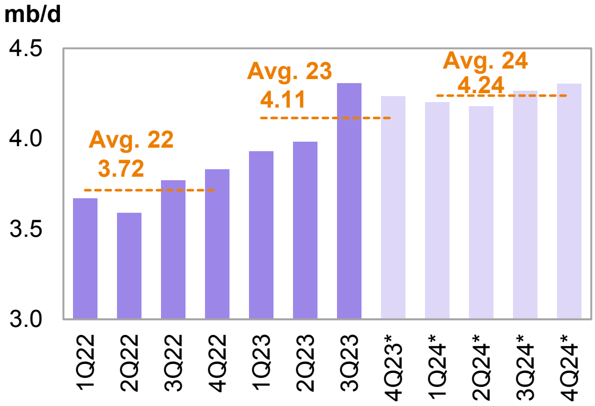
Brazil's crude output in **October** fell by 131 tb/d, m-o-m, to average 3.5 mb/d. NGL production, however, was broadly unchanged at an average of 80 tb/d and was expected to remain flat in November. Biofuel output (mainly ethanol) remained mostly unchanged at an average of 678 tb/d, with preliminary data showing a stable trend in November. The country's total liquids production decreased by 134 tb/d in October to average 4.3 mb/d. The October production level was still strong as Brazil reached its second-highest liquids output on record.

Graph 5 - 24: Brazil's monthly liquids production development by type



Sources: Brazilian National Agency of Petroleum, Natural Gas and Biofuels (ANP) and OPEC.

Graph 5 - 25: Brazil's quarterly liquids production



*Note: * 4Q23-4Q24 = Forecast. Sources: ANP and OPEC.*

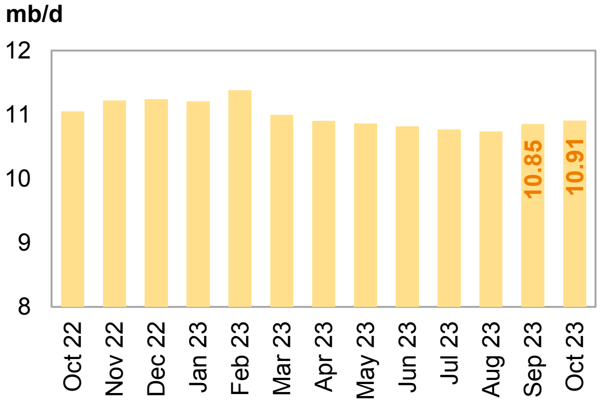
For **2023**, Brazil's liquids supply, including biofuels, is forecast to rise by 0.4 mb/d, y-o-y, to average 4.1 mb/d, revised up by 30 tb/d from the previous month's assessment due to stronger-than-expected output in October and higher than expected production in 4Q23. Higher production bases this year have been due to the ramp-ups of new units, improving performances of existing assets, and fewer maintenance events.

For **2024**, Brazil's liquids supply, including biofuels, is forecast to increase by about 120 tb/d, y-o-y, to average 4.2 mb/d. Crude oil output is expected to increase through production ramp-ups in the Buzios (Franco), Mero (Libra NW), Tupi (Lula), Peregrino and Itapu (Florim) fields. Oil project start-ups are expected at the Atlanta, Pampo-Enchova Cluster and Vida sites.

Russia

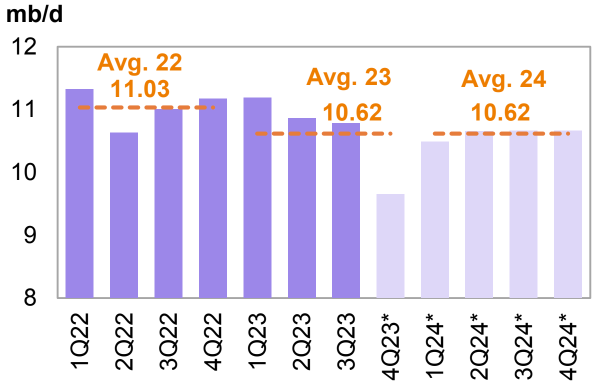
Russia's liquids production in October rose by about 55 tb/d, m-o-m, to average 10.9 mb/d. This includes 9.5 mb/d of crude oil and 1.4 mb/d of NGLs and condensate.

Graph 5 - 26: Russia's monthly liquids production



Sources: Nefte Compass and OPEC.

Graph 5 - 27: Russia's quarterly liquids production



*Note: * 4Q23-4Q24 = Forecast.*
Sources: Nefte Compass and OPEC.

For **2023**, Russian liquids production is forecast to drop by 0.4 mb/d for an average of 10.6 mb/d, broadly unchanged from the previous month's assessment. It is worth noting that this takes into account all announced production adjustments of the countries in the DoC to the end of 2023 and 2024.

For **2024**, Russian liquids production is forecast to remain steady with the previous year, averaging 10.6 mb/d. In addition to project ramp-ups from several oil fields, there will be start-ups by Rosneft, Russneft, Lukoil, Gazprom, Neftisa and TenderResurs. However, overall additional liquids production is expected to be offset by declines at mature fields.

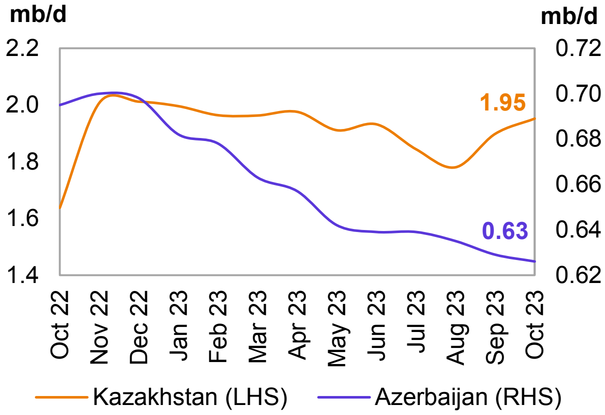
Caspian

Kazakhstan & Azerbaijan

Liquids output in Kazakhstan rose by 54 tb/d, m-o-m, to average 2.0 mb/d in **October**. Crude production was up by 37 tb/d, m-o-m, to average 1.6 mb/d. NGL and condensate output rose by 17 tb/d, m-o-m, to average 0.3 mb/d.

For **2023**, the liquids supply is forecast to increase by 0.1 mb/d for an average of 1.9 mb/d, revised up by a minor 3 tb/d from the previous forecast.

Graph 5 - 28: Caspian monthly liquids production development by selected country



Sources: Nefte Compass, JODI and OPEC.

Kazakh oil production slumped in late November as storms near the Russian port of Novorossiysk affected supplies to a major export pipeline. However, the Caspian Pipeline Consortium (CPC) resumed oil loadings at its Black Sea terminal in less than a week.

For **2024**, the liquids supply is forecast to increase by about 60 tb/d to average 2.0 mb/d, revised down by 20 tb/d compared with the previous assessment following the recently announced voluntary adjustment for 1Q24. The growth is expected mainly from production ramp-ups in the Tengiz oil field through an expansion at the Tengizchevroil Future Growth Project (FGP) and wellhead pressure management project. In the latest update, Chevron announced that due to delays and more intensive commissioning, the project will produce about 50 tb/d less as it comes online over 2024 and 2025.

Oil production in the Kashagan field and gas condensate output in the Karachaganak field are also expected to rise marginally.

Azerbaijan's liquids production in **October** remained largely unchanged, m-o-m, averaging 0.6 mb/d, which is a drop of 69 tb/d, y-o-y. Crude production averaged 489 tb/d, with NGL output at 137 tb/d, according to official sources.

Azerbaijan's liquids supply for **2023** is forecast to drop by about 30 tb/d to average 0.7 mb/d. This is a downward revision of about 13 tb/d stemming from lower-than-expected production at major oil fields in October. The majority of declines in legacy reservoirs, like the Azeri-Chirag-Guneshli (ACG) oil fields, are expected to be primarily offset by ramp-ups in other fields this year.

Azerbaijan's liquids supply for **2024** is forecast to remain broadly stable at an average of 0.7 mb/d. Growth is forecast to come partly from the Shah Deniz, Absheron and Umid-Babek gas condensate projects. Production in Azerbaijan's ACG oil fields should also get a boost next year with a seventh ACG platform. However, the overall decline is expected to offset the planned ramp-ups.

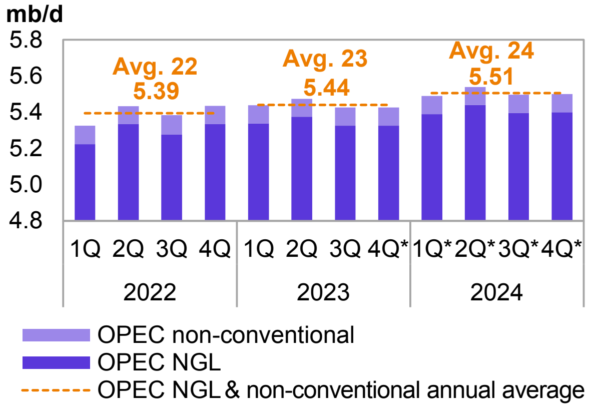
OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids are forecast to expand by about 50 tb/d in **2023** to average 5.4 mb/d. NGL production is projected to grow by 50 tb/d to average 5.3 mb/d, while non-conventional liquids are forecast to remain unchanged at 0.1 mb/d.

Preliminary data shows NGL output in 3Q23 averaging 5.33 mb/d, while non-conventional output is forecast to remain steady at 0.1 mb/d. Taken together, 5.41 mb/d is expected for October, according to preliminary data.

The preliminary **2024** forecast indicates combined growth of 65 tb/d for an average of 5.5 mb/d. NGL production is projected to grow by 65 tb/d to average 5.4 mb/d, while non-conventional liquids are projected to remain unchanged at 0.1 mb/d.

Graph 5 - 29: OPEC NGLs and non-conventional liquids quarterly production and forecast



*Note: * 4Q23-4Q24 = Forecast. Source: OPEC.*

Table 5 - 6: OPEC NGLs + non-conventional oils, mb/d

OPEC NGL and non-coventional oils	2022	Change 22/21	2023	Change 23/22	1Q24	2Q24	3Q24	4Q24	2024	Change 24/23
OPEC NGL	**5.29**	*0.11*	**5.34**	*0.05*	5.39	5.44	5.40	5.40	**5.41**	*0.07*
OPEC non-conventional	**0.10**	*0.00*	**0.10**	*0.00*	0.10	0.10	0.10	0.10	**0.10**	*0.00*
Total	**5.39**	***0.11***	**5.44**	***0.05***	**5.49**	**5.54**	**5.50**	**5.50**	**5.51**	***0.07***

Note: 2023 and 2024 = Forecast.

Source: OPEC.

OPEC crude oil production

According to secondary sources, total **OPEC-13 crude oil production** averaged 27.84 mb/d in November 2023, lower by 57 tb/d, m-o-m. Crude oil output increased mainly in Venezuela, Libya and Kuwait, while production in Iraq, Angola and Nigeria decreased.

Table 5 - 7: OPEC crude oil production based on *secondary sources*, tb/d

Secondary sources	2021	2022	1Q23	2Q23	3Q23	Sep 23	Oct 23	Nov 23	*Change Nov/Oct*
Algeria	913	1,017	1,013	979	953	960	965	962	*-2*
Angola	1,123	1,140	1,058	1,104	1,135	1,118	1,168	1,130	*-37*
Congo	263	260	269	264	259	249	257	258	*2*
Equatorial Guinea	98	84	53	59	59	50	56	56	*0*
Gabon	182	197	194	206	205	204	217	218	*2*
IR Iran	2,392	2,554	2,572	2,698	3,003	3,082	3,121	3,128	*7*
Iraq	4,046	4,439	4,371	4,135	4,287	4,317	4,355	4,278	*-77*
Kuwait	2,419	2,704	2,684	2,585	2,560	2,577	2,552	2,571	*19*
Libya	1,138	981	1,157	1,168	1,160	1,177	1,157	1,178	*21*
Nigeria	1,373	1,204	1,348	1,234	1,273	1,407	1,388	1,370	*-17*
Saudi Arabia	9,114	10,531	10,357	10,150	8,993	9,020	8,987	8,998	*12*
UAE	2,727	3,066	3,045	2,941	2,912	2,929	2,918	2,909	*-9*
Venezuela	553	680	694	751	764	745	757	780	*23*
Total OPEC	**26,341**	**28,858**	**28,817**	**28,276**	**27,562**	**27,837**	**27,895**	**27,837**	***-57***

Notes: Totals may not add up due to independent rounding, given available secondary sources to date.
Source: OPEC.

Table 5 - 8: OPEC crude oil production based on *direct communication*, tb/d

Direct communication	2021	2022	1Q23	2Q23	3Q23	Sep 23	Oct 23	Nov 23	*Change Nov/Oct*
Algeria	911	1,020	1,011	971	951	960	961	960	*-1*
Angola	1,124	1,137	1,046	1,098	1,131	1,113	1,147	1,084	*-63*
Congo	267	262	278	280	269	252	265	253	*-12*
Equatorial Guinea	93	81	51	59	58	55	54	53	*-1*
Gabon	181	191	201	203	..	..	..	..	..
IR Iran	..	..	..	..	..	..	..	..	..
Iraq	3,971	4,453	4,288	3,959	4,101	4,138	4,189	4,093	*-96*
Kuwait	2,415	2,707	2,676	2,590	2,548	2,548	2,548	2,548	*0*
Libya	1,207	..	1,195	1,181	1,187	1,196	1,188	1,206	*19*
Nigeria	1,323	1,138	1,277	1,144	1,201	1,347	1,351	1,250	*-100*
Saudi Arabia	9,125	10,591	10,456	10,124	8,969	8,975	8,940	8,818	*-122*
UAE	2,718	3,064	3,041	2,941	2,904	2,924	2,892	2,894	*2*
Venezuela	636	716	731	808	797	762	786	801	*15*
Total OPEC	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**

Notes: .. Not available. Totals may not add up due to independent rounding.
Source: OPEC.

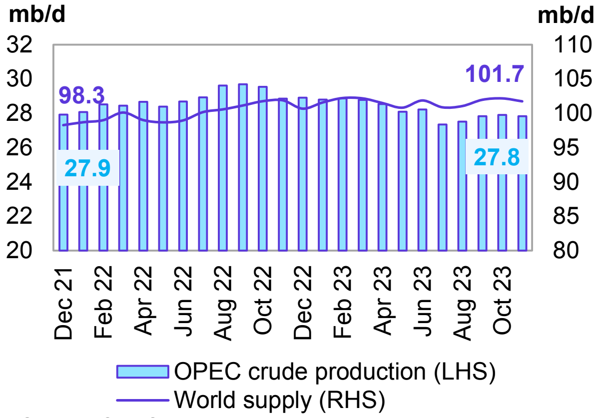
World oil supply

Preliminary data indicates that **global liquids production in November** decreased by 0.4 mb/d to average 101.7 mb/d compared with the previous month.

Non-OPEC liquids production (including OPEC NGLs) is estimated to have decreased by 0.4 mb/d, m-o-m, in November to average 73.9 mb/d. This is higher by 0.9 mb/d, y-o-y. Preliminary estimated production decreases in November were mainly seen in Russia and Kazakhstan and were partially offset by rises in Other Asia, Canada and Other Eurasia.

The **share of OPEC crude oil in total global production** in November, increased by 0.1 pp to stand at 27.4% compared with the previous month. Estimates are based on preliminary data for non-OPEC supply, OPEC NGLs and non-conventional oil, while assessments for OPEC crude production are based on secondary sources.

Graph 5 - 30: OPEC crude production and world oil supply development



Source: OPEC.

