OPEC Monthly Oil Market Report

10 August 2023

Feature article: *Crude and product price movements*

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Oil Market Highlights

Crude Oil Price Movements

The OPEC Reference Basket (ORB) rose by \$5.87, or 7.8%, m-o-m to an average of \$81.06/b in July. The ICE Brent front-month contract increased by \$5.18, or 6.9%, m-o-m to \$80.16/b, and NYMEX WTI front-month contract rose by \$5.76, or 8.2%, m-o-m to average \$76.03/b. The DME Oman front-month contract rose by \$6.25, or 8.3%, m-o-m to settle at \$81.16/b. The front-month ICE Brent/NYMEX WTI spread narrowed in July m-o-m by 58¢ to average \$4.13/b. The futures forward curves of ICE Brent, NYMEX WTI and DME Oman steepened in backwardation during the month on improving oil market fundamental outlooks, and money managers including hedge funds raised bullish positions in ICE Brent and NYMEX WTI.

World Economy

World economic growth is revised up slightly for both 2023 and 2024 to stand at 2.7% and 2.6%, respectively. US GDP growth for 2023 is revised up to stand at 1.8%, followed by 0.7% growth in 2024. Euro-zone economic growth for 2023 is revised down to stand at 0.6%, while growth in 2024 remains at 0.8%. Japan's GDP growth in 2023 remains at 1.1%, followed by growth of 1% in 2024. China's GDP growth remains at 5.2% in 2023 and 4.8% in 2024. India's GDP growth remains at 5.6% for 2023 and 5.9% for 2024. Brazil's GDP growth is revised up to 1.7% and is expected to increase by 1.2% in 2024. For Russia, both the 2023 and 2024 GDP growth forecasts are revised up to stand at 0.6% and 1.0%, respectively.

World Oil Demand

World oil demand in 2023 is expected to grow by 2.4 mb/d, unchanged from the last month's assessment. Upward revisions to the 1Q23 based on actual data received for OECD America and OECD Europe were completely offset by downward revisions to 2Q23, mainly in Europe and Other Asia. In the OECD region, oil demand in 2023 is anticipated to rise by 74 tb/d, to an average of 46.0 mb/d, while in the non-OECD region, total oil demand is anticipated to rise by nearly 2.4 mb/d, to average 56.0 mb/d. For 2024, world oil demand is forecast to grow by a healthy 2.2 mb/d, unchanged from the previous assessment. The OECD is anticipated to expand by about 0.3 mb/d, with OECD Americas contributing the largest increase. The non-OECD is set to drive growth, increasing by around 2.0 mb/d, with China, the Middle East and Other Asia contributing the largest share, with further support from India, Latin America, and Africa.

World Oil Supply

Non-OPEC liquids supply is expected to expand by 1.5 mb/d in 2023, a slight upward revision from the previous assessment. The main drivers of liquids supply growth for 2023 are expected to be the US, Brazil, Norway, Kazakhstan Guyana and China, while the largest decline is expected from Russia. There remain uncertainties associated with US shale oil output potential and unplanned maintenance in 2023. For 2024, non-OPEC liquids production is projected to grow by 1.4 mb/d, unchanged from the previous assessment. For 2024, the main drivers for liquids supply growth are expected to be the US, Canada, Guyana, Brazil, Norway and Kazakhstan, mainly due to existing project ramp-ups. The largest declines are expected from Mexico and Azerbaijan. OPEC NGLs and non-conventional liquids are forecast to grow by 46 tb/d in 2023 to an average of 5.4 mb/d and by another 65 tb/d to an average of 5.5 mb/d in 2024. In July, OPEC-13 crude oil production decreased by 836 tb/d m-o-m to an average of 27.31 mb/d, according to available secondary sources.

Product Markets and Refining Operations

Refinery margins in July continued to rise, with solid gains across all regions. In the US Gulf Coast, margins increased for the second consecutive month, mainly driven by the robust performance of transport fuels, particularly gasoline. In Rotterdam, product markets were boosted by firm product exports to the US and high middle distillate requirements in the region. In Singapore, margin gains were driven by sizeable stock draws and healthy regional product demand, with notable strength registered at the middle and bottom sections of the barrel. Global refinery intake in July continued to trend upwards, moving 793 tb/d higher m-o-m to average 81.9 mb/d, according to preliminary estimates. In the coming months, refinery intakes are expected to be supported by seasonal fuel consumption levels during the summer season.

Tanker Market

The tanker market drifted lower in July, with Aframax and Suezmax spot freight rates approaching the lowest levels seen so far this year amid slowing of activities in the Atlantic basin for these vessels. Aframax spot freight rates on the Mediterranean-to-Northwest Europe route declined 22%, while Suezmax rates on the US Gulf Coast-to-Europe route fell 11%. VLCC rates experienced less of a decline as a pick-up in long-haul demand out of the Atlantic basin offset reduced activities out of the Middle East. Spot freight rates on the Middle East-to-East route declined 15% m-o-m. However, freight rates overall remain at elevated levels amid trade shifts supporting tonne-mile growth. Clean rates were mixed, with activities in the Atlantic basin supporting the West of Suez routes, while the return of Asian refineries from maintenance weighed on East of Suez flows. Clean freight rates on the intra-Med route rose 23% m-o-m, while rates on the Middle East-to-East route declined 15%.