Product Markets and Refinery Operations

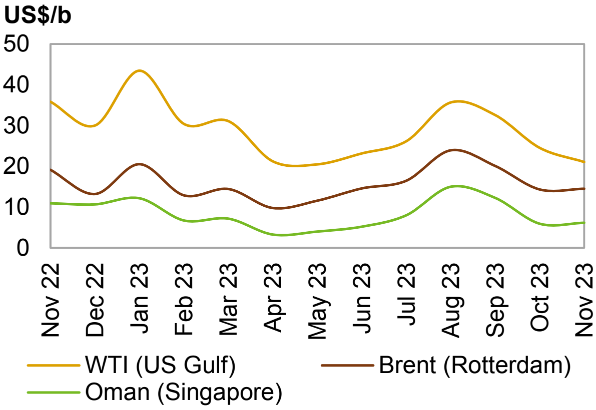
In November, refinery margins experienced a decline in the USGC as losses seen all across the barrel offset solid gains linked to gasoil markets. Gasoline crack spreads in the US continued to fall in response to seasonality, which represented the main source of weakness. This decline was further intensified by rising refinery product output, which weighed on USGC refining economics. In Rotterdam and Singapore, margins remained under pressure but showed slight positive improvements m-o-m. Lower feedstock prices and positive performances at the top section of the barrel, coupled with plans for intentional gasoline stock builds ahead of the year-end holiday season, contributed to higher refining margins. In addition, suppressed product exports from China further sustained margins, particularly in Southeast Asia.

Global refinery intake shifted course, experiencing recovery with a 1.9 mb/d increase, averaging 81.3 mb/d compared to 79.4 mb/d in the previous month. Y-o-y, intakes were 907 tb/d higher. In the coming months, with refineries back online, intakes are expected to remain well sustained, although softening margins may limit the upside.

Refinery margins

USGC refining margins against WTI extended their downward trend, having declined for the third consecutive month, although losses were significantly more contained compared to the previous month. Pronounced and continual decreases in gasoline crack spreads in line with seasonality weighed heavily on product markets despite the temporary support received over the Thanksgiving holidays. Moreover, higher refinery product output as a result of refiners' increased runs following the end of heavy turnarounds led to pressure on product markets all across the barrel, except gasoil. Total US gasoil inventories showed a drop over the month of November, further exacerbating the already low inventory levels, signalling tight availability.

Graph 6 - 1: Refining margins



Sources: Argus and OPEC.

In addition, lower temperatures in the US, along with higher y-o-y average heating degree (326 in November 2023 vs. 248 in November 2022, Platts), drove increased demand for heating oil, which helped gasoil crack spreads to post solid gains in November.

However, these substantial gains were completely outweighed by the weakness observed in all other products, particularly gasoline. US refiners are expected to keep their focus on diesel production to increase heating oil production and replenish stocks, given the improvements in product crack spreads.

In terms of operations, US refinery intake shifted course and increased with the end of heavy maintenance works, resulting in a monthly gain of 450 tb/d and bringing the average to 16.09 mb/d in November. USGC margins against WTI averaged $21.05/b, down by $3.47, m-o-m, and $14.80, y-o-y.

Refinery margins in Rotterdam against Brent increased slightly, mostly underpinned by positive performance at the top section of the barrel. Both gasoline and naphtha markets strengthened as exports for both products firmed up with some countries preparing for gasoline stockbuilds ahead of the year-end holiday season. On the other hand, products at the middle and bottom sections of the barrel in Northwest Europe experienced losses as stronger refinery processing rates contributed to expanding product balances in the region.

Refinery throughput in Europe experienced a reversal, trending upwards. According to preliminary data, it was 120 tb/d higher, at an average of 9.25 mb/d. Refinery margins against Brent in Europe averaged $14.48/b in November, 18¢ higher, m-o-m, but $4.64 lower y-o-y.

Singapore's refining margins against Oman regained some ground as performance improvements at the top and bottom sections of the barrel outweighed weakness at the middle section. The strengthening of product markets was attributed to firm regional gasoline demand, reduced gasoline exports from China, and limited gasoline supplies from the Middle East due to refinery issues.

In addition, naphtha crack spreads emerged as the second-strongest margin contributor, showing substantial gains nearly equivalent to those seen for gasoline, reflecting a seasonal uptick in petrochemical intake. Another supportive factor was the release of fuel oil import quotas in China in late November, which boosted fuel oil imports. This combined strength, coupled with the observed decline in feedstock prices over the month, provided sufficient leverage to drive up refining economics in Southeast Asia.

In November, the combined refinery intakes for Japan, China, India, Singapore and South Korea experienced a decline of 265 tb/d relative to the previous month, averaging 27.44 mb/d, according to preliminary data. Refinery margins against Oman experienced a decline of 23¢, m-o-m, to average $6.19/b, which was $4.78 lower, y-o-y.

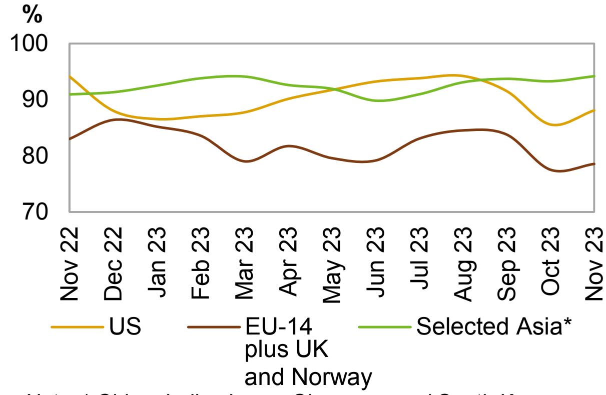
Refinery operations

US refinery utilization rates in November increased to an average of 88.1%, which corresponds to a throughput of 16.09 mb/d. This represented a rise of 2.5 pp and 450 tb/d compared with October. Y-o-y, the November refinery utilization rate was down by 6.0 pp, with throughput showing an 846 tb/d drop.

European refinery utilization averaged 78.5% in November, corresponding to a throughput of 9.25 mb/d. This is a m-o-m rise of 1.0 pp or 120 tb/d. On a y-o-y basis, the utilization rate was down 4.5 pp, and throughput was 525 tb/d lower.

In **Selected Asia** – comprising Japan, China, India, Singapore and South Korea – refinery utilization rates increased to an average of 94.2% in November, corresponding to a throughput of 27.44 mb/d. Compared with the previous month, utilization rates were up by 0.9 pp, and throughput was higher by 265 tb/d. Relative to the previous year, utilization rates were higher by 3.3 pp, and throughput was up by 956 tb/d.

Graph 6 - 2: Refinery utilization rates



*Note: * China, India, Japan, Singapore and South Korea.*
Sources: Argus, EIA, Euroilstock, PAJ and OPEC.

Table 6 - 1: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				Refinery utilization, %			
	Sep 23	Oct 23	Nov 23	Change Nov/Oct	Sep 23	Oct 23	Nov 23	Change Nov/Oct
US	**16.71**	**15.64**	**16.09**	**0.45**	**91.50**	**85.53**	**88.05**	**2.5 pp**
Euro-14, plus UK and Norway	**9.86**	**9.13**	**9.25**	**0.12**	**83.76**	**77.49**	**78.53**	**1.0 pp**
France	1.05	0.97	0.98	0.01	91.41	83.85	84.76	0.9 pp
Germany	1.66	1.59	1.63	0.03	81.01	77.70	79.38	1.7 pp
Italy	1.33	1.31	1.31	0.01	69.79	68.79	69.18	0.4 pp
UK	0.89	0.75	0.80	0.04	75.96	64.28	67.90	3.6 pp
Selected Asia*	**27.42**	**27.17**	**27.44**	**0.26**	**93.72**	**93.28**	**94.19**	**0.9 pp**

*Note: * Includes Japan, China, India, Singapore and South Korea.*

Sources: Argus Media, EIA, Euroilstock, NBS, PAJ and OPEC.

Table 6 - 2: Refinery crude throughput, mb/d

Refinery crude throughput	2020	2021	2022	4Q22	1Q23	2Q23	3Q23	4Q23
OECD Americas	**16.60**	**17.79**	**18.68**	**18.56**	**18.04**	**19.05**	**19.23**	**18.55**
of which US	*14.73*	*15.66*	*16.48*	*16.35*	*15.78*	*16.75*	*17.02*	*16.06*
OECD Europe	**10.65**	**10.92**	**11.43**	**11.38**	**11.28**	**11.10**	**11.72**	**11.59**
of which:								
France	*0.67*	*0.69*	*0.84*	*0.78*	*0.83*	*0.87*	*1.06*	*0.98*
Germany	*1.72*	*1.72*	*1.83*	*1.87*	*1.64*	*1.59*	*1.70*	*1.66*
Italy	*1.11*	*1.23*	*1.32*	*1.29*	*1.28*	*1.26*	*1.29*	*1.29*
UK	*0.92*	*0.92*	*1.04*	*1.03*	*1.03*	*1.01*	*0.96*	*0.81*
OECD Asia Pacific	**5.87**	**5.77**	**6.08**	**6.01**	**6.16**	**5.68**	**5.74**	**6.02**
of which Japan	*2.48*	*2.49*	*2.71*	*2.73*	*2.77*	*2.38*	*2.55*	*2.73*
Total OECD	**33.12**	**34.47**	**36.20**	**35.95**	**35.48**	**35.83**	**36.69**	**36.16**
Latin America	**3.20**	**3.50**	**3.36**	**3.32**	**3.41**	**3.53**	**3.37**	**3.39**
Middle East	**6.10**	**6.80**	**7.28**	**7.40**	**7.31**	**7.46**	**7.62**	**7.77**
Africa	**1.79**	**1.77**	**1.76**	**1.73**	**1.71**	**1.71**	**1.67**	**1.73**
India	**4.42**	**4.73**	**5.00**	**4.89**	**5.35**	**5.22**	**5.03**	**4.99**
China	**13.48**	**14.07**	**13.49**	**14.14**	**14.57**	**14.78**	**15.19**	**15.11**
Other Asia	**4.72**	**4.72**	**4.89**	**4.77**	**4.86**	**5.13**	**4.99**	**5.06**
Russia	**5.39**	**5.61**	**5.46**	**5.59**	**5.67**	**5.40**	**5.49**	**5.40**
Other Eurasia	**1.10**	**1.23**	**1.15**	**1.15**	**1.23**	**1.07**	**1.07**	**1.02**
Other Europe	**0.43**	**0.41**	**0.48**	**0.49**	**0.44**	**0.42**	**0.48**	**0.45**
Total Non-OECD	**40.63**	**42.85**	**42.87**	**43.48**	**44.55**	**44.73**	**44.92**	**44.92**
Total world	**73.75**	**77.32**	**79.07**	**79.43**	**80.04**	**80.56**	**81.60**	**81.08**

Note: Totals may not add up due to independent rounding.

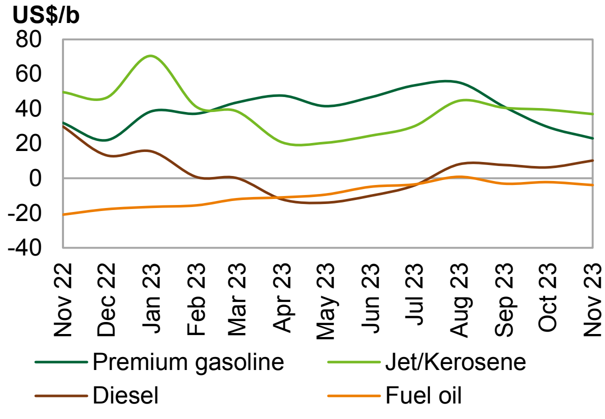
Sources: AFREC, APEC, EIA, IEA, Euroilstock, PAJ, Ministry data, including Ministry of Energy of the Russian Federation, Ministry of Petroleum and Natural Gas of India, OPEC and JODI.

Product markets

US market

The **USGC gasoline crack spread** continued to decline, although the decline registered was considerably more limited compared to what was witnessed in the previous month. This was a reflection of weaker fundamentals as the products market continued to weaken in line with seasonality. USGC wholesale gasoline 93 prices dropped by $9.65/b, m-o-m, to an average of $100.34/b in November. The USGC gasoline crack spread lost $6.58, m-o-m, to average $22.97/b in November. This was $8.92 lower, y-o-y.

Graph 6 - 3: US Gulf crack spread vs. WTI



Sources: Argus and OPEC.

The USGC **jet/kerosene crack spread** eased but showed the smallest decline among the transport fuel pack. Despite the downward trend, jet/kerosene crack spreads remained the primary margin contributor, particularly as gasoline crack spreads continued to underperform jet fuel. Wholesale prices saw a $5.55/b decrease, m-o-m, averaging $114.34/b.

The US jet/kerosene crack spread against WTI averaged $36.97/b, down by $2.48, m-o-m, and $12.57 y-o-y.

The USGC **gasoil crack** recovered the previous months' losses, showing solid gains as the sole positive performer across the barrel in the USGC. A significant contraction in product availability amid a decline in total product inventory m-o-m in the US likely underpinned the positive outcome. In addition to tight availability as gasoil inventories remained below their five-year average, lower temperatures in the US, coupled with a decline in average heating degree days, likely supported heating oil demand and gasoil crack spreads.

Gasoil prices averaged $87.61/b in November, up by 88¢ relative to October. The US gasoil crack spread against WTI averaged $10.24/b, up by $3.95, m-o-m, but lower by $19.62, y-o-y.

The **USGC fuel oil** crack spread against WTI trended downwards, losing the ground gained a month earlier. The rebound in US refinery processing rates and higher fuel oil output exerted pressure on the products market. In addition, weakening FCC margins, reflecting the decline in fuel oil to gasoline conversion economics amid the ongoing downturn in gasoline markets, likely added to the pressure and poor performance. In November, the US fuel oil crack spread against WTI averaged -$3.82/b, lower by $1.70/b, m-o-m, but higher by $17.02, y-o-y.

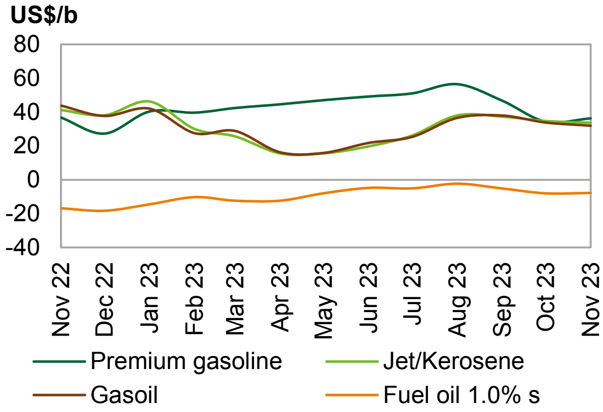
European market

Gasoline crack spreads in Rotterdam increased, supported by an uptick in gasoline exports as some consuming nations prepared for stock builds ahead of the year-end holiday season. Going forward, gasoline crack spreads are expected to come under pressure once the year-end holiday season's boost in demand diminishes amid rising refinery output levels and the subsequent and seasonal upward potential in inventory levels. The gasoline crack spread against Brent averaged $36.28/b in November, which was $1.91/b higher, m-o-m, but 52¢ lower, y-o-y.

In November, **jet/kerosene crack spreads** continued to decrease and ranked as the second strongest decliner m-o-m across the barrel in Northwest Europe. This reflects the supply–side pressures linked to rising refinery output levels in line with stronger refinery processing rates. Going forward, European jet/kerosene markets are expected to improve with a potential rise in air travel activities towards the end of the year. The Rotterdam jet/kerosene crack spread against Brent averaged $33.67/b, down by $1.03, m-o-m, and $7.50 lower, y-o-y.

Gasoil 10 ppm crack spreads in Rotterdam receded to become the strongest decliner across the barrel in November. Firm gasoil supplies in the region and softening demand amid the end of harvest season weighed on the products market. Gasoil production in Europe has been well sustained in recent months, and in November, it benefitted from stronger refinery runs, contributing to stable availability. The resulting pressures from supply-side dynamics are likely to weigh on performance, although strong heating oil demand requirements in the regions should provide some support. Moreover, softening European industrial indicators have impacted gasoil/diesel requirements within the region, further hindering gains in profitability. The gasoil crack spread against Brent averaged $31.94/b, down by $1.86, m-o-m, and by $11.90 lower, y-o-y.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



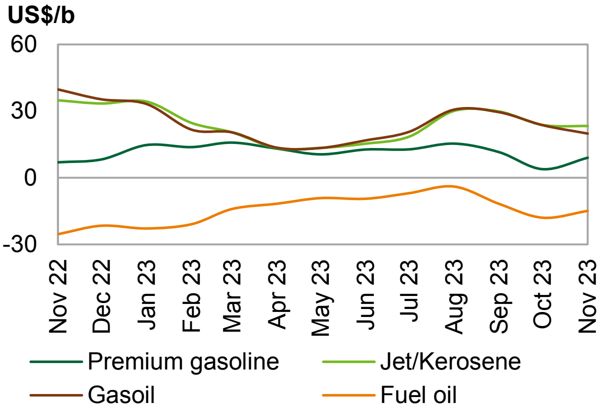
Sources: Argus and OPEC.

At the bottom of the barrel, **fuel oil 1.0% crack spreads** strengthened slightly as limited fuel oil desulfurization capacity weighed on availability and prevented steeper price declines. In addition, substantial inflows to the region from the Middle East are expected to arrive in the region amid recent advances in the phased startups new processing units in Kuwait. This will likely contribute to a weaker performance in the coming months. In terms of prices, fuel oil 1.0% decreased in value m-o-m to an average of $75.29/b, which was $5.35 lower relative to the previous month. In NWE, fuel oil 1.0% cracks against Brent averaged minus $7.76/b in November, experiencing a gain of 24¢, m-o-m, and of $9.01 higher, y-o-y.

Asian market

The **Asian gasoline 92 crack** posted significant gains, albeit not fully recovering all the ground lost in the previous month. This positive performance lifted gasoline crack spreads from the 12-month low in October, although they remained in the single-digit range. Most of the support was derived from healthy regional requirements, lower exports from China, and reported refinery problems in the Middle East, which limited gasoline flows from the Middle East to Asia in November. Reports indicating a temporary restraint in the release of additional Chinese product export quotas could help limit the upside potential for gasoline surplus in the near term. The Singapore gasoline crack spread against Dubai in November averaged $9.03/b. This was up by $5.13, m-o-m, and by $2.04 higher, y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Dubai



Sources: Argus and OPEC.

Asian **naphtha crack spreads** experienced notable gains, marking a reversal of the two-month declining trend observed since September despite remaining in negative territory. This was the outcome of improved naphtha requirements from the regional petrochemical industry in line with seasonal trends, as plastics production tends to increase in tandem with higher packaging material production ahead of the year-end holidays. The Singapore naphtha crack spread against Oman averaged minus $13.76/b, $5.25 higher, m-o-m, but $1.86 lower, y-o-y.

In the middle of the barrel, **jet/kerosene crack spreads** continued to trend downwards, as healthy regional supplies and slower volume requirements from the Atlantic Basin exerted pressure on product markets, despite the sustained robust demand from the global aviation sector. Expectations of an increase in international air travel activity during the holidays and possibly stronger export requirements to OECD Europe and Americas will likely support jet/kerosene markets towards the year-end. The Singapore jet/kerosene crack spread against Oman averaged $23.30/b, down by 47¢, m-o-m, and by $11.59 lower, y-o-y.

The Singapore **gasoil crack spread** weakened along with that of jet/kerosene. The end of the heavy turnaround season in the Atlantic Basin points to pressure on East-to-West gasoil outflows going forward, potentially increasing the supply-side pressures in Asian gasoil markets in the near term unless refiners in the region decide to reduce runs. The Singapore gasoil crack spread against Oman averaged $19.88/b, down by $3.79, m-o-m, and by $19.91 lower, y-o-y.

The Singapore **fuel oil 3.5% crack spread** showed improvement as fuel oil import quotas released to refiners in China boosted fuel oil demand and imports for feedstock blending. Weakening FCC margins due to lower economic incentives to convert residual fuel into gasoline are expected to continue to weigh on the product's performance. In addition, strong supplies from the Middle East led to a surge in the product's availability amid higher available refining capacity in the region, adding to the supply-side pressure. Singapore's high sulphur fuel oil crack spreads against Oman averaged minus $14.90/b, which was up by $3.05, m-o-m, and by $10.44, higher y-o-y.

Table 6 - 3: Short-term prospects for product markets and refinery operations

Event	Time frame	Observations	Asia	Europe	US
Year-end holidays (jet fuel)	Dec 23	A rise in air travel activities is expected to take place nearly globally during the year-end holiday season. This could be supportive for refinery runs.	↑ Upward pressure on jet fuel crack spreads	↑ Upward pressure on jet fuel crack spreads	↑ Upward pressure on jet fuel crack spreads
Year-end holidays (Naphtha)	Dec 23	Naphtha markets in Asia could experience some improvement as plastic demands tend to pick up ahead of the holiday season due to a typical surge in packaging material.	↑ Upward pressure on naphtha crack spreads	-	-
Weakening refining margins	Dec 23	If refining margins continue to decline, refiners may have to respond by reducing run to mitigate their losses.	↓ Pressure on refinery runs	↓ Pressure on refinery runs	↓ Pressure on refinery runs
Gasoil markets (heating oil demand)	Dec 23	Gasoil and kerosene markets are expected to respond positively as temperatures reach colder levels, providing support to middle distillates.	↑ Upward pressure on gasoil crack spreads	↑ Upward pressure on gasoil crack spreads	↑ Upward pressure on gasoil crack spreads

Source: OPEC.

Table 6 - 4: Refined product prices, US$/b

		Oct 23	Nov 23	Change Nov/Oct	Annual avg. 2022	Year-to-date 2023
US Gulf (Cargoes FOB)						
Naphtha*		72.09	68.93	-3.16	89.24	73.17
Premium gasoline	(unleaded 93)	109.99	100.34	-9.65	134.59	119.24
Regular gasoline	(unleaded 87)	97.03	88.41	-8.62	123.34	106.42
Jet/Kerosene		119.89	114.34	-5.55	140.17	114.67
Gasoil	(0.2% S)	86.73	87.61	0.88	122.10	78.39
Fuel oil	(3.0% S)	74.51	70.96	-3.55	76.84	67.70
Rotterdam (Barges FoB)						
Naphtha		71.27	69.35	-1.92	85.08	71.14
Premium gasoline	(unleaded 98)	123.01	119.33	-3.68	136.26	127.18
Jet/Kerosene		123.34	116.72	-6.62	139.86	112.15
Gasoil/Diesel	(10 ppm)	122.44	114.99	-7.45	142.32	111.70
Fuel oil	(1.0% S)	80.64	75.29	-5.35	88.77	74.60
Fuel oil	(3.5% S)	81.46	74.51	-6.95	78.86	73.11
Mediterranean (Cargoes FOB)						
Naphtha		69.13	66.13	-3.00	82.26	68.59
Premium gasoline**		97.72	95.77	-1.95	120.04	102.89
Jet/Kerosene		120.01	112.54	-7.47	135.36	108.22
Diesel		120.24	109.55	-10.69	135.91	109.64
Fuel oil	(1.0% S)	85.02	80.43	-4.59	94.51	79.06
Fuel oil	(3.5% S)	72.85	63.91	-8.94	72.30	66.99
Singapore (Cargoes FOB)						
Naphtha		70.80	69.57	-1.23	83.91	69.25
Premium gasoline	(unleaded 95)	98.91	98.00	-0.91	115.05	99.29
Regular gasoline	(unleaded 92)	93.71	92.36	-1.35	111.02	94.61
Jet/Kerosene		113.58	106.63	-6.95	126.76	104.96
Gasoil/Diesel	(50 ppm)	117.06	106.08	-10.98	134.94	106.59
Fuel oil	(180 cst)	112.78	103.06	-9.72	129.75	102.81
Fuel oil	(380 cst 3.5% S)	71.86	68.43	-3.43	76.63	69.44

*Note: * Barges. ** Cost, insurance and freight (CIF).*

Sources: Argus and OPEC.

Tanker Market

Dirty freight rates recovered further in November on tightening availability, yet remained below the volatile levels seen last year. Rates have remained steady in the first weeks of December amid relatively quiet activities.

VLCC spot freight rates saw healthy gains in November, with rates on the Middle East-to-East route rising 30%, m-o-m. The market has been supported by higher tonnage mile demand amid record US crude exports and strong y-o-y growth in Brazilian exports.

Suezmax rates saw a more gradual increase, building on the spike in rates the month before. Suezmax rates on the US Gulf Coast to Europe route edged up 2%, m-o-m.

Aframax rates also increased, although gains were more muted East of Suez. Around the Mediterranean, Aframax rates rose 16% m-o-m.

In the clean tanker market, spot freight rates saw mixed movement, with East of Suez rates falling by 24% m-o-m, while West of Suez rates rose 28%.

Spot fixtures

Global spot fixtures fell in November, dropping by almost 2.0 mb/d, or 13%, m-o-m, to average 12.9 mb/d. Compared with the same month last year, spot fixtures declined 3.7 mb/d or 22%.

OPEC spot fixtures declined 1.6 mb/d, or 15%, to average 8.8 mb/d in November. Compared with the same month in 2022, fixtures were 3.4 mb/d, or 28% lower.

Middle East-to-East fixtures declined by 0.6 mb/d or almost 10% to average 5.4 mb/d. Compared with the same month in 2022, eastward flows from the Middle East dropped 1.9 mb/d or 26%.

In contrast, spot fixtures on the **Middle East-to-West** route fell by 0.5 mb/d or 32%, m-o-m, to average 1 mb/d. Fixtures were down 0.3 mb/d or about 25%, y-o-y.

Fixtures on routes **outside the Middle East** fell by 0.6 mb/d, or almost 21%, m-o-m, to average 2.4 mb/d. Compared with the same month last year, fixtures declined 1.2 mb/d, or almost 34%.

Table 7 - 1: Spot fixtures, mb/d

Spot fixtures	Sep 23	Oct 23	Nov 23	*Change* Nov 23/Oct 23
All areas	14.7	14.8	12.9	-2.0
OPEC	10.9	10.4	8.8	-1.6
Middle East/East	6.1	6.0	5.4	-0.6
Middle East/West	1.4	1.4	1.0	-0.5
Outside Middle East	3.4	3.0	2.4	-0.6

Sources: Oil Movements and OPEC.

Sailings and arrivals

OPEC sailings declined 1.7 mb/d or 7%, m-o-m, to average 22.0 mb/d in November. Compared with the same month last year, OPEC sailings were down by 3.4 mb/d, or over 13%. **Middle East sailings** averaged 16.7 mb/d in November, representing a marginal decline of less than 1%. Y-o-y, sailings from the region were 0.2 mb/d, or less than 2% lower.

Crude arrivals were mixed in November. **North American arrivals** increased by 0.6 mb/d, or about 7%, to average 9.2 mb/d. Y-o-y, however, North American arrivals were down 0.1 mb/d, or less than 2%. In contrast, **arrivals in Europe** were marginally unchanged, averaging 12.4 mb/d. Compared with the same month last year, arrivals to Europe increased, up 0.9 mb/d, or about 8%.

Far East arrivals rose 0.8 mb/d, or almost 5%, m-o-m, to average 17.5 mb/d. Y-o-y, arrivals in the region were up 0.2 mb/d or about 1%. **Arrivals** in **West Asia**, in contrast, fell by 0.4 mb/d, or around 5%, to an average of 8.5 mb/d. Y-o-y, arrivals in the region increased by 1.1 mb/d, or over 15%.

Table 7 - 2: Tanker sailings and arrivals, mb/d

Sailings	Sep 23	Oct 23	Nov 23	Change Nov 23/Oct 23
OPEC	22.8	23.8	22.0	-1.7
Middle East	16.4	16.8	16.7	-0.1
Arrivals				
North America	9.1	8.6	9.2	0.6
Europe	12.6	12.5	12.4	-0.1
Far East	13.0	16.7	17.5	0.8
West Asia	7.1	8.9	8.5	-0.4

Sources: Oil Movements and OPEC.

Dirty tanker freight rates

Very large crude carriers

VLCC spot rates outperformed those of Suezmax and Aframax vessels, increasing for the second month in a row on all monitored routes. VLCC spot freight rates rose 26%, m-o-m, on average, amid a pickup in longer haul demand. However, compared with the same month last year, VLCC rates were 39% lower.

On the **Middle East-to-East** route, rates gained 30%, m-o-m, to average WS69 points. This represents a y-o-y decline of 38%. Rates on the **Middle East-to-West** route rose 25%, m-o-m, to average WS40 points. Compared with the same month last year, rates on the route fell 41%.

West Africa-to-East spot rates increased 23%, m-o-m, to average WS69 points in November. Compared with the same month last year, rates were down 38%.

Table 7 - 3: Dirty VLCC spot tanker freight rates, Worldscale (WS)

VLCC	Size 1,000 DWT	Sep 23	Oct 23	Nov 23	Change Nov 23/Oct 23
Middle East/East	230-280	42	53	69	16
Middle East/West	270-285	27	32	40	8
West Africa/East	260	47	56	69	13

Sources: Argus and OPEC.

Suezmax

Suezmax spot freight rates built on the previous month's strong gains, rising 6%, m-o-m, in November. However, they remained 41% lower than the exceptionally elevated levels seen in the same month last year.

On the **West Africa-to-US Gulf Coast** (USGC) route, spot freight rates rose 2%, m-o-m, in November to average WS108 points. Compared with the previous year, spot rates were 44% lower, y-o-y.

Rates on the **USGC-to-Europe** increased 9%, m-o-m, to average WS108 points. Compared with the same month of 2022, they were down 37%.

Table 7 - 4: Dirty Suezmax spot tanker freight rates, WS

Suezmax	Size 1,000 DWT	Sep 23	Oct 23	Nov 23	Change Nov 23/Oct 23
West Africa/US Gulf Coast	130-135	67	106	108	2
US Gulf Coast/ Europe	150	50	99	108	9

Sources: Argus and OPEC.

Aframax

Aframax spot freight rates showed further momentum in November, rising 15%, m-o-m. While rates were higher than the strong levels seen at the end of 2019, they were still 42% lower than in November last year when rates were pushed higher by geopolitical developments.

Rates on the **Indonesia-to-East** route saw the weakest performances, up 5%, m-o-m, to an average of WS164 points in November. Compared with the same month last year, rates were 37% lower.

Spot rates on the **Caribbean-to-US East Coast (USEC)** route continued to see the strongest m-o-m gain in the monitored Aframax routes, increasing 21% to average WS232 points in November. Compared with the same month last year, rates were down by 50%.

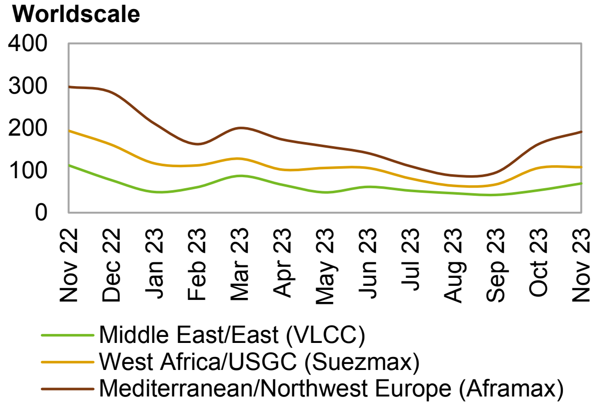
Table 7 - 5: Dirty Aframax spot tanker freight rates, WS

Aframax	Size *1,000 DWT*	Sep 23	Oct 23	Nov 23	*Change* Nov 23/Oct 23
Indonesia/East	80-85	126	156	164	8
Caribbean/US East Coast	80-85	85	192	232	40
Mediterranean/Mediterranean	80-85	98	171	199	28
Mediterranean/Northwest Europe	80-85	95	162	191	29

Sources: Argus and OPEC.

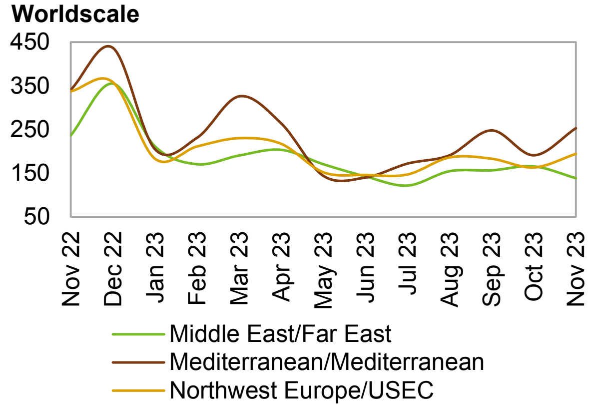
Cross-Med spot freight rates rose 16%, m-o-m, to average WS199 points. This represented a 39% decline, y-o-y. Meanwhile, rates on the **Mediterranean-to-Northwest Europe (NWE)** route gained 18%, m-o-m, to average WS191 points. Compared with the same month of 2022, rates were down by around 36%.