Crude and Refined Products Trade

Preliminary data show US crude imports remained at strong levels in July, averaging 6.5 mb/d, while US crude exports fell below 4 mb/d amid reduced flows to Asia. China crude imports jumped to the second-highest on record in June, averaging 12.7 mb/d, although preliminary customs data shows crude inflows dropped to 10.3 mb/d in July, as the previous month's arrivals dampened crude needs for the month. China's product imports were broadly steady near the previous month's high levels, averaging 2.4 mb/d, while product exports declined, led by sharp falls in gasoline and diesel outflows. India's crude imports declined for the fourth month in a row in June to average 4.7 mb/d, as the country moved towards the lower-demand monsoon season. Japan's crude imports declined for the second-consecutive month to reach a 12-month low of 2.3 mb/d in June. Preliminary estimates indicate OECD Europe crude imports picked up at the start of 3Q23. Product imports into the region were seen down slightly as a decline in gasoline inflows outpaced an increase in diesel imports.

Commercial Stock Movements

Preliminary data for June 2023 sees total OECD commercial oil stocks up m-o-m by 4.2 mb. At 2,828 mb, they were 74 mb lower than the latest five-year average and 119 mb below the 2015–2019 average. Within the components, crude stocks fell by 5.1 mb, m-o-m, while product stocks rose by 9.3 mb. OECD commercial crude stocks stood at 1,395 mb in June. This is 18 mb below the latest five-year average and 70 mb lower than the 2015–2019 average. Total product inventories rose by 9.3 mb in June to stand at 1,433 mb. This is 55 mb lower than the latest five-year average and 49 mb below the 2015–2019 average. In terms of days of forward cover, OECD commercial stocks fell m-o-m by 0.1 days to stand at 60.4 days in June. This is 2.7 days lower than the latest five-year average and 1.4 days below the 2015–2019 average.

Balance of Supply and Demand

Demand for OPEC crude in 2023 is revised down by 0.1 mb/d from the previous month's assessment to stand at 29.3 mb/d. This is around 0.9 mb/d higher than in 2022. Demand for OPEC crude in 2024 is also revised down by 0.1 mb/d from the previous month's assessment to stand at 30.1 mb/d. This is around 0.8 mb/d higher than in 2023.

Feature Article

Crude and product price movements

In 1H23, negative sentiment dominated the oil Graph 1: Crude futures prices and first-to-third futures markets, amid macroeconomic uncertainties spreads and concerns about considerable interest rate hikes US\$/b from major central banks, including the US Federal Reserve (Fed) and the European Central Bank (ECB), as they attempt to reduce high inflation levels. Moreover, investors remained cautious due to the temporary turmoil in the banking system earlier in the year and data showing slower manufacturing activity in major economies, in particular the US, Europe and China.

On a monthly basis, between January and June, ICE Brent and NYMEX WTI declined by \$8.93 and \$7.89, or 10.6% and 10.1%, respectively, to an average of \$74.98/b and \$70.27/b (Graph 1). However, market liquidity continued to recover from

US\$/b 18 120 14 100 10 80 6 60 2 40 -2 22 23 22 22 22 22 22 23 23 23 23 23 2 33 33 33 Jun Jul Aug Sep Oct Jan eb ۸ar Apr ٨ay Dec Jan Feb ٨ar Apr May η ١Ľ NYMEX WTI (LHS) ICE Brent (LHS) ICE Brent: NYMEX WTI: M1-M3 (RHS) M1-M3 (RHS) Sources: CME and ICE.

low levels seen in 2H22, as the actions of OPEC and countries participating in the 'Declaration of Cooperation' continue to contribute to market stability, reduce volatility and provide long-term guidance to the market.

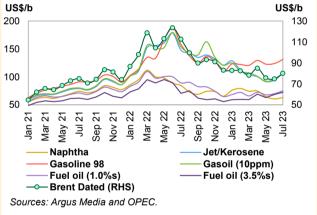
In July, the outlook for oil market fundamentals improved further, which was reflected in the strengthening of the market structure as all major oil futures prices turned to a firm backwardation structure. For the month, ICE Brent increased by \$5.18, or 6.9%, m-o-m, to stand at \$80.16/b, and the NYMEX WTI front-month contract increased by \$5.76, or 8.2% m-o-m, to an average of \$76.03/b

eased from the record-high levels witnessed in the US\$/b previous year across all regions, on greater product 200 availability.

In the USGC, gasoline prices are once again supported by peak summer demand to average 100 \$129.29/b in July, however, this is considerably lower than the same time last year. Jet/kerosene prices have also retracted to follow a more usual seasonal pattern, while gasoil prices are gradually recovering from a multi-year low of \$57.56/b in May, to average \$71.68/b in July.

In Rotterdam, despite firm gasoline exports, gasoil stock draws led to a significant contraction of the

On the product side, fuel prices, in general, have Graph 2: Wholesale refined product prices in Rotterdam



gasoline-middle distillate price differential of \$24.85/b in July, compared to \$31.21/b seen in May (Graph 2).