Graph 7 - 1: Crude oil spot tanker freight rates, monthly average



Sources: Argus and OPEC.

Graph 7 - 2: Products spot tanker freight rates, monthly average



Sources: Argus and OPEC.

Clean tanker freight rates

Clean rates saw mixed movement. On average, clean spot freight rates on East of Suez routes fell 24%, m-o-m, while rates in the West of Suez market rose 28% over the same period. As a result, rates averaged 7% higher overall.

Table 7 - 6: Clean spot tanker freight rates, WS

East of Suez	Size *1,000 DWT*	Sep 23	Oct 23	Nov 23	*Change* Nov 23/Oct 23
Middle East/East	30-35	156	165	138	-27
Singapore/East	30-35	229	217	153	-64
West of Suez					
Northwest Europe/US East Coast	33-37	183	163	194	31
Mediterranean/Mediterranean	30-35	248	191	253	62
Mediterranean/Northwest Europe	30-35	258	201	263	62

Sources: Argus and OPEC.

Rates on the **Middle East-to-East** route fell 16%, m-o-m, to average WS138 points. Compared with the same month last year, rates were 42% lower. Clean spot freight rates on the **Singapore-to-East** route declined 29%, m-o-m, to average WS153 points. This was 55% lower than in the same month of 2022.

West of Suez rates showed a brighter picture, with spot freight rates on the **NWE-to-USEC** route increasing 19%, m-o-m, to average WS194 points. This represents a 42% decline compared with November 2022.

Rates for the **Cross-Med** route rose 32%, m-o-m, to average WS253 points, while rates on the **Med-to-NWE** route increased by 31%, m-o-m, to average WS263 points. However, compared with the same month of 2022, rates declined by around 25% on both routes.

Crude and Refined Products Trade

Preliminary November data shows US crude imports broadly stable, averaging 6.3 mb/d for the month. US crude exports increased to 4.8 mb/d, the second highest on record. US crude imports are likely to follow a seasonal decline in December, while crude exports could remain close to record levels amid sustained buying by Europe and Asia.

China's crude imports recovered some of the previous month's decline, averaging 11.6 mb/d in October, a m-o-m gain of almost 4%. Preliminary November figures show imports fell to 10.4 mb/d. China's product exports slipped a further 8%, m-o-m, in October, with losses driven by gasoline, naphtha, and the other product category.

Following seven months of declines dating back to February 2023, India's crude imports increased to average 4.4 mb/d in October. India's product imports were the second-highest on record, driven by gains in LPG, naphtha and gasoline. India's crude imports are expected to continue to increase in November, ahead of the festive season, averaging around 4.5 mb/d.

Japan's crude imports were down by about 12% in October to average 2.3 mb/d. Product exports, including LPG, dropped from a seven-month high the month before to average 494 tb/d. Declines were seen across most major products, the exception being gasoline. Japan's crude imports in November are expected to increase as the country enters its high-demand winter season.

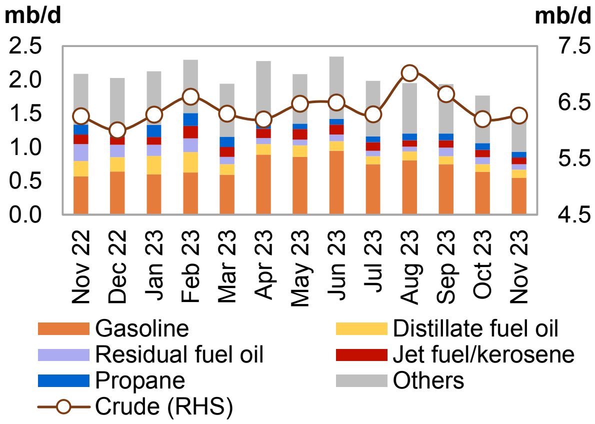
Preliminary estimates show OECD Europe crude imports increasing slightly in November, while product imports are also seen gaining momentum. Crude exports are likely to be higher amid flows of Forties and Norwegian crude to Asia.

US

Preliminary data shows **US crude imports** edging up m-o-m by 1% in November to average 6.3 mb/d. Compared with the same month last year, crude imports dropped by around 1%.

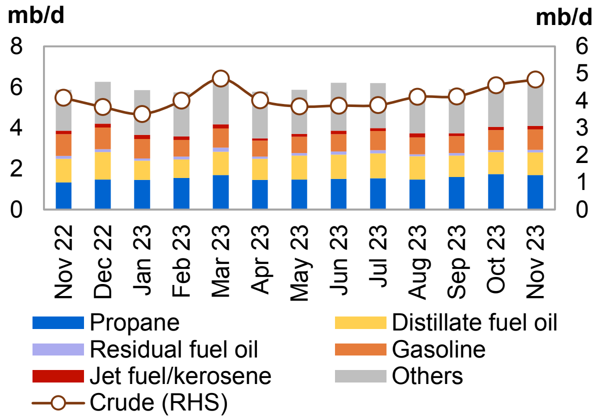
According to the latest official monthly data from the US Energy Information Administration (EIA), Canada remained the top supplier of crude in September, with a share of close to 57%. Mexico was second with about 11%, and Saudi Arabia was third with over 5%.

Graph 8 - 1: US imports of crude and products



Sources: EIA and OPEC.

Graph 8 - 2: US exports of crude and products



Sources: EIA and OPEC.

US crude exports rose to the second highest on record, according to preliminary data, averaging 4.8 mb/d. Crude outflows rose 0.2 mb/d, m-o-m, or over 4%, and were up 0.7 mb/d, or over 16%, compared to the same month last year.

US **net crude imports** declined for the third month in a row to average 1.5 mb/d in November. This compares with 1.6 mb/d in October and 2.2 mb/d in the same month last year.

On the **products** side, **imports** declined in November by about 0.2 mb/d, m-o-m, or 12%, averaging around 1.6 mb/d, with losses across all products, except distillates. Compared with the same month last year, product inflows were down by around 0.5 mb/d, or almost 26%.

Product exports increased 0.1 mb/d, or about 2%, to average 6.3 mb/d in November, representing an eight-month high, with gains across most major products except propane. Compared with the same month last year, exports were 0.4 mb/d, or almost, 7% higher.

Preliminary data showed **US net product exports** averaging 4.7 mb/d in November, compared with 4.4 mb/d in October and 3.8 mb/d in the same month last year.

Preliminary data indicates that US **net crude and product imports** averaged 3.2 mb/d in November. This compares with 2.8 mb/d in October and 1.6 mb/d in the same month last year.

Table 8 - 1: US crude and product net imports, mb/d

US	Sep 23	Oct 23	Nov 23	*Change* Nov 23/Oct 23
Crude oil	2.48	1.63	1.49	-0.14
Total products	-3.97	-4.40	-4.72	-0.31
Total crude and products	**-1.49**	**-2.78**	**-3.23**	**-0.45**

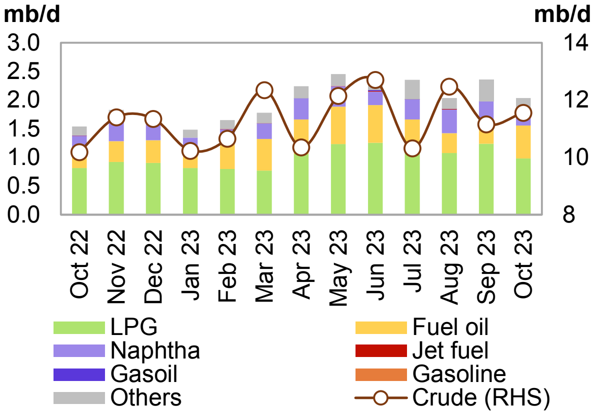
Note: Totals may not add up due to independent rounding.
Sources: EIA and OPEC.

Looking ahead, US crude imports are likely to follow a seasonal decline in December. US crude exports are expected to remain close to record levels amid sustained buying by Europe and Asia. US product exports were at strong levels in the first week of December, supported by demand from Europe, Asia and Latin America.

China

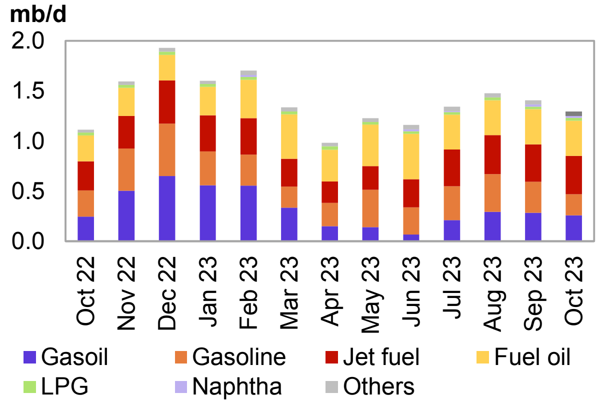
China's crude imports increased to 11.6 mb/d in October, partially recovering from the previous month's decline. This represented a m-o-m increase of 0.4 mb/d, or almost 4%. Compared with the same month last year, China's crude imports were 1.4 mb/d, or almost 14%, higher. Preliminary November figures show imports fell to a four-month low of 10.4 mb/d.

Graph 8 - 3: China's import of crude and total products



Sources: China OGP and OPEC.

Graph 8 - 4: China's export of total products



Sources: China OGP and OPEC.

In terms of **crude imports by source**, Russia remained in the top spot in October with a 17% share, albeit down from 19% the month before. Saudi Arabia was second with almost 14%, while Malaysia was third with 12%. Inflows were significantly higher in percentage terms from Angola, Kuwait, Colombia, and Ecuador.

Product imports erased most of the previous month's gains, averaging 2.0 mb/d in October. Inflows were down 0.3 mb/d, m-o-m, or almost 14%, with declines seen in naphtha and LPG, while fuel oil imports increased. Compared to the same period last year, product imports were 0.5 mb/d, or around 33%, higher.

Product exports declined further m-o-m to average 1.3 mb/d, representing a drop of 0.1 mb/d, or 8%. Losses were driven by gasoline and diesel. Compared to the same period last year, product exports were almost 0.2 mb/d, or 16%, higher.

Net product imports averaged 746 tb/d in October, compared to 953 tb/d in September and 424 tb/d in the same month last year.

Table 8 - 2: China's crude and product net imports, mb/d

China	Aug 23	Sep 23	Oct 23	*Change* Oct 23/Sep 23
Crude oil	12.41	11.13	11.56	0.44
Total products	0.55	0.95	0.75	-0.21
Total crude and products	**12.97**	**12.08**	**12.31**	**0.23**

Note: Totals may not add up due to independent rounding.

Sources: China OGP and OPEC.

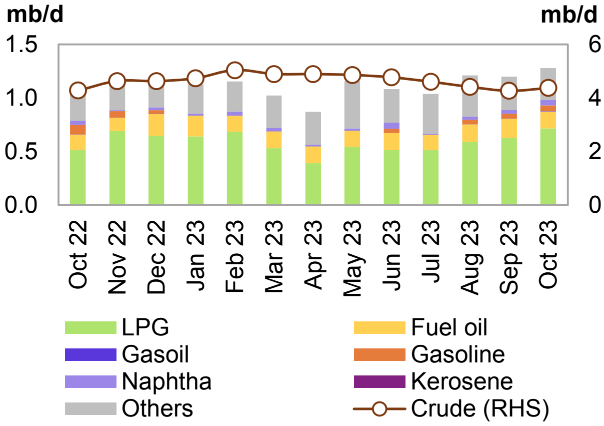
Looking ahead, China's crude imports could return above 11 mb/d in December as importers prepare for the new year. Product imports are expected to be lower in December, with declines across all major categories. Product exports are expected to fall in December amid limited export quotas.

India

India's crude imports increased to 4.4 mb/d in October, following seven months of declines dating back to February 2023. Compared to the previous month, crude inflows were down 104 tb/d, or 2%. Y-o-y, crude imports were up by 95 tb/d, or just over 2%.

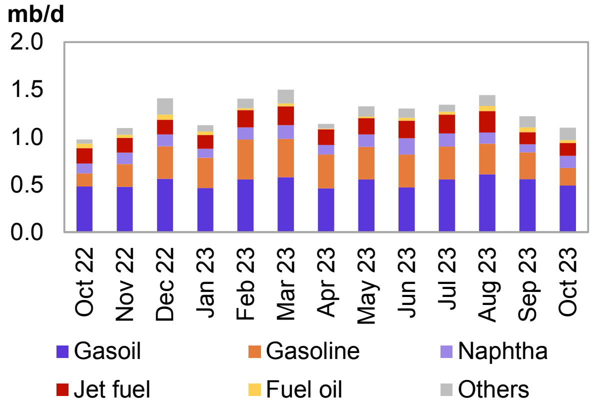
In terms of **crude imports by source**, Kpler data shows Russia was the top crude supplier to India in October, with a share of 36%. Saudi Arabia and Iraq were second and third, respectively, with shares of 20% and 19%.

Graph 8 - 5: India's imports of crude and products



Sources: PPAC and OPEC.

Graph 8 - 6: India's exports of products



Sources: PPAC and OPEC.

In terms of **products**, **imports** were the second-highest on record, averaging 1.3 mb/d. Gains were driven by LPG, naphtha and gasoline. Compared with the previous month, India's product imports increased 81 tb/d, or almost 7%. Y-o-y, product inflows were 191 tb/d or aobut 18% higher.

Product exports declined by 121 tb/d, m-o-m, or almost 10%, to average 1.1 mb/d, marking an 11-month low. Losses were shared across diesel, gasoline and fuel oil. Compared to the same month last year, product outflows from India were 124 tb/d, or almost 13%, higher.

Table 8 - 3: India's crude and product net imports, mb/d

India	Aug 23	Sep 23	Oct 23	*Change* Oct 23/Sep 23
Crude oil	4.42	4.27	4.37	0.10
Total products	-0.23	-0.02	0.18	0.20
Total crude and products	**4.19**	**4.25**	**4.56**	**0.31**

Note: Totals may not add up due to independent rounding.
India data table does not include information for crude import and product export by Reliance Industries.
Sources: PPAC and OPEC.

As a result, India's **net product** flows showed net **imports** for the first time in almost a year – if the relatively balanced figure for January is disregarded. Net product imports averaged 181 tb/d in October, compared to net exports of 20 tb/d the month before and net imports of 114 tb/d in October 2022.

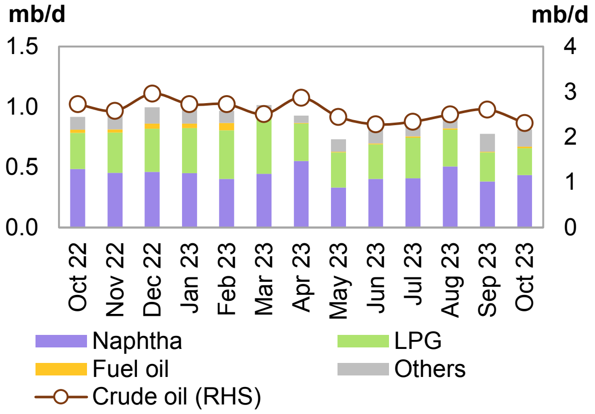
Looking ahead, India's crude imports are expected to continue to increase in November, ahead of the festive season, and average around 4.5 mb/d. Tanker tracking data shows a jump in product outflows to major trading hubs in November, with gains across all major products. Product exports are likely to fall in December as domestic demand picks up.

Japan

Japan's crude imports declined in October, averaging 2.3 mb/d, a drop of 299 tb/d, m-o-m, or almost 12%. Compared with the same month last year, crude inflows were 0.4 mb/d, or around 15%, lower.

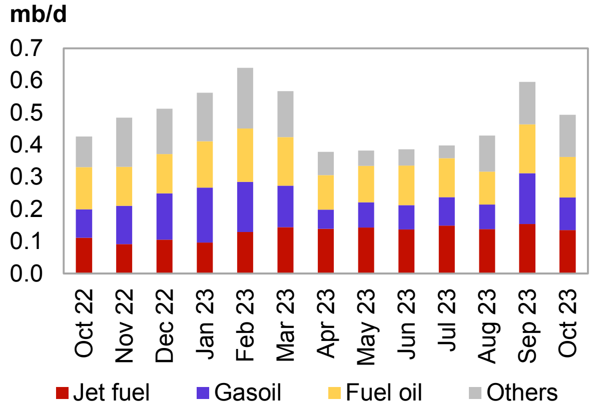
In terms of **crude imports by source**, Saudi Arabia held the highest share in October, with over 42%. The United Arab Emirates was second with almost 41%, followed by Kuwait with almost 5%.

Graph 8 - 7: Japan's imports of crude and products



Sources: METI and OPEC.

Graph 8 - 8: Japan's exports of products



Sources: METI and OPEC.

Product imports, including LPG, rose by about 5% to average 812 tb/d. Gains were seen in naphtha, kerosene and fuel oil, offsetting declines in gasoline and gasoil. Compared with October 2022, product inflows were 104 tb/d, or about 11%, lower.

Product exports declined in October by 102 tb/d, or around 17%, m-o-m, to average 494 tb/d. Losses were seen across most major products, the exception being gasoline. Compared with the same month last year, product exports were up by 68 tb/d, or about 16%.

Consequently, Japan's **net product imports**, including LPG, averaged 318 tb/d in October. This compares with 179 tb/d the month before and 490 tb/d in October 2022.

Table 8 - 4: Japan's crude and product net imports, mb/d

Japan	Aug 23	Sep 23	Oct 23	*Change* Oct 23/Sep 23
Crude oil	2.50	2.61	2.31	-0.30
Total products	0.49	0.18	0.32	0.14
Total crude and products	**2.99**	**2.79**	**2.63**	**-0.16**

Note: Totals may not add up due to independent rounding.

Sources: METI and OPEC.

Looking ahead, Japan's crude imports in November are expected to increase as the country enters its high-demand winter season. Product imports are also seen to have increased in November amid higher inflows of LPG and naphtha. Product exports are likely to be lower in November, with declines across all major products, except fuel oil.

OECD Europe

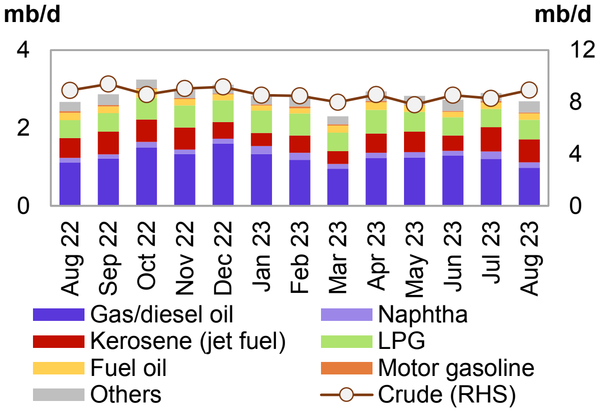
The latest regional data shows **OECD Europe imports** increased in **August** by 0.6 mb/d, m-o-m, or more than 7%, to average 8.9 mb/d. Compared with the same month last year, crude imports were broadly unchanged.

In terms of **import sources** from outside the region, the US was the top supplier in August, with close to 1.8 mb/d. Iraq was second with almost 1.0 mb/d, followed by Kazakhstan with close to 0.9 mb/d.

Crude exports average 30 tb/d in **August**, representing a decline of around 50 tb/d from the previous month. Compared to the same month last year, crude outflows were broadly unchanged. Romania was the main destination for crude exports outside the region in July, taking in around 20 tb/d.

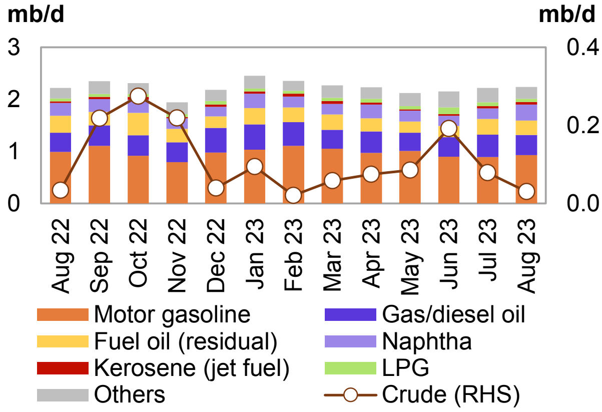
Net crude imports averaged 8.9 mb/d in August, compared with 8.2 mb/d in July and about 8.9 mb/d in August 2022.

Graph 8 - 9: OECD Europe imports of crude and products



Sources: IEA and OPEC.

Graph 8 - 10: OECD Europe exports of crude and products



Sources: IEA and OPEC.

In terms of **products**, **imports** declined m-o-m by 0.2 mb/d, or about 7%, to average 2.7 mb/d. Losses were seen in most major categories, particularly diesel, but were slightly offset by higher outflows of ethane and LPG. Compared with August 2022, product inflows were marginally higher.

Product exports edged marginally higher, but still averaged 2.2 mb/d. Gains in naphtha and gasoline were partially offset by losses in diesel and fuel oil. Compared to the same month last year, product outflows also saw marginal gains.

Net product imports averaged 450 tb/d in August, compared with net imports of 679 tb/d the month before and 454 tb/d in August 2022.

Combined, **net crude and product imports** averaged 9.3 mb/d in August, compared with 8.9 mb/d in July and 9.3 mb/d in August 2022.

Table 8 - 5: OECD Europe's crude and product net imports, mb/d

OECD Europe	Jun 23	Jul 23	Aug 23	*Change* Aug 23/Jul 23
Crude oil	8.33	8.20	8.88	0.68
Total products	0.57	0.68	0.45	-0.23
Total crude and products	**8.90**	**8.88**	**9.33**	**0.45**

Note: Totals may not add up due to independent rounding.

Sources: IEA and OPEC.

Looking ahead, preliminary estimates show OECD Europe crude imports at higher levels both y-o-y and m-o-m in November, supported by rising inflows from West Africa. Pipeline crude flows from Russia are scheduled to be stable at around 0.3 mb/d in December. Maritime crude flows were strong in the first week of December, with stronger flows from all regions. Crude exports are likely to be higher amid flows of Forties and Norwegian crude to Asia. Product imports were elevated in November, with gains across all major categories, the exception being diesel. Weekly estimates for the first week of December show continued high levels, with only jet inflows declining. Product exports have been strong in the first week of December, supported by a jump in gasoline exports.

Eurasia

Total crude oil exports from Russia and Central Asia averaged 6.7 mb/d in October, representing a m-o-m increase of 0.3 mb/d, or 5%. Gains came at the time the country's refineries experienced peak refinery maintenance. Compared to the same month last year, outflows were 0.5 mb/d, or 8%, higher.

Crude exports through the **Transneft system** rose in October, with increases in almost all major outlets. Outflows averaged 4.0 mb/d, representing a m-o-m increase of 275 tb/d, or about 8%. Compared to the same month last year, exports were 111 tb/d, or 3%, lower. Crude exports from the **Baltic Sea** showed the largest increase, up 147 tb/d, or almost 10%, to average 1.7 mb/d. Flows from Primorsk were up 148 tb/d, or 18%, to average 949 tb/d. Exports from Ust-Luga were largely unchanged at 722 tb/d. Shipments from the **Black Sea** port of Novorossiysk increased 66 tb/d, or about 13%, to average 580 tb/d.

Shipments via the **Druzhba** pipeline edged down 7 tb/d, or 2%, to average 323 tb/d in October. Compared to the same month last year, exports on the pipeline were down by 361 tb/d, or 53%. Exports to inland China via the **ESPO pipeline** rose 33 tb/d m-o-m, or about 6%, to average 614 tb/d in October. This was 18 tb/d, or about 3%, higher than in the same month last year. Flows to the Pacific port of **Kozmino** averaged 835 tb/d, representing a gain of 23 tb/d, or almost 3%. This was about 25 tb/d, or 3%, lower than in the same month last year.

In the **Lukoil system**, exports via the Varandey offshore platform in the Barents Sea rose m-o-m by 29 tb/d, or 29%, to average 129 tb/d in October. There continued to be no exports from the Kaliningrad terminal.

On other routes, the combined **Russia's Far East** exports from the De Kastri and Aniva ports rose by 75 tb/d, or about 35%, to average 294 tb/d in October. This was 222 tb/d higher than the volumes shipped in the same month last year during a period when De Kastri flows were at 85 tb/d.

Central Asian exports averaged 217 tb/d in October, a decline of about 2% from September and a 3% increase over the same month last year.

Black Sea total exports from the **CPC terminal** were broadly unchanged, averaging 1.4 mb/d in October. This represented an increase of 426 tb/d, or 44%, compared with the same month last year. Flows on the Supsa pipeline remained at zero in October. Exports via the **Baku-Tbilisi-Ceyhan (BTC) pipeline** declined by 86 tb/d, or 13%, in October, to average 585 tb/d.

Total product exports from Russia and Central Asia were marginally lower m-o-m, averaging 2.4 mb/d in October. The steady performance came despite major maintenance work at refineries and a fuel export ban during the month. The m-o-m declines were driven by VGO, jet fuel, and gasoline. These were offset by gains in naphtha, gasoil, and fuel oil. Y-o-y, total product exports declined 244 tb/d, or 9%, with the bulk of losses driven by fuel oil.

Commercial Stock Movements

Preliminary October 2023 data show total OECD commercial oil stocks down by 12.8 mb, m-o-m. At 2,818 mb, they were 45 mb higher than the same time one year ago, but 66 mb lower than the latest five-year average and 128 mb below the 2015–2019 average. Within the components, crude stocks rose by 11.0 mb, while product stocks fell 23.8 mb, m-o-m.

OECD commercial crude stocks stood at 1,342 mb in October. This was 15 mb lower than the same time a year ago, 57 mb below the latest five-year average and 112 mb lower than the 2015–2019 average.

Total product stocks fell by 23.8 mb in October to stand at 1,476 mb. This is 61 mb above the same time a year ago, but 9 mb lower than the latest five-year average and 16 mb below the 2015–2019 average.

In terms of days of forward cover, OECD commercial stocks remained unchanged, m-o-m, in October, standing at 61.7 days. This is 0.6 days above the October 2022 level, but 1.4 days lower than the latest five-year average and 0.7 days less than the 2015–2019 average.

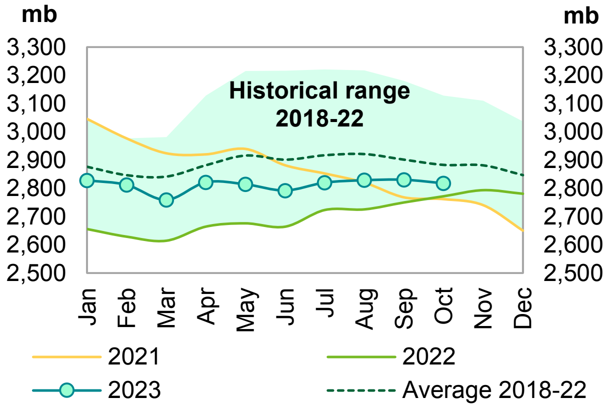
Preliminary data for November 2023 showed that total US commercial oil stocks rose by 6.8 mb, m-o-m, to stand at 1,269 mb. This is 42.5 mb, or 3.5%, higher than the same month in 2022, but 8.7 mb, or 0.7%, below the latest five-year average. Crude stocks rose by 23.1 mb, while product stocks fell by 16.4 mb, m-o-m.

OECD

Preliminary **October 2023** data show **total OECD commercial oil stocks** down by 12.8 mb, m-o-m. At 2,818 mb, they were 45 mb higher than the same time one year ago, but 66 mb lower than the latest five-year average and 128 mb below the 2015–2019 average.

Within the components, crude stocks rose by 11.0 mb, while product stocks fell by 23.8 mb, m-o-m. Within the OECD regions, total commercial oil stocks in October fell in OECD Americas, while they increased in OECD Europe and OECD Asia Pacific.

Graph 9 - 1: OECD commercial oil stocks



Sources: Argus, EIA, Euroilstock, IEA, METI and OPEC.

OECD commercial **crude stocks** stood at 1,342 mb in October. This was 15 mb lower than the same time a year ago, 57 mb below the latest five-year average and 112 mb lower than the 2015–2019 average. M-o-m, OECD Americas and OECD Asia Pacific saw crude stock builds of 4.4 mb and 6.1 mb, respectively, while crude stocks in OECD Europe rose by 0.5 mb.

Total product stocks fell by 23.8 mb in October to stand at 1,476 mb. This is 61 mb above the same time a year ago, but 9 mb lower than the latest five-year average and 16 mb below the 2015–2019 average. M-o-m, product stocks in OECD Americas witnessed draws of 26.7 mb, while OECD Europe and OECD Asia Pacific product stocks rose by 0.5 mb and 2.4 mb, respectively.

Table 9 - 1: OECD commercial stocks, mb

OECD stocks	Oct 22	Aug 23	Sep 23	Oct 23	*Change* Oct 23/Sep 23
Crude oil	1,357	1,343	1,331	1,342	*11.0*
Products	1,415	1,486	1,500	1,476	*-23.8*
Total	**2,772**	**2,829**	**2,831**	**2,818**	***-12.8***
Days of forward cover	**61.0**	**61.7**	**61.6**	**61.7**	***0.0***

Note: Totals may not add up due to independent rounding.

Sources: Argus, EIA, Euroilstock, IEA, METI and OPEC.

In terms of **days of forward cover**, OECD commercial stocks remained unchanged, m-o-m, in October, standing at 61.7 days. This is 0.6 days above the October 2022 level, but 1.4 days lower than the latest five-year average and 0.7 days less than the 2015–2019 average.

Within the OECD regions, OECD Americas stood 2.1 days and OECD Europe 0.4 days below the latest five-year average, at 60.8 days and 71.8 days, respectively. OECD Asia Pacific was 1.1 days below the latest five-year average, standing at 47.3 days.

OECD Americas

OECD Americas' total commercial stocks fell by 22.3 mb, m-o-m, in October to settle at 1,505 mb. This is 14 mb higher than the same month in 2022, but 40 mb below the latest five-year average.

Commercial **crude oil stocks** in OECD Americas rose by 4.4 mb, m-o-m, in October to stand at 736 mb, which is 23 mb lower than in October 2022 and 35 mb below the latest five-year average.

By contrast**, total product stocks** in OECD Americas fell m-o-m, dropping by 26.7 mb in October to stand at 770 mb. This is 37 mb higher than the same month in 2022, but 5 mb below the latest five-year average. Higher consumption in the region was behind the product stock draw.

OECD Europe

OECD Europe's total commercial stocks rose by 1.0 mb, m-o-m, in October to settle at 940 mb. This is 24 mb higher than the same month in 2022, but 10 mb below the latest five-year average.

OECD Europe's **commercial crude stocks** increased by 0.5 mb, m-o-m, to end October at 416 mb. This is 0.8 mb above one year ago and 7.0 mb less than the latest five-year average.

By contrast, Europe's **product stocks** rose by 0.5 mb, m-o-m, to end October at 523 mb. This is 23 mb above the same time a year ago, but 3.3 mb below the latest five-year average.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks rose by 8.5 mb, m-o-m, in October to stand at 373 mb. This is 7.3 mb higher than the same time a year ago, but 14.9 mb below the latest five-year average.

OECD Asia Pacific's **crude stocks** rose by 6.1 mb, m-o-m, to end October at 190 mb. This is 6.9 mb higher than one year ago, but 14.5 mb below the latest five-year average.

OECD Asia Pacific's **product stocks** increased by 2.4 mb, m-o-m, to end October at 183 mb. This is 0.4 mb higher than one year ago, but 0.4 mb below the latest five-year average.