In Singapore, middle distillates prices trended lower on improved availability amid rising refinery runs in the Atlantic Basin. Naphtha's prices' overall performance remains weak, as firm supplies from the Middle East and Russia caused the discount to Dubai to widen from \$8.23/b in January to \$17.90/b in July. In July, transportation fuel prices rebounded on the back of trans-Atlantic product exports and residual fuel prices responded positively to demand from the Middle East for power generation. These transatlantic product exports could further benefit from a slower-than-expected economic recovery in China, the impact of the Monsoon season on oil demand in the region, and soft demand from the petrochemical sector.

Despite the current elevated level of global refinery runs, gasoline and middle distillate stocks remain well below the latest five-year averages in the US and Europe. Looking forward, refinery maintenance and potential production outages during the US hurricane season could potentially tighten the Atlantic Basin market, hence prompting stronger economic incentives for East-to-West product flows. Similarly, prospects for healthy oil fundamentals in the second half of the year, along with the preemptive, proactive and precautious approach of OPEC and non-OPEC producing countries to assess market conditions and take necessary measures at any time and as needed, will ensure stability of the global oil market.

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Crude Oil Price Movements

Crude spot prices rose on average m-o-m in July driven by higher futures prices and stronger physical crude supply/demand fundamentals. Robust buying in the spot market including for near-term loading volumes for July and August trading cycles, concurrent with higher refinery intakes in July and firm demand from Asian buyers supported spot prices.

The ORB value averaged higher m-o-m in July. This came amid firm gains in related crude benchmarks and higher official selling prices (OSP) of all medium and heavy components exported to Asia, Europe and the US markets. In July, the ORB increased by \$5.87, or 7.8%, to settle at \$81.06/b.

Crude oil futures prices bounced back in July from low levels recorded in June, as selling pressure in futures markets ceased and market sentiment turned optimistic about improving global oil market fundamentals in the second half of 2023. Moreover, the expectations that central banks were approaching the end of their monetary tightening cycles, the sharp decline of the US dollar in the first half of July and expectations of economic stimulus in China added to the positive sentiment in financial markets.

The ICE Brent front-month averaged \$5.18, or 6.9%, higher in July to stand at \$80.16/b, and NYMEX WTI rose by \$5.76, or 8.2%, to average \$76.03/b. DME Oman crude oil futures prices increased m-o-m in July by \$6.25, or 8.3%, to settle at \$81.16/b.

Hedge funds and other money managers recovered a large part of their combined futures and options net long positions in July, after significantly cutting their bullish positions in May and June, mirroring an improved market sentiment and a change in speculators' strategy. Money managers rush to cover short positions built in the previous month, which contributed to pushing oil futures prices higher. The rise of net long positions was mainly due to the large drop in short positions.

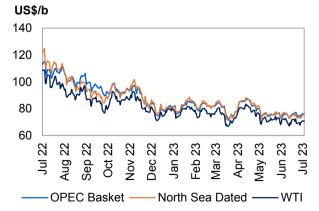
The crude market structure strengthened in July on an improving supply/demand balance outlook and signs of easing supply overhang for prompt loading volumes amid robust demand from refiners. Higher global refinery intakes boosted purchases of crude for prompt loading volume. The large decline in US crude oil stocks last month contributed to a strengthening of the structure of NYMEX WTI with the nearest monthspreads flipping into backwardation from contango in June. The sharp rise in bullish positions in the futures markets added support to prompt-month prices compared to forward-month contracts.

The prospect of a tighter sour market and sustained supply availability of light sweet crude, including from the US, led to the further narrowing of the spread between the value of sweet and sour crude in almost all regions, although they widened slightly in Asia. Further strengthening of high sulphur fuel oil supported the value of heavy sour crude, while a sharp drop in the value of Naphtha cracks weighed on the value of light sweet crude, which resulted in further narrowing of the naphtha-HSFO spread to deep discount.

Crude spot prices

Crude spot prices rose on average m-o-m in July Graph 1 - 1: Crude oil price movements driven by higher futures prices and stronger physical crude supply/demand fundamentals. Robust buying in the spot market including for near-term loading volumes for July and August trading cycles, concurrent with higher refinery intakes in July and firm demand from Asian buyers, including Chinese refiners supported spot prices. There were lower crude loading programs in several regions. Spot prices were further buoyed by higher refining margins in all major refining hubs, specifically diesel and gasoline.

North Sea Dated benchmark rose firmly m-o-m buoyed by demand from European refiners and a favourable west-to-east arbitrage that raised demand for Brent-related crude from Asia refiners and lowered supply availability in the Atlantic Basin.



Sources: Argus. OPEC and Platts.

In the US, WTI crude also rose in July on strong demand from US refiners and lower crude stocks, partly due to sustained crude exports. The sour crude rose the most amid the prospect of tighter sour markets and stronger heavy distillate margins, including high sulphur fuel oil. Dubai prices rose 7.5% m-o-m.

Spot crude prices strengthened against futures prices but they remained below futures prices in July in a sign that the crude market was adequately supplied. North Sea Dated stayed at a discount to ICE Brent's first-month contract in June and July on a monthly basis, after pricing at a premium in April and May. On a monthly average, the North Sea Dated-ICE Brent spread stood at a discount of $7\phi/b$ in July, compared with a discount of $25\phi/b$ in June. The spread was at a premium of $12\phi/b$ in May and \$1.53/b in April.