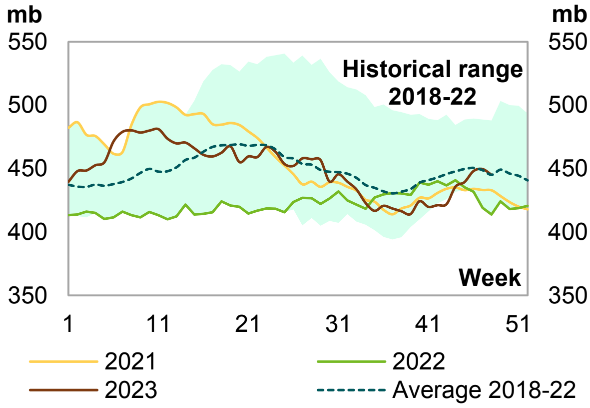
US

Preliminary data for **November 2023** showed that **total US commercial oil stocks** rose by 6.8 mb, m-o-m, to stand at 1,269 mb. This is 42.5 mb, or 3.5%, higher than the same month in 2022, but 8.7 mb, or 0.7%, below the latest five-year average. Crude stocks rose by 23.1 mb, while product stocks fell by 16.4 mb, m-o-m.

US commercial **crude stocks** in November stood at 445.0 mb. This is 28.4 mb, or 6.8%, higher than the same month of 2022 and 4.2 mb, or 0.9%, below the latest five-year average. The monthly build in crude oil stocks came despite a 450 tb/d m-o-m increase in crude runs to a level of 16.09 mb/d.

By contrast, **total product stocks** fell in November to stand at 824.3 mb. This is 14.1 mb, or 1.7%, higher than November 2022 levels, but 4.6 mb, or 0.5%, lower than the latest five-year average. The product stock draw can be attributed to higher product consumption.

Graph 9 - 2: US weekly commercial crude oil inventories



Sources: EIA and OPEC.

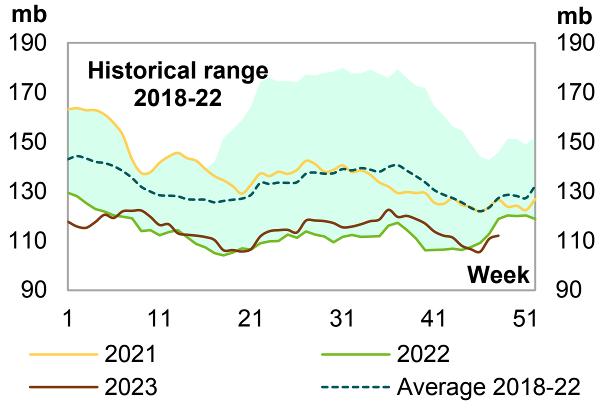
Gasoline stocks rose by 0.1 mb, m-o-m, in November to settle at 223.6 mb. This is 2.3 mb, or 1.0%, higher than the same month of 2022 and 5.8 mb, or 2.5%, less than the latest five-year average.

Distillate stocks increased by 0.8 mb, m-o-m, in November to stand at 112.0 mb. This is 8.6 mb, or 7.1%, lower than the same month of 2022, and 20.4 mb, or 15.4%, below the latest five-year average.

Jet fuel stocks dropped by 2.5 mb, m-o-m, ending November at 38.0 mb. This is 0.1 mb, or 0.4%, higher than the same month in 2022, and 0.5 mb, or 1.3%, less than the latest five-year average.

Residual fuel oil stocks fell by 1.4 mb m-o-m in November. At 26.1 mb, they were 3.3 mb, or 11.1%, lower than a year earlier and 4.1 mb, or 13.5%, below the latest five-year average.

Graph 9 - 3: US weekly distillate inventories



Sources: EIA and OPEC.

Table 9 - 2: US commercial petroleum stocks, mb

US stocks	Nov 22	Sep 23	Oct 23	Nov 23	*Change* Nov 23/Oct 23
Crude oil	**416.6**	**417.5**	**421.9**	**445.0**	***23.1***
Gasoline	221.4	227.6	223.5	223.6	*0.1*
Distillate fuel	120.6	119.2	111.3	112.0	*0.8*
Residual fuel oil	29.4	27.5	27.5	26.1	*-1.4*
Jet fuel	37.8	43.5	40.5	38.0	*-2.5*
Total products	**810.2**	**865.9**	**840.7**	**824.3**	***-16.4***
Total	**1,226.8**	**1,283.4**	**1,262.6**	**1,269.3**	***6.8***
SPR	**388.4**	**351.3**	**351.3**	**351.9**	***0.6***

Sources: EIA and OPEC.

Japan

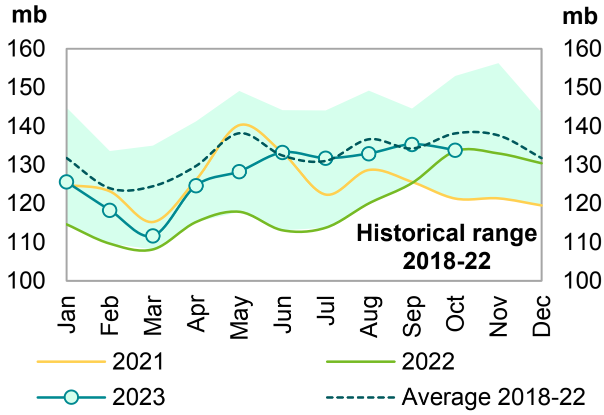
In **Japan**, **total commercial oil stocks** in **October** fell by 1.5 mb, m-o-m, to settle at 133.8 mb. This is 0.3 mb, or 0.2%, higher than the same month in 2022 but 4.3 mb, or 3.1%, below the latest five-year average. Crude stocks fell by 3.9 mb m-o-m, while product stocks rose by 2.4 mb.

Japanese **commercial crude oil stocks** fell by 3.9 mb, m-o-m, in October to stand at 68.4 mb. This is 3.1 mb, or 4.4%, lower than the same month of 2022 and 5.3 mb, or 7.2%, less than the latest five-year average.

Gasoline stocks rose by 0.4 mb m-o-m to stand at 10.4 mb in October. This is 0.6 mb, or 6.0%, higher than a year earlier, but 0.4 mb, or 4.1%, lower than the latest five-year average. The build came on the back of lower domestic gasoline sales, which declined by 2.4%, m-o-m.

Distillate stocks also rose by 1.3 mb, m-o-m, to end October at 31.8 mb. This is 1.9 mb, or 6.5%, above the same month of 2022 and 0.2 mb, or 0.7%, higher than the latest five-year average.

Graph 9 - 4: Japan's commercial oil stocks



Sources: METI and OPEC.

Within distillate components, kerosene stocks rose by 13.5%, while jet fuel and gasoil stocks fell by 9.8% and 6.1%, respectively.

By contrast, **total residual fuel oil stocks** fell m-o-m by 0.4 mb to end October at 13.0 mb. This is 0.7 mb, or 5.4%, higher than the same month of 2022 and 0.4 mb, or 3.3%, above the latest five-year average. Within the components, fuel oil A and fuel oil B.C stocks fell by 1.8% and 3.7%, m-o-m, respectively.

Table 9 - 3: Japan's commercial oil stocks*, mb

Japan's stocks	Oct 22	Aug 23	Sep 23	Oct 23	*Change* Oct 23/Sep 23
Crude oil	**71.6**	**69.7**	**72.4**	**68.4**	***-3.9***
Gasoline	9.8	9.7	10.0	10.4	*0.4*
Naphtha	9.9	10.8	9.0	10.1	*1.1*
Middle distillates	29.8	28.7	30.5	31.8	*1.3*
Residual fuel oil	12.4	14.1	13.4	13.0	*-0.4*
Total products	**61.9**	**63.2**	**63.0**	**65.4**	***2.4***
Total**	**133.5**	**132.9**	**135.3**	**133.8**	***-1.5***

*Note: * At the end of the month. ** Includes crude oil and main products only.*

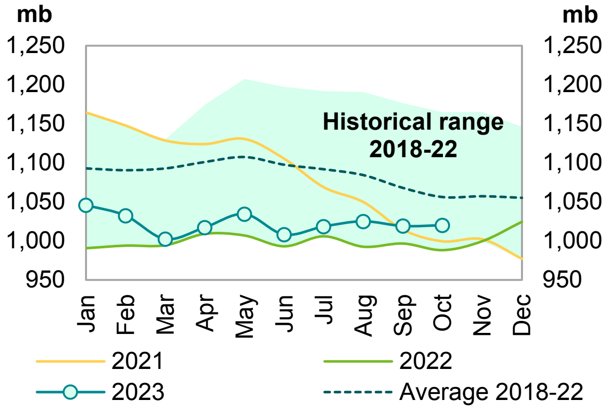
Sources: METI and OPEC.

EU-14 plus UK and Norway

Preliminary data for **October** showed that **total European commercial oil stocks** rose by 1.0 mb m-o-m to stand at 1,020 mb. At this level, they were 31.9 mb, or 3.2%, above the same month of 2022, but 36.1 mb, or 3.4%, lower than the latest five-year average. Crude and product stocks rose m-o-m each by 0.5 mb.

European **crude stocks** stood at 435.0 mb in October. This is 1.2 mb, or 0.3%, higher than the same month in 2022, but 24.8 mb, or 5.4%, below the latest five-year average. The build in crude oil stocks came on the back of lower refinery throughput in the EU-14, plus the UK and Norway, which fell by around 740 tb/d, m-o-m, to stand at 9.13 mb/d.

Graph 9 - 5: EU-14 plus UK and Norway total oil stocks



Sources: Argus, Euroilstock and OPEC.

Total European product stocks rose by 0.5 mb, m-o-m, to end October at 585.0 mb. This is 30.7 mb, or 5.5%, higher than the same month of 2022, but 11.3 mb, or 1.9%, below the latest five-year average. The build could be attributed to lower demand in the region.

Middle distillate stocks rose by 1.1 mb, m-o-m, in October to stand at 392.7 mb. This is 32.2 mb, or 8.9%, higher than the same month in 2022, but 6.9 mb, or 1.7%, lower than the latest five-year average.

Naphtha stocks also rose by 0.3 mb, m-o-m, in October, ending the month at 27.8 mb, which is in line with the same time in 2022 levels and is 0.9 mb, or 3.5%, higher than the latest five-year average.

By contrast, **gasoline stocks** fell by 0.3 mb, m-o-m, in October to stand at 108.0 mb. At this level, they were 3.1 mb, or 2.9%, higher than the same time in 2022, but 0.5 mb, or 0.5%, lower than the latest five-year average.

Residual fuel stocks also fell by 0.6 mb, m-o-m, in October to stand at 56.4 mb. This is 4.6 mb, or 7.5%, lower than the same month in 2022 and 4.8 mb, or 7.9%, below the latest five-year average.

Table 9 - 4: EU-14 plus UK and Norway's total oil stocks, mb

EU stocks	Oct 22	Aug 23	Sep 23	Oct 23	*Change* Oct 23/Sep 23
Crude oil	**433.8**	**445.1**	**434.5**	**435.0**	***0.5***
Gasoline	105.0	103.6	108.3	108.0	*-0.3*
Naphtha	27.9	28.1	27.5	27.8	*0.3*
Middle distillates	360.5	389.3	391.6	392.7	*1.1*
Fuel oils	61.0	59.0	57.1	56.4	*-0.6*
Total products	**554.3**	**580.0**	**584.5**	**585.0**	***0.5***
Total	**988.1**	**1,025.0**	**1,019.0**	**1,020.0**	***1.0***

Sources: Argus, Euroilstock and OPEC.

Singapore, Amsterdam-Rotterdam-Antwerp (ARA) and Fujairah

Singapore

In **October**, **total product stocks in Singapore** fell by 1.2 mb m-o-m to stand at 40.9 mb. This is 0.3 mb, or 0.6%, lower than the same month in 2022 and 2.4 mb, or 5.6%, below the latest five-year average.

Light distillate stocks fell by 0.8 mb, m-o-m, in October to stand at 12.1 mb. This is 2.7 mb, or 18.0%, lower than the same month of 2022, and 0.2 mb, or 1.7%, below the latest five-year average.

Middle distillate stocks fell by 0.3 mb, m-o-m, in October to stand at 9.3 mb. This is 2.5 mb, or 36.1%, higher than in October 2022, but 1.3 mb, or 12.3%, lower than the latest five-year average.

Residual fuel oil stocks fell by 0.1 mb, m-o-m, ending October at 19.5 mb. This is 0.1 mb, or 0.4%, lower than in October 2022 and 0.9 mb, or 4.5%, below the latest five-year average.

ARA

Total product stocks in ARA in October fell by 0.3 mb, m-o-m. At 40.1 mb, they were 0.5 mb, or 1.2%, above the same month in 2022, but 1.8 mb, or 4.2%, lower than the latest five-year average.

Gasoil stocks fell by 1.5 mb, m-o-m, ending October at 13.2 mb. This is 0.3 mb, or 2.2%, higher than in October 2022, but 3.9 mb, or 22.6%, below the latest five-year average.

Jet oil stocks also fell by 0.5 mb, m-o-m, to stand at 5.5 mb. This is 1.2 mb, or 17.7%, lower than in October 2022 and 1.2 mb, or 18.3%, below the latest five-year average.

By contrast, **gasoline stocks** in October rose by 0.8 mb, m-o-m, to stand at 12.2 mb. This is 1.7 mb, or 16.6%, higher than the same month of 2022, and 3.6 mb, or 42.1%, higher than the latest five-year average.

Fuel oil stocks also increased by 0.8 mb, m-o-m, in October to stand at 7.5 mb, which is 0.4 mb, or 5.9%, higher than in October 2022, and 0.5 mb, or 6.7%, above the latest five-year average.

Fujairah

During the week ending 4 December 2023, **total oil product stocks in Fujairah** fell by 1.26 mb, w-o-w, to stand at 18.66 mb, according to data from FEDCom and S&P Global Commodity Insights. At this level, total oil stocks were 4.19 mb lower than at the same time a year ago.

Light distillate stocks fell by 0.46 mb, w-o-w, to stand at 4.78 mb, which is 2.35 mb lower than a year ago.

By contrast, **heavy distillate stocks** rose by 1.17 mb, w-o-w, to stand at 10.69 mb, which is 1.87 mb below the same period a year ago.

Middle distillate stocks also rose w-o-w, increasing by 0.54 mb to stand at 3.20 mb, which is 0.04 mb higher than the same time last year.

Balance of Supply and Demand

Demand for OPEC crude in 2023 remains unchanged from the previous assessment to stand at 29.1 mb/d. This is around 0.6 mb/d higher than in 2022.

According to secondary sources, OPEC crude production averaged 28.8 mb/d in 1Q23, which is 0.4 mb/d higher than demand for OPEC crude. In 2Q23, OPEC crude production averaged 28.3 mb/d, which is 0.1 mb/d lower than demand for OPEC crude. In 3Q23, OPEC crude production averaged 27.6 mb/d, which is 0.8 mb/d lower than demand for OPEC crude.

Demand for OPEC crude in 2024 also remains unchanged from the previous month's assessment to stand at 29.9 mb/d, which is 0.8 mb/d higher than the estimated level in 2023.

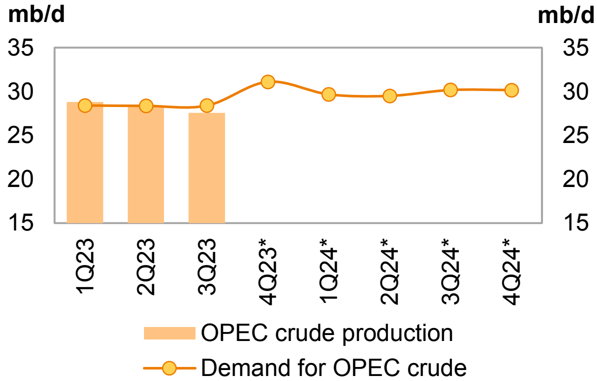
Balance of supply and demand in 2023

Demand for OPEC crude in 2023 remains unchanged from the previous assessment to stand at 29.1 mb/d. This is around 0.6 mb/d higher than in 2022.

Compared with the previous month's assessment, 3Q23 is revised down by 0.2 mb/d, while 4Q23 is revised up by 0.2 mb/d, respectively. Meanwhile, both 1Q23 and 2Q23 remain unchanged compared to last month's assessment.

Compared with the same quarters in 2022, demand for OPEC crude in 2Q23, 3Q23 and 4Q23 is estimated to be higher by 0.2 mb/d, 0.2 mb/d and 2.4 mb/d, respectively. Demand for OPEC crude in 1Q23 is estimated to be down by 0.3 mb/d.

Graph 10 - 1: Balance of supply and demand, 2023–2024*



*Note: * 4Q23-4Q24 = Forecast.*
Source: OPEC.

According to secondary sources, OPEC crude production averaged 28.8 mb/d in 1Q23, which is 0.4 mb/d higher than demand for OPEC crude. In 2Q23, OPEC production averaged 28.3 mb/d, which is 0.1 mb/d lower than demand for OPEC crude. In 3Q23, OPEC production averaged 27.6 mb/d, which is 0.8 mb/d lower than demand for OPEC crude.

Table 10 - 1: Supply/demand balance for 2023*, mb/d

	2022	1Q23	2Q23	3Q23	4Q23	2023	Change 2023/22
(a) World oil demand	**99.66**	**101.57**	**101.47**	**102.12**	**103.28**	**102.11**	***2.46***
Non-OPEC liquids production	65.81	67.72	67.62	68.29	66.73	67.59	*1.78*
OPEC NGL and non-conventionals	5.39	5.44	5.47	5.43	5.43	5.44	*0.05*
(b) Total non-OPEC liquids production and OPEC NGLs	**71.21**	**73.15**	**73.10**	**73.72**	**72.16**	**73.03**	***1.82***
Difference (a-b)	**28.45**	**28.42**	**28.37**	**28.40**	**31.12**	**29.08**	***0.63***
OPEC crude oil production	**28.86**	**28.82**	**28.28**	**27.56**			
Balance	**0.41**	**0.40**	**-0.10**	**-0.84**			

*Note: * 2023 = Forecast. Totals may not add up due to independent rounding.*
Source: OPEC.

Balance of supply and demand in 2024

Demand for OPEC crude in 2024 remains unchanged from the previous month's assessment to stand at 29.9 mb/d, which is 0.8 mb/d higher than the estimated level in 2023.

Compared with the previous month's assessment, demand for OPEC crude is revised down by 0.1 mb/d for 2Q24, while 4Q24 is revised up by 0.1 mb/d. Meanwhile, 1Q24 and 3Q24 remain unchanged compared to the last month's assessment.

Compared with the same quarters in 2023, demand for OPEC crude in 1Q24 and 2Q24 is forecast to be 1.3 mb/d and 1.1 mb/d higher, respectively. The demand for OPEC crude in 3Q24 is expected to be 1.8 mb/d higher, while demand for OPEC crude in 4Q24 is forecast to be lower by 0.9 mb/d.

Table 10 - 2: Supply/demand balance for 2024*, mb/d

	2023	1Q24	2Q24	3Q24	4Q24	2024	Change 2024/23
(a) World oil demand	**102.11**	**103.60**	**103.64**	**104.80**	**105.38**	**104.36**	***2.25***
Non-OPEC liquids production	67.59	68.42	68.59	69.12	69.70	68.96	*1.37*
OPEC NGL and non-conventionals	5.44	5.49	5.54	5.50	5.50	5.51	*0.07*
(b) Total non-OPEC liquids production and OPEC NGLs	**73.03**	**73.91**	**74.13**	**74.61**	**75.20**	**74.47**	***1.43***
Difference (a-b)	**29.08**	**29.68**	**29.51**	**30.19**	**30.18**	**29.89**	***0.81***

*Note: * 2024 = Forecast. Totals may not add up due to independent rounding.*

Source: OPEC.

Appendix

Table 11 - 1: World oil demand and supply balance, mb/d

World oil demand and supply balance	2020	2021	2022	1Q23	2Q23	3Q23	4Q23	2023	1Q24	2Q24	3Q24	4Q24	2024
World demand													
Americas	22.49	24.32	24.87	24.52	25.21	25.47	24.94	25.04	24.70	25.38	25.67	25.10	25.22
of which US	*18.35*	*20.03*	*20.16*	*19.92*	*20.50*	*20.47*	*20.05*	*20.24*	*20.06*	*20.64*	*20.62*	*20.19*	*20.38*
Europe	12.41	13.19	13.51	13.10	13.54	13.67	13.34	13.41	13.16	13.60	13.74	13.38	13.47
Asia Pacific	7.16	7.34	7.38	7.81	6.96	7.07	7.65	7.37	7.84	6.97	7.10	7.65	7.39
Total OECD	**42.06**	**44.85**	**45.75**	**45.43**	**45.71**	**46.20**	**45.93**	**45.82**	**45.70**	**45.96**	**46.51**	**46.13**	**46.08**
China	13.94	15.10	14.95	15.73	16.06	16.27	16.37	16.11	16.30	16.52	16.89	17.04	16.69
India	4.51	4.77	5.14	5.40	5.40	5.17	5.50	5.37	5.63	5.64	5.40	5.69	5.59
Other Asia	8.13	8.67	9.06	9.33	9.48	9.12	9.18	9.28	9.60	9.73	9.48	9.54	9.59
Latin America	5.90	6.25	6.44	6.60	6.70	6.75	6.68	6.68	6.79	6.88	6.97	6.84	6.87
Middle East	7.45	7.79	8.30	8.63	8.32	8.82	8.73	8.63	8.91	8.76	9.38	8.98	9.01
Africa	4.08	4.22	4.40	4.59	4.24	4.27	4.83	4.48	4.70	4.42	4.44	4.96	4.63
Russia	3.39	3.62	3.70	3.83	3.59	3.74	4.01	3.79	3.89	3.70	3.89	4.08	3.89
Other Eurasia	1.07	1.21	1.15	1.24	1.21	1.02	1.23	1.17	1.27	1.24	1.08	1.28	1.22
Other Europe	0.70	0.75	0.77	0.79	0.77	0.75	0.83	0.79	0.81	0.78	0.77	0.84	0.80
Total Non-OECD	**49.16**	**52.38**	**53.90**	**56.15**	**55.76**	**55.92**	**57.35**	**56.29**	**57.90**	**57.68**	**58.29**	**59.25**	**58.28**
(a) Total world demand	**91.22**	**97.23**	**99.66**	**101.57**	**101.47**	**102.12**	**103.28**	**102.11**	**103.60**	**103.64**	**104.80**	**105.38**	**104.36**
Y-o-y change	***-9.13***	***6.01***	***2.43***	***1.90***	***3.01***	***2.73***	***2.18***	***2.46***	***2.03***	***2.17***	***2.68***	***2.10***	***2.25***
Non-OPEC liquids production													
Americas	24.87	25.46	26.91	27.90	28.18	29.02	28.24	28.34	28.80	28.84	29.31	29.62	29.14
of which US	*17.76*	*18.06*	*19.28*	*20.10*	*20.70*	*21.20*	*20.33*	*20.58*	*20.85*	*21.07*	*21.33*	*21.50*	*21.19*
Europe	3.92	3.79	3.58	3.69	3.65	3.54	3.69	3.64	3.85	3.73	3.68	3.82	3.77
Asia Pacific	0.52	0.51	0.48	0.45	0.45	0.44	0.47	0.45	0.46	0.43	0.44	0.43	0.44
Total OECD	**29.31**	**29.77**	**30.97**	**32.04**	**32.28**	**33.01**	**32.40**	**32.43**	**33.11**	**33.00**	**33.43**	**33.87**	**33.35**
China	4.16	4.32	4.48	4.63	4.63	4.49	4.49	4.56	4.59	4.58	4.55	4.54	4.56
India	0.78	0.78	0.77	0.76	0.78	0.78	0.77	0.77	0.79	0.79	0.79	0.78	0.79
Other Asia	2.53	2.42	2.30	2.31	2.25	2.24	2.27	2.27	2.25	2.23	2.21	2.21	2.22
Latin America	6.02	5.96	6.34	6.69	6.76	7.06	7.04	6.89	7.10	7.13	7.26	7.33	7.21
Middle East	3.15	3.19	3.29	3.27	3.29	3.27	3.29	3.28	3.29	3.32	3.31	3.31	3.31
Africa	1.41	1.34	1.29	1.24	1.27	1.27	1.28	1.27	1.26	1.26	1.31	1.35	1.30
Russia	10.54	10.80	11.03	11.19	10.86	10.78	9.66	10.62	10.49	10.65	10.66	10.66	10.62
Other Eurasia	2.91	2.93	2.83	2.99	2.93	2.82	2.95	2.92	2.93	3.00	2.99	3.03	2.99
Other Europe	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Total Non-OECD	**31.64**	**31.85**	**32.44**	**33.21**	**32.88**	**32.82**	**31.86**	**32.69**	**32.79**	**33.07**	**33.17**	**33.32**	**33.09**
Total Non-OPEC production	60.95	61.61	63.41	65.25	65.15	65.83	64.26	65.12	65.90	66.07	66.60	67.18	66.44
Processing gains	2.16	2.29	2.40	2.47	2.47	2.47	2.47	2.47	2.52	2.52	2.52	2.52	2.52
Total Non-OPEC liquids production	**63.11**	**63.90**	**65.81**	**67.72**	**67.62**	**68.29**	**66.73**	**67.59**	**68.42**	**68.59**	**69.12**	**69.70**	**68.96**
OPEC NGL + non-conventional oils	5.17	5.28	5.39	5.44	5.47	5.43	5.43	5.44	5.49	5.54	5.50	5.50	5.51
(b) Total non-OPEC liquids production and OPEC NGLs	**68.27**	**69.18**	**71.21**	**73.15**	**73.10**	**73.72**	**72.16**	**73.03**	**73.91**	**74.13**	**74.61**	**75.20**	**74.47**
Y-o-y change	***-2.54***	***0.91***	***2.03***	***2.21***	***2.78***	***2.50***	***-0.18***	***1.82***	***0.76***	***1.03***	***0.89***	***3.04***	***1.43***
OPEC crude oil production (secondary sources)	25.72	26.34	28.86	28.82	28.28	27.56							
Total liquids production	94.00	95.52	100.07	101.97	101.37	101.28							
Balance (stock change and miscellaneous)	2.78	-1.71	0.41	0.40	-0.10	-0.84							
OECD closing stock levels, *mb*													
Commercial	3,037	2,651	2,781	2,759	2,792	2,831							
SPR	1,541	1,484	1,214	1,217	1,206	1,210							
Total	**4,578**	**4,135**	**3,995**	**3,976**	**3,998**	**4,041**							
Oil-on-water	1,148	1,202	1,399	1,413	1,302	1,220							
Days of forward consumption in OECD, *days*													
Commercial onland stocks	68	58	61	60	60	62							
SPR	34	32	26	27	26	26							
Total	**102**	**90**	**87**	**87**	**87**	**88**							
Memo items													
(a) - (b)	**22.95**	**28.05**	**28.45**	**28.42**	**28.37**	**28.40**	**31.12**	**29.08**	**29.68**	**29.51**	**30.19**	**30.18**	**29.89**

Note: Totals may not add up due to independent rounding.

Source: OPEC.

Table 11 - 2: World oil demand and supply balance: changes from last month's table*, mb/d

World oil demand and supply balance	2020	2021	2022	1Q23	2Q23	3Q23	4Q23	2023	1Q24	2Q24	3Q24	4Q24	2024
World demand													
Americas	-	-	-	-	-	0.12	-	0.03	-	-	0.12	-	0.03
of which US	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-0.13	-0.03	-0.04	-	-	-0.13	-0.03	-0.04
Asia Pacific	-	-	-	-	-	-0.03	-	-0.01	-	-	-0.03	-	-0.01
Total OECD	**-**	**-**	**-**	**-**	**-**	**-0.03**	**-0.03**	**-0.02**	**-**	**-**	**-0.03**	**-0.03**	**-0.02**
China	-	-	-	-	-	-	0.08	0.02	-	-	-	0.08	0.02
India	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	0.09	-	0.02	-	-	0.09	-	0.02
Latin America	-	-	-	-	-	0.02	-	-	-	-	0.02	-	-
Middle East	-	-	-	-	-	-0.04	-	-0.01	-	-	-0.04	-	-0.01
Africa	-	-	-	-	-	-0.03	-0.05	-0.02	-	-	-0.03	-0.05	-0.02
Russia	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Eurasia	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	**-**	**-**	**-**	**-**	**-**	**0.04**	**0.03**	**0.02**	**-**	**-**	**0.04**	**0.03**	**0.02**
(a) Total world demand	**-**	**-**	**-**	**-0.01**	**-**	**0.01**	**-**	**-**	**-0.01**	**-**	**0.01**	**-**	**-**
Y-o-y change	***-0.01***	***-***	***-***	***-0.01***	***-***	***0.01***	***-***	***-***	***-***	***-***	***-***	***-***	***-***
Non-OPEC liquids production													
Americas	-	-	-	-	-	0.16	-0.12	0.01	0.01	0.01	0.01	0.01	0.01
of which US	*-*	*-*	*-*	*-*	*-*	*0.14*	*-0.11*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
Europe	-	-	-	-	-	0.02	-0.04	-	-	-	-	-	-
Asia Pacific	-	-	-	-	-	-0.01	-	-	-	-	-	-	-
Total OECD	**-**	**-**	**-**	**-**	**0.01**	**0.17**	**-0.16**	**-**	**-**	**-**	**-**	**-**	**-**
China	-	-	-	-	-	-	-	-	0.01	0.01	0.01	0.01	0.01
India	-	-	-	-	-	-	-0.01	-	-	-	-	-	-
Other Asia	-	-	-	-	-0.01	0.01	-0.11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
Latin America	-	-	-	-	-	-	0.12	0.03	0.03	0.03	0.03	0.03	0.03
Middle East	-	-	-	-	-	-	-0.02	-	-0.05	-	-	-	-0.01
Africa	-	-	-	-	-	-	-0.01	-	-	-0.01	-	-0.01	-
Russia	-	-	-	-	-	0.01	0.03	0.01	0.06	0.11	-0.01	-0.12	0.01
Other Eurasia	-	-	-	-	-	-	-0.03	-0.01	-0.08	-	-	-	-0.02
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	**-**	**-**	**-**	**-**	**-0.01**	**0.02**	**-0.03**	**-0.01**	**-0.06**	**0.11**	**-0.01**	**-0.12**	**-0.02**
Total Non-OPEC production	-	-	-	-	-	0.19	-0.19	-	-0.06	0.12	-	-0.11	-0.01
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC liquids production	**-**	**-**	**-**	**-**	**-**	**0.19**	**-0.19**	**-**	**-0.06**	**0.12**	**-**	**-0.11**	**-0.01**
OPEC NGL + non-conventional oils	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC liquids production and OPEC NGLs	**-**	**-**	**-**	**-**	**-**	**0.19**	**-0.19**	**-**	**-0.06**	**0.12**	**-**	**-0.11**	**-0.01**
Y-o-y change	***-***	***-***	***-***	***-***	***-***	***0.19***	***-0.19***	***-***	***-0.06***	***0.12***	***-0.19***	***0.08***	***-0.01***
OPEC crude oil production (secondary sources)	-	-	-	-0.02	0.01	0.01							
Total liquids production	-	-	-	-0.02	0.01	0.19							
Balance (stock change and miscellaneous)	-	-	-	-0.02	0.01	0.19							
mb													
Commercial	-	-	-	-	1	47							
SPR	-	-	-	-	-	1							
Total	**-**	**-**	**-**	**-**	**1**	**48**							
Oil-on-water	-	-	-	-	-	-							
Days of forward consumption in OECD, *days*													
Commercial onland stocks	-	-	-	-	-	1							
SPR	-	-	-	-	-	-							
Total	**-**	**-**	**-**	**-**	**-**	**1**							
Memo items													
(a) - (b)	**-**	**-**	**-**	**-0.01**	**0.00**	**-0.18**	**0.19**	**0.00**	**0.05**	**-0.12**	**0.01**	**0.11**	**0.01**

*Note: * This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the November 2023 issue.*
This table shows only where changes have occurred.
Source: OPEC.