In July, North Sea Dated and Dubai's first-month contracts increased m-o-m by \$5.36 and \$5.63, respectively, or 7.2% and 7.5%, to settle at \$80.09/b and \$80.33/b. WTI's first-month contract also rose last month, increasing by \$5.54 m-o-m, or 7.9%, to settle at \$75.85/b.

			Change		Year-to-c	late
OPEC Reference Basket (ORB)	Jun 23	Jul 23	Jul 23/Jun 23	%	2022	2023
ORB	75.19	81.06	5.87	7.8	105.82	79.56
Arab Light	77.18	83.45	6.27	8.1	106.44	81.49
Basrah Medium	73.03	78.82	5.79	7.9	104.02	76.75
Bonny Light	74.18	79.92	5.74	7.7	110.46	79.81
Djeno	67.28	72.64	5.36	8.0	101.07	72.24
Es Sider	74.23	79.69	5.46	7.4	108.75	78.83
Girassol	76.30	82.09	5.79	7.6	111.24	81.09
Iran Heavy	75.33	81.48	6.15	8.2	105.49	79.84
Kuwait Export	76.44	82.39	5.95	7.8	106.62	80.94
Merey	57.37	63.28	5.91	10.3	81.86	59.90
Murban	75.52	80.78	5.26	7.0	104.55	80.04
Rabi Light	74.27	79.63	5.36	7.2	108.06	79.23
Sahara Blend	75.23	80.29	5.06	6.7	111.72	80.59
Zafiro	75.28	81.45	6.17	8.2	110.67	80.14
Other Crudes						
North Sea Dated	74.73	80.09	5.36	7.2	108.52	79.69
Dubai	74.70	80.33	5.63	7.5	102.07	79.08
lsthmus	66.31	72.56	6.25	9.4	100.27	68.35
LLS	72.63	78.39	5.76	7.9	103.62	77.42
Mars	70.67	77.19	6.52	9.2	98.90	74.19
Minas	72.58	77.47	4.89	6.7	102.85	77.73
Urals	56.64	65.12	8.48	15.0	86.47	55.72
WTI	70.31	75.85	5.54	7.9	101.68	74.92
Differentials						
North Sea Dated/WTI	4.42	4.24	-0.18	-	6.85	4.77
North Sea Dated/LLS	2.10	1.70	-0.40	-	4.90	2.27
North Sea Dated/Dubai	0.03	-0.24	-0.27	-	6.46	0.61

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

Sources: Argus, Direct Communication, OPEC and Platts.

Crude oil differentials strengthened further in July and the value of spot differentials of several crudes rose to multi-month highs, specifically in the Atlantic Basin. Firm demand from European and Asian refiners for the August trading cycle and higher refining margins added support.

In the **North Sea**, the value of sour crude rose the most amid lower supply availability of sour crude and firm demand from European refiners that was boosted by higher middle distillates margins. Light sweet crudes also rose last month, although a well-supplied light sweet market and a sharp decline of naphtha margins to deep discount limited the rise of the value of light sweet crude. Ekofisk crude differentials increased by 26ϕ on a monthly average in July to settle at premiums of \$1.74/b, while the value of Johan Sverdrup crude differentials rose by \$2.30 m-o-m to an average of \$2,83/b premium, which makes the value of sour crude higher than sweet crude. However, North Sea Forties crude eased 11ϕ m-o-m to a premium of $4\phi/b$.

West African crude differentials registered robust gains in July, buoyed by firm demand from European refiners and the return of demand from some Asian refiners amid favourable west-to-east arbitrage, represented in a narrow Brent/Dubai spread and lower freight rates. On a monthly average, crude differentials to the North Sea Dated benchmark by Bonny Light, Forcados and Qua Iboe rose by 48ϕ , \$1.19 and 87ϕ , respectively, m-o-m in July to settle at premiums of \$1.12/b, \$2.59/b and \$1.95/b. The crude differential of Cabinda also rose in July by 2ϕ m-o-m on average to a premium of \$1.24/b.

Likewise in the **Mediterranean**, Saharan Blend and the CPC Blend crude differentials also firmed last month, despite a sharp decline of naphtha margins, rising respectively by 23ϕ and 73ϕ m-o-m to stand at a premium of $6\phi/b$ and a discount of \$1.48/b. Azeri light crude differentials rose the most by 85ϕ in July to stand at a premium of 4.23/b, buoyed by strong diesel margins.

In the **Middle East**, crude differentials to Dubai rose in July on firm demand from Asia Pacific buyers, including China and India, higher refining margins and the prospects of lower supply in the coming months. The value of the Oman crude differential rose 64¢ m-o-m in July to a premium of \$1.64/b.

Similarly, in the **USGC**, the crude differentials of Light Louisiana Sweet (LLS) and Mars sour strengthened amid higher demand from refiners in the USGC, sustained US crude oil exports and a large drop in US PADD3. Mars sour crude rose more than sweet crude like in other regions. LLS and Mars sour crude differentials against WTI at Cushing rose m-o-m in July, increasing by 20¢ and 96¢, respectively, on a monthly average, to premiums of \$2.54/b and \$1.34/b.

OPEC Reference Basket (ORB)

The **ORB value** averaged higher m-o-m in July. This was amid firm gains in related crude benchmarks and higher official selling prices (OSP) of all medium and heavy components exported to Asia, the US and Europe markets. In July, the ORB increased by \$5.87, or 7.8%, to settle at \$81.06/b. On a yearly average, however, the ORB was down by \$26.25, or 24.8%, at \$79.56/b.

All **ORB component values** increased in July, with West and North African Basket components – Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro – rising by \$5.56, or 7.5%, m-o-m on average to \$79.39/b. Multiple region destination grades – Arab Light, Basrah Light, Iran Heavy and Kuwait Export – increased by \$6.04, or 8.0%, m-o-m on average, to settle at \$81.54/b. The Murban crude value rose by \$5.26, or 7.0% m-o-m on average, to settle at \$80.78/b. Merey crude increased by \$5.91, or 10.3% m-o-m on average, to settle at \$63.28/b.

The oil futures market

Crude oil futures prices bounced back in July from low levels recorded in June, as selling pressure in futures markets ceased and market sentiment turned positive on optimism about improving global oil market fundamentals in the second half of 2023. Moreover, the expectations that central banks were approaching the end of their monetary tightening cycles, coupled with easing inflation data in the US and expectations of economic stimulus in China added to the positive sentiment in financial markets.

The sharp decline of the US dollar in the first half of July, sliding to a one-year low against a basket of major currencies, provided additional support for oil futures. A weaker dollar often spurs demand for commodities, including oil, as it enhances the purchasing power of buyers using other currencies.

Signs of strengthening physical crude market fundamentals, particularly regarding near-term loading volumes for July and August trading cycles, further fuelled the market's bullish trajectory. Additionally, the robustness of the petroleum products' crack spreads further boosted oil futures prices. This emphasized the potential for further enhancing market conditions, engendering additional confidence in the market. Unplanned oil supply disruptions in Africa and diminished crude loading programs across various regions had a supply-tightening effect. Furthermore, a report from the Energy Information Administration (EIA) projected a decrease in US shale oil production for August.

Oil prices were further supported by a significant drop in US crude oil stocks. According to the EIA weekly data, US crude stocks declined by 12.4 mb between the week of 30 June and 28 July, to their lowest since the first week of January 2023.

The ICE Brent front-month averaged \$5.18, or 6.9%, higher in July to stand at \$80.16/b, and NYMEX WTI rose by \$5.76, or 8.2%, to average \$76.03/b. Y-t-d, ICE Brent was \$25.02, or 23.8%, lower at \$79.95/b, and NYMEX WTI was lower by \$26.48, or 26.1%, at \$74.95/b, compared with the same period a year earlier. DME Oman crude oil futures prices increased m-o-m in July by \$6.25, or 8.3%, to settle at \$81.16/b. Y-t-d, DME Oman was lower by \$22.97, or 22.5%, at \$79.17/b.

Crude Oil Price Movements

		Change			Year-to-date		
Crude oil futures	Jun 23	Jul 23	Jul 23/Jun 23	%	2022	2023	
NYMEX WTI	70.27	76.03	5.76	8.2	101.43	74.95	
ICE Brent	74.98	80.16	5.18	6.9	104.97	79.95	
DME Oman	74.91	81.16	6.25	8.3	102.14	79.17	
Spread							
ICE Brent-NYMEX WTI	4.71	4.13	-0.58	-12.3	3.54	5.00	

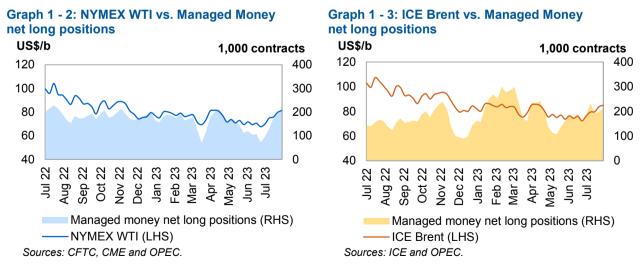
Table 1 - 2: Crude oil futures, US\$/b

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

The **ICE Brent–NYMEX WTI** first-month spread narrowed significantly m-o-m in July but remained above \$4/b, as the NYMEX WTI contract rebound was stronger than ICE Brent. The WTI crude benchmark was supported by higher demand in US refinery operations as gross inputs of crude oil into refineries rose by 0.2 mb/d between the July m-o-m, according to EIA weekly data. The decline in US crude oil stocks in July, including at Cushing Oklahoma, added support to the NYMEX WTI price. The rebound of net long positions in the NYMEX WTI contract that was higher compared to ICE Brent, as speculators rushed to close short positions also contributed to a narrowing of the spread between the two contracts. Between the weeks of 27 June and 25 July, NYMEX WTI net long positions in futures and options dropped by 59.6%, while net long positions related to ICE Brent fell by 27.1% during the same period. The ICE Brent–NYMEX WTI first month spread contracted by 58¢ in July compared to the March average to stand at \$4.13/b. The spread between North Sea Dated and WTI Houston also narrowed last month compared to the previous month, falling by 24¢ on a monthly average to stand at a premium of \$2.63/b. Demand from US refiners and sustained US crude exports in July lent support to the light sweet crude in the USGC and boosted the value of WTI Houston, which contributed to narrowing the North Sea Dated-WTI Houston spread.