Table 11 - 3: OECD oil stocks and oil on water at the end of period

OECD oil stocks and oil on water	2020	2021	2022	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23
Closing stock levels, mb											
OECD onland commercial	**3,037**	**2,651**	**2,781**	**2,651**	**2,615**	**2,664**	**2,750**	**2,781**	**2,759**	**2,792**	**2,831**
Americas	1,614	1,470	1,492	1,470	1,408	1,435	1,473	1,492	1,489	1,513	1,528
Europe	1,043	857	936	857	890	911	918	936	919	920	939
Asia Pacific	380	324	353	324	317	318	359	353	351	359	364
OECD SPR	**1,541**	**1,484**	**1,214**	**1,484**	**1,442**	**1,343**	**1,246**	**1,214**	**1,217**	**1,206**	**1,210**
Americas	640	596	374	596	568	495	418	374	373	349	353
Europe	487	479	461	479	468	452	448	461	460	470	473
Asia Pacific	414	409	378	409	406	395	380	378	383	387	384
OECD total	**4,578**	**4,135**	**3,995**	**4,135**	**4,057**	**4,008**	**3,996**	**3,995**	**3,976**	**3,998**	**4,041**
Oil-on-water	**1,148**	**1,202**	**1,399**	**1,202**	**1,231**	**1,304**	**1,407**	**1,399**	**1,413**	**1,302**	**1,220**
Days of forward consumption in OECD, days											
OECD onland commercial	**68**	**58**	**61**	**58**	**58**	**58**	**60**	**61**	**60**	**60**	**62**
Americas	66	59	60	59	57	57	59	61	59	59	61
Europe	79	63	70	65	66	65	69	71	68	67	70
Asia Pacific	52	44	48	42	46	44	47	45	50	51	48
OECD SPR	**35**	**34**	**34**	**32**	**32**	**29**	**27**	**27**	**27**	**26**	**26**
Americas	26	24	24	24	23	20	17	15	15	14	14
Europe	37	35	36	36	35	32	34	35	34	34	35
Asia Pacific	56	55	55	53	59	55	50	48	55	55	50
OECD total	**103**	**93**	**95**	**90**	**90**	**87**	**87**	**88**	**87**	**87**	**88**

Sources: Argus, EIA, Euroilstock, IEA, JODI, METI and OPEC.

Table 11 - 4: Non-OPEC liquids production and OPEC natural gas liquids, mb/d*

Non-OPEC liquids production and OPEC NGLs	2022	Change 2022/21	1Q23	2Q23	3Q23	4Q23	2023	Change 2023/22	1Q24	2Q24	3Q24	4Q24	2024	Change 2024/23
US	19.3	1.2	20.1	20.7	21.2	20.3	20.6	1.3	20.8	21.1	21.3	21.5	21.2	0.6
Canada	5.6	0.2	5.7	5.3	5.7	5.8	5.6	0.0	5.9	5.7	5.9	6.1	5.9	0.2
Mexico	2.0	0.1	2.1	2.1	2.1	2.1	2.1	0.1	2.1	2.1	2.1	2.1	2.1	0.0
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OECD Americas	**26.9**	**1.5**	**27.9**	**28.2**	**29.0**	**28.2**	**28.3**	**1.4**	**28.8**	**28.8**	**29.3**	**29.6**	**29.1**	**0.8**
Norway	1.9	-0.1	2.0	2.0	2.0	2.0	2.0	0.1	2.2	2.1	2.1	2.2	2.1	0.1
UK	0.9	0.0	0.8	0.8	0.7	0.8	0.8	-0.1	0.8	0.8	0.7	0.8	0.8	0.0
Denmark	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
OECD Europe	**3.6**	**-0.2**	**3.7**	**3.7**	**3.5**	**3.7**	**3.6**	**0.1**	**3.8**	**3.7**	**3.7**	**3.8**	**3.8**	**0.1**
Australia	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Other Asia Pacific	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	**0.5**	**0.0**	**0.5**	**0.4**	**0.4**	**0.5**	**0.5**	**0.0**	**0.5**	**0.4**	**0.4**	**0.4**	**0.4**	**0.0**
Total OECD	**31.0**	**1.2**	**32.0**	**32.3**	**33.0**	**32.4**	**32.4**	**1.5**	**33.1**	**33.0**	**33.4**	**33.9**	**33.4**	**0.9**
China	**4.5**	**0.2**	**4.6**	**4.6**	**4.5**	**4.5**	**4.6**	**0.1**	**4.6**	**4.6**	**4.5**	**4.5**	**4.6**	**0.0**
India	**0.8**	**0.0**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.0**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.0**
Brunei	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Indonesia	0.8	0.0	0.9	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Malaysia	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Thailand	0.4	-0.1	0.4	0.3	0.4	0.4	0.4	0.0	0.4	0.3	0.3	0.3	0.3	0.0
Vietnam	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Asia others	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Other Asia	**2.3**	**-0.1**	**2.3**	**2.3**	**2.2**	**2.3**	**2.3**	**0.0**	**2.3**	**2.2**	**2.2**	**2.2**	**2.2**	**0.0**
Argentina	0.8	0.1	0.8	0.8	0.8	0.8	0.8	0.1	0.8	0.9	0.9	0.9	0.9	0.0
Brazil	3.7	0.1	3.9	4.0	4.3	4.2	4.1	0.4	4.2	4.2	4.3	4.3	4.2	0.1
Colombia	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Ecuador	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Guyana	0.3	0.2	0.4	0.4	0.4	0.4	0.4	0.1	0.5	0.5	0.6	0.6	0.5	0.2
Latin America	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Latin America	**6.3**	**0.4**	**6.7**	**6.8**	**7.1**	**7.0**	**6.9**	**0.6**	**7.1**	**7.1**	**7.3**	**7.3**	**7.2**	**0.3**
Bahrain	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	1.1	0.1	1.1	1.1	1.0	1.0	1.0	0.0	1.0	1.1	1.1	1.1	1.1	0.0
Qatar	1.9	0.0	1.9	1.9	1.9	1.9	1.9	0.0	1.9	1.9	1.9	1.9	1.9	0.0
Syria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yemen	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Middle East	**3.3**	**0.1**	**3.3**	**3.3**	**3.3**	**3.3**	**3.3**	**0.0**	**3.3**	**3.3**	**3.3**	**3.3**	**3.3**	**0.0**
Cameroon	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Chad	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Egypt	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Ghana	0.2	0.0	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.0
South Africa	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Sudans	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Africa other	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.1	0.0
Africa	**1.3**	**0.0**	**1.2**	**1.3**	**1.3**	**1.3**	**1.3**	**0.0**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**0.0**
Russia	**11.0**	**0.2**	**11.2**	**10.9**	**10.8**	**9.7**	**10.6**	**-0.4**	**10.5**	**10.7**	**10.7**	**10.7**	**10.6**	**0.0**
Kazakhstan	1.8	0.0	2.0	1.9	1.8	1.9	1.9	0.1	1.9	2.0	2.0	2.0	2.0	0.1
Azerbaijan	0.7	0.0	0.7	0.6	0.6	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Eurasia others	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Other Eurasia	**2.8**	**-0.1**	**3.0**	**2.9**	**2.8**	**3.0**	**2.9**	**0.1**	**2.9**	**3.0**	**3.0**	**3.0**	**3.0**	**0.1**
Other Europe	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
Total Non-OECD	**32.4**	**0.6**	**33.2**	**32.9**	**32.8**	**31.9**	**32.7**	**0.2**	**32.8**	**33.1**	**33.2**	**33.3**	**33.1**	**0.4**
Non-OPEC	63.4	1.8	65.2	65.2	65.8	64.3	65.1	1.7	65.9	66.1	66.6	67.2	66.4	1.3
Processing gains	2.4	0.1	2.5	2.5	2.5	2.5	2.5	0.1	2.5	2.5	2.5	2.5	2.5	0.1
Non-OPEC liquids production	**65.8**	**1.9**	**67.7**	**67.6**	**68.3**	**66.7**	**67.6**	**1.8**	**68.4**	**68.6**	**69.1**	**69.7**	**69.0**	**1.4**
OPEC NGL	5.3	0.1	5.3	5.4	5.3	5.3	5.3	0.0	5.4	5.4	5.4	5.4	5.4	0.1
OPEC Non-conventional	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OPEC (NGL+NCF)	**5.4**	**0.1**	**5.4**	**5.5**	**5.4**	**5.4**	**5.4**	**0.0**	**5.5**	**5.5**	**5.5**	**5.5**	**5.5**	**0.1**
Non-OPEC & OPEC (NGL+NCF)	**71.2**	**2.0**	**73.2**	**73.1**	**73.7**	**72.2**	**73.0**	**1.8**	**73.9**	**74.1**	**74.6**	**75.2**	**74.5**	**1.4**

Note: Totals may not add up due to independent rounding.
Source: OPEC.

Table 11 - 5: World rig count, units

World rig count	2020	2021	2022	*Change 2022/21*	1Q23	2Q23	3Q23	Oct 23	Nov 23	Change *Nov/Oct*
US	436	475	722	*247*	761	719	648	622	620	*-2*
Canada	90	133	174	*41*	221	119	188	193	196	*3*
Mexico	41	45	47	*2*	48	60	54	58	59	*1*
OECD Americas	**567**	**654**	**945**	***291***	**1,033**	**900**	**892**	**873**	**875**	***2***
Norway	16	17	17	*0*	16	13	19	20	15	*-5*
UK	6	8	10	*2*	11	13	10	10	13	*3*
OECD Europe	**59**	**58**	**65**	***7***	**67**	**67**	**64**	**67**	**63**	***-4***
OECD Asia Pacific	**22**	**23**	**24**	***1***	**23**	**27**	**25**	**24**	**22**	***-2***
Total OECD	**648**	**735**	**1,034**	***299***	**1,123**	**994**	**981**	**964**	**960**	***-4***
Other Asia*	187	174	186	*12*	193	210	206	205	210	*5*
Latin America	58	91	119	*28*	127	122	118	115	114	*-1*
Middle East	57	57	62	*5*	62	61	59	62	63	*1*
Africa	43	42	57	*15*	60	56	56	57	59	*2*
Other Europe	12	9	10	*1*	11	11	10	9	10	*1*
Total Non-OECD	**357**	**373**	**434**	***61***	**453**	**460**	**449**	**448**	**456**	***8***
Non-OPEC rig count	**1,005**	**1,108**	**1,468**	***360***	**1,576**	**1,454**	**1,430**	**1,412**	**1,416**	***4***
Algeria	31	26	32	*6*	32	33	37	43	47	*4*
Angola	3	4	7	*3*	9	9	10	10	10	*0*
Congo	1	0	1	*1*	1	2	2	0	0	*0*
Equatorial Guinea**	0	0	0	*0*	0	0	0	0	0	*0*
Gabon	3	2	3	*1*	3	3	3	2	4	*2*
Iran**	117	117	117	*0*	117	117	117	117	117	*0*
Iraq	47	39	51	*12*	60	62	62	62	62	*0*
Kuwait	45	25	27	*2*	24	25	24	23	25	*2*
Libya	12	13	7	*-6*	11	15	14	18	18	*0*
Nigeria	11	7	10	*3*	14	13	16	13	14	*1*
Saudi Arabia	93	62	73	*11*	78	83	85	86	87	*1*
UAE	54	42	47	*5*	53	57	56	60	63	*3*
Venezuela	15	6	3	*-3*	3	3	5	2	2	*0*
OPEC rig count	**432**	**343**	**377**	***34***	**405**	**422**	**431**	**436**	**449**	***13***
World rig count***	**1,437**	**1,451**	**1,845**	***394***	**1,980**	**1,877**	**1,861**	**1,848**	**1,865**	***17***
of which:										
Oil	1,116	1,143	1,462	*319*	1,567	1,484	1,480	1,472	1,484	*12*
Gas	275	275	352	*77*	376	347	338	336	338	*2*
Others	46	33	31	*-2*	37	46	43	40	43	*3*

*Note: * Other Asia includes India and offshore rigs for China.*
*** Estimated data when Baker Hughes Incorporated did not reported the data.*
**** Data excludes onshore China as well as Russia and other Eurasia.*
Totals may not add up due to independent rounding.
Sources: Baker Hughes and OPEC.

Glossary of Terms

Abbreviations

b	barrels
b/d	barrels per day
bp	basis points
bb	billion barrels
bcf	billion cubic feet
cu m	cubic metres
mb	million barrels
mb/d	million barrels per day
mmbtu	million British thermal units
mn	million
m-o-m	month-on-month
mt	metric tonnes
q-o-q	quarter-on-quarter
pp	percentage points
tb/d	thousand barrels per day
tcf	trillion cubic feet
y-o-y	year-on-year
y-t-d	year-to-date

Acronyms

ARA	Amsterdam-Rotterdam-Antwerp
BoE	Bank of England
BoJ	Bank of Japan
BOP	Balance of payments
BRIC	Brazil, Russia, India and China
CAPEX	capital expenditures
CCI	Consumer Confidence Index
CFTC	Commodity Futures Trading Commission
CIF	cost, insurance and freight
CPI	consumer price index
DoC	Declaration of Cooperation
DCs	developing countries
DUC	drilled, but uncompleted (oil well)
ECB	European Central Bank
EIA	US Energy Information Administration
Emirates NBD	Emirates National Bank of Dubai
EMs	emerging markets
EV	electric vehicle

FAI	fixed asset investment
FCC	fluid catalytic cracking
FDI	foreign direct investment
Fed	US Federal Reserve
FID	final investment decision
FOB	free on board
FPSO	floating production storage and offloading
FSU	Former Soviet Union
FX	Foreign Exchange
FY	fiscal year
GDP	gross domestic product
GFCF	gross fixed capital formation
GoM	Gulf of Mexico
GTLs	gas-to-liquids
HH	Henry Hub
HSFO	high-sulphur fuel oil
ICE	Intercontinental Exchange
IEA	International Energy Agency
IMF	International Monetary Fund
IOCs	international oil companies
IP	industrial production
ISM	Institute of Supply Management
JODI	Joint Organisations Data Initiative
LIBOR	London inter-bank offered rate
LLS	Light Louisiana Sweet
LNG	liquefied natural gas
LPG	liquefied petroleum gas
LR	long-range (vessel)
LSFO	low-sulphur fuel oil
MCs	(OPEC) Member Countries
MED	Mediterranean
MENA	Middle East/North Africa
MOMR	(OPEC) Monthly Oil Market Report
MPV	multi-purpose vehicle
MR	medium-range or mid-range (vessel)
NBS	National Bureau of Statistics
NGLs	natural gas liquids
NPC	National People's Congress (China)
NWE	Northwest Europe
NYMEX	New York Mercantile Exchange
OECD	Organisation for Economic Co-operation and Development
OPEX	operational expenditures
OIV	total open interest volume
ORB	OPEC Reference Basket
OSP	Official Selling Price
PADD	Petroleum Administration for Defense Districts
PBoC	People's Bank of China
PMI	purchasing managers' index
PPI	producer price index

RBI	Reserve Bank of India
REER	real effective exchange rate
ROI	return on investment
SAAR	seasonally-adjusted annualized rate
SIAM	Society of Indian Automobile Manufacturers
SRFO	straight-run fuel oil
SUV	sports utility vehicle
ULCC	ultra-large crude carrier
ULSD	ultra-low sulphur diesel
USEC	US East Coast
USGC	US Gulf Coast
USWC	US West Coast
VGO	vacuum gasoil
VLCC	very large crude carriers
WPI	wholesale price index
WS	Worldscale
WTI	West Texas Intermediate
WTS	West Texas Sour

OPEC Basket average price *US$/b*

down 6.86 in November

November 2023	84.92
October 2023	91.78
Year-to-date	**83.28**

November OPEC crude production *mb/d, according to secondary sources*

down 0.06 in November

November 2023	27.84
October 2023	27.89

Economic growth rate *per cent*

	World	OECD	US	Eurozone	Japan	China	India
2023	2.9	1.5	2.4	0.2	1.7	5.2	6.5
2024	2.6	0.9	1.0	0.5	0.9	4.8	5.9

Supply and demand *mb/d*

2023		**23/22**	**2024**		**24/23**
World demand	102.1	2.5	World demand	104.4	2.2
Non-OPEC liquids production	67.6	1.8	Non-OPEC liquids production	69.0	1.4
OPEC NGLs	5.4	0.0	OPEC NGLs	5.5	0.1
Difference	**29.1**	**0.6**	**Difference**	**29.9**	**0.8**

OECD commercial stocks *mb*

	Aug 23	Sep 23	Oct 23	Oct 23/Sep 23
Crude oil	1,343	1,331	1,342	11.0
Products	1,486	1,500	1,476	–23.8
Total	**2,829**	**2,831**	**2,818**	**–12.8**
Days of forward cover	61.7	61.6	61.7	0.0

Next report to be issued on 17 January 2024.