After significantly cutting their bullish positions in May and June, **hedge funds and other money managers** recovered a large part of their combined futures and options net long positions in July, mirroring an improved market sentiment and a change in speculators' strategy. The improving global oil market outlook and a rebound in oil prices from the lower levels of June prompted money managers to rush to cover short positions built in the previous month, which contributed to pushing oil futures prices higher. The rise of net long positions was mainly due to the large drop in short positions.

Speculators sharply raised their net long positions in July in the two major futures contracts, ICE Brent and NYMEX WTI. They were buyers of a net of around 157 mb between the weeks of 27 June and 25 July in both contracts. Meanwhile, the total combined futures and options open interest rose marginally by 0.1%. This followed money managers' selling in futures and options net long positions in ICE Brent and NYMEX WTI of an equivalent of 169 mb in May and June. However, the rise in NYMEX WTI was more pronounced. Between the weeks of 27 June and 25 July, NYMEX WTI net long positions in futures and options jumped 168.5%, while net long positions related to ICE Brent rose by 23.1% over the same period.



Money managers sharply raised bullish NYMEX WTI positions in July, with net long positions in the week of 25 July rising to their highest point since 25 April. Between the weeks of 27 June and 25 July, NYMEX WTI futures and options net long positions increased by 120,561 lots, or 168.5%, to stand at 192,104 contracts, according to the US Commodity Futures Trading Commission (CFTC).

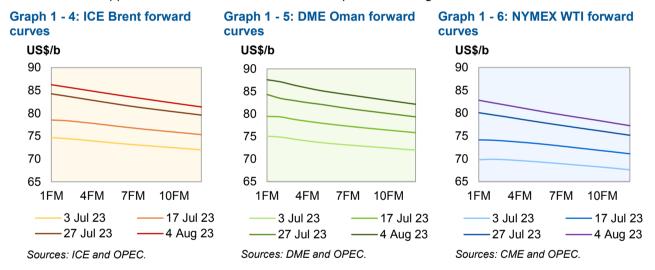
During the same period, gross short positions dropped by 80,980 lots, or 59.6%, to 54,780 contracts, while gross long positions rose by 39,581 lots, or 19.1%, to 246,884 contracts.

Money managers also raised net long positions in futures and options related to the ICE Brent contract in July. They were buyers of a net equivalent of about 37 mb. Combined futures and options net long positions rose by 36,840 contracts, or 23.1%, to stand at 196,640 lots in the week of 25 July, according to the ICE Exchange. This is a combination of an increase in long positions and a cut in short positions. Gross short positions declined by 18,350 lots, or 27.1%, to stand at 49,483 contracts, while gross long positions rose by 18,490 lots, or 8.1%, to 246,123 contracts.

The **long-to-short ratio of speculative positions** in ICE Brent contracts rose in the week of 25 July to 5:1, compared with 3:1 in late June. The NYMEX WTI long-to-short ratio rose to about 5:1 in the week of 25 July, compared with 2:1 in late June. Total futures and options open interest volumes on the two exchanges rose in July, increasing by 0.1% m-o-m, or 4,044 contracts, to stand at 5.1 million contracts in the week ending 25 July.

The futures market structure

The **crude market structure** strengthened in July on an improving supply/demand balance outlook and signs of easing supply overhang for prompt loading volumes. The large decline in US crude oil stocks last month contributed to a strengthening of the structure of NYMEX WTI with the nearest month-spreads flipping into backwardation from contango in June. The sharp rise in bullish positions in the futures markets added support to prompt-month prices compared to forward-month contracts. Robust demand from refiners and higher global refinery intakes boosted purchases of crude for prompt loading volume amid the prospect of lower loading programs in several regions supporting the value of front-month prices. However, the first-to-third months of backwardation of Brent and Dubai remained below levels registered in March and April as the spot market remained well supplied and the macroeconomic backdrop limited strength of the market structure.



The **backwardation structure of Brent futures** strengthened last month as the improving short-term supply/demand outlook in the Atlantic Basin provided more support to the value of prompt-month prices compared to forward contracts. This was added to easing supply availability of light sweet crude in the Atlantic basin due to higher demand from European and Asian refiners amid open west-to-east arbitrage.

Prompt prices were also buoyed by a crude demand in Europe amid stronger gasoline and middle distillate margins that encouraged refiners to increase their throughputs. The ICE Brent first-month premium to the third month widened m-o-m by 48¢ to a backwardation of 65¢/b. Similarly, ICE Brent's M1/M6 backwardation strengthened last month by 81¢ to settle at \$1.81 on average, compared with a backwardation of \$1.01 in June.

The **front end of NYMEX WTI** also strengthened last month and flipped into backwardation from a contango structure in June. Short covering in NYMEX WTI futures and options contracts, higher demand from US refineries and a large drop in US crude oil stocks, including at Cushing, supported the value of the first-month contract that rose above forward contracts. The NYMEX WTI M1/M3-month spread flipped from a contango of 11¢/b on average in June, to a backwardation of 47¢ in July, rising by 58¢ m-o-m.

DME Oman and Dubai market structures steepened further last month, moving into deeper backwardation as front-month prices came under upward pressure from robust Asian refiner demand, including China and India. Prospects of lower supply availability in the short term in the east Suez market also contributed to strengthening the market structure of DME Oman and Dubai. On a monthly average, the DME Oman M1/M3 spread widened by 43¢ m-o-m to a backwardation of 99¢/b on average in July.

In terms of the M1/M3 structure, the North Sea Brent M1/M3 spread widened in July by 62¢ to a backwardation of 64¢/b, compared with a shallow backwardation of 2¢/b in June. The Dubai M1/M3 spread expanded on average by 43¢ to a backwardation of \$1.43/b. In the US, the WTI M1/M3 spread rose m-o-m by 57¢, flipping from a contango of 16¢ in June to a backwardation of 41¢/b in July.

Crude spreads

The prospect of a tighter sour market and sustained supply availability of light sweet crude, including from the US. led to further narrowing of the spread between the value of sweet and sour crude in almost all regions. although they widened slightly in Asia. Further strengthening of high sulfur fuel oil supported the value of heavy sour crude, while a sharp drop in the value of Naphtha cracks weighed on the value of light sweet crude, which resulted in further narrowing of the naphtha-HSFO spread to deep discount. However, the spread between sweet and sour crude widened in Asia, as a narrow EFS Dubai raises the west-to-east flow of light sweet crude to Asia and weighed on the value of light sweet crude in Asia.

In Europe, the North Sea Dated-Urals crude spread Graph 1 - 7: Differentials in Asia, Europe and USGC narrowed in July, as the assessment of Urals value in the Mediterranean and Northwest Europe was seen higher in July from reporting agencies, amid prospects of lower August loading programs, firm demand from Asian refiners and lower freight rates. Light sweet crude also rose in July but at a slower pace compared to sour crude, as competitiveness from similar crude quality in the Atlantic Basin, soft demand from Asian refiners for North Sea crude, and lower naphtha margins caped the rise of light sweet crude. The North Sea Dated-Urals crude differential narrowed by \$3.12 on average m-o-m to stand at a premium of \$14.97/b in July. The value of the Johan Sverdrup differential rose firmly last month and its differential to the North Sea Dated narrowed in July





m-o-m by \$2.04 and flipped to a discount of \$1.10 on average, compared to a premium of 94¢/b in June.

In the USGC, the sweet-sour crude differentials also contracted on a strong rally of sour crudes that were supported by limited supply and strong demand for prompt loading cargos amid expectations of tighter global sour crude in the coming months. Meanwhile, a sustained supply of light sweet crude in the USGC and lower naphtha margins kept the downward pressure of sweet crude, despite strong crude exports. However, the rise of sour crude was capped after news that the Energy Department cancelled a planned purchase of 6 mb of crude for the strategic reserve. The LLS premium over medium sour Mars narrowed in July by 76¢ m-o-m to \$1.20/b premium.

However, in Asia, the sweet-sour crude differential represented in the Tapis-Dubai spread widened in July as a favourable west-to-east arbitrage that encouraged the flow of light sweet crude from the Atlantic Basin to Asia contributed to pushing the value of sweet crudes in Asia Pacific lower. However, the Tapis-Dubai spread remained relatively narrow compared to the previous months, as the sour crude was supported by strong demand from Asia refiners and higher HSFO cracks, which was reflected in the narrower Brent-Dubai spread. The Brent-Dubai exchange of futures for swaps (EFS) narrowed in July by 43¢ to stand at a low premium of \$1.22/b. The Tapis/Dubai spread narrowed by 40ϕ in July to a premium of \$4.26/b from a premium of \$3.86/b the previous month.

Commodity Markets

All selected commodity price indices rebounded in July, marking the fourth consecutive month in which they all moved in the same direction. However, the movement of prices within the indices continued to be mixed in July.

Sentiment improved in the futures markets in July, compared with the previous month. Money managers' net length increased in the month after two consecutive months of decreases. However, total open interest decreased for the second consecutive month over the same period.

Commodity prices benefited from non-market fundamental factors in July, while in some instances market fundamentals remained largely unchanged m-o-m. Nonetheless, the demand outlook for commodities improved in July following a 2023 upward revision of global economic growth by the International Monetary Fund and other reporting agencies.

Trends in selected commodity markets

The **energy price index** recovered from the previous month's decline, increasing by 5.9% m-o-m in July. The index recovery was driven by a rally in US natural gas prices and a rebound in average crude oil and coal prices but was partially offset by a decline in European natural gas prices. Y-o-y, the index was down by 40.2%.

The **non-energy price index** rose in July after two consecutive months of decline, increasing by 0.7% m-o-m. Ongoing geopolitical developments in Eastern Europe continued to underpin agricultural commodity prices, but ongoing improvement in the crop outlook in Latin America and softer global demand helped ease pressure on prices. The index was down y-o-y by 5.4%.

Commodity	Unit	Мо	nthly avera	% Change	Year-to-date		
commonly	onit	May 23	Jun 23	Jul 23	Jul 23/Jun 23	2022	2023
Energy*	Index	96.9	95.2	100.8	5.9	154.8	105.1
Coal, Australia	US\$/mt	160.5	139.4	140.6	0.9	312.8	192.5
Crude oil, average	US\$/b	74.1	73.3	79.0	7.8	103.6	78.0
Natural gas, US	US\$/mbtu	2.1	2.2	2.6	17.0	6.2	2.4
Natural gas, Europe	US\$/mbtu	10.1	10.4	9.5	-7.8	34.9	13.4
Non-energy*	Index	112.0	109.6	110.3	0.7	130.9	113.9
Base metal*	Index	107.1	106.7	107.0	0.3	132.3	112.3
Precious metals*	Index	151.5	147.4	148.6	0.9	141.1	147.1

Table 2 - 1: Commodity prices

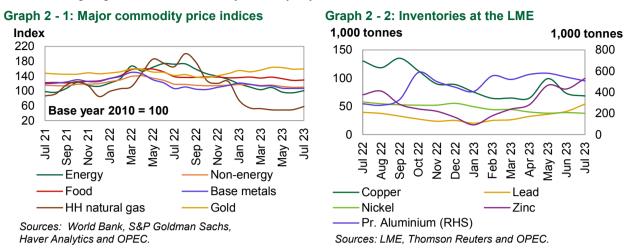
Note: * World Bank commodity price indices (2010 = 100). Sources: World Bank and OPEC.

Average **crude oil prices** rebounded in July after two consecutive months of decline, increasing m-o-m by 7.8%. Prices advanced as improvements in market sentiment and the global macroeconomic outlook helped offset the bearish impact of ongoing monetary tightening. Y-o-y, prices were down by 24.8%.

Henry Hub's natural gas prices experienced a consecutive monthly increase in July, rising by 17.0% m-o-m. Prices rose sharply in the month, supported by buying interest for US LNG in the Asian markets amid higher prices in the region. LNG spot prices in Asia averaged \$11.2/mmbtu in July, which was \$8.6/mmbtu higher than Henry Hub's average of \$2.6/mmbtu over the same period. However, prices were down by 64.8% y-o-y.

Natural gas prices in Europe receded in July, offsetting gains from the previous month. The average Title Transfer Facility (TTF) price went from \$10.4/mmbtu in June to \$9.5/mmbtu in July, a 7.8% decrease m-o-m. Prices rallied earlier in the month on news of extended planned maintenance shutdowns at Norwegian facilities. However, heatwaves across southern Europe eased and gas inventories remained high, thus putting downward pressure on prices. As of 31 July, EU gas storage was at 86.0% according to data from Gas Infrastructure Europe. Lower industrial demand amid an economic slowdown in major EU economies in July also weighed on prices. Y-o-y, prices were down by 81.4%.

Australian thermal coal prices rebounded in July, increasing by 0.9% m-o-m. Prices rose on the back of increased demand for power generation in Asia, more specifically, increased buying interest from China ahead of winter demand. However, they were capped by weaker demand in Europe, as the export of unused coal remained ongoing. Prices were down by 63.3% y-o-y.



The **base metal index** rebounded after two consecutive months of losses, advancing by 0.3% m-o-m. Price movements within the index were mixed but marginal, which underscores how market fundamentals for base metals remained largely unchanged m-o-m. The rise in the index was driven by copper and zinc but partially offset by declines in aluminium, nickel and lead. The index was up by 0.9% y-o-y, as China's base metal output was lower compared with the same period last year.

Aluminium prices fell for the third consecutive month in July, declining by 1.1% m-o-m. Prices fell amid reports of an inventory build-up in China. Outside of China, London Metal Exchange (LME) warehouses reported a 6.6% decrease in inventories m-o-m, but a 74.3% increase y-o-y. Prices were down by 10.3% y-o-y.

Average monthly **copper prices** advanced for the second consecutive month, increasing by 1.0% m-o-m in July. Copper prices found support in a weaker US dollar and recent Chinese policy announcements. Outside of China, prices were further supported by a decline in inventories. According to the LME, inventories were down by 6.3% m-o-m and 47.7% y-o-y. Prices were up by 12.4% y-o-y.

Lead prices receded in July by 0.6% m-o-m. Prices fell amid a combination of muted industrial demand in China and an inventory build-up outside of the country. According to the LME, inventories rose by 31.5% m-o-m and 37.2% y-o-y. Prices were up by 6.2% y-o-y.

The movement of **nickel and zinc prices** was mixed m-o-m. Nickel prices fell for the third consecutive month, declining by 0.7% m-o-m in July, while zinc prices rebounded after five consecutive months of losses, increasing by 1.2% m-o-m. Meanwhile, iron ore prices advanced for the second consecutive month, increasing by 0.9% over the same period. Nickel prices remained pressured by healthy inventories amid muted demand in China. Meanwhile, both zinc and iron ore prices found support from China's policy announcements. Nickel prices were down y-o-y by 1.8%, while those for zinc were down by 22.6%.

The **precious metals index** rebounded in July after two consecutive months of declines, increasing by 0.9% m-o-m. The index rise was driven by a m-o-m recovery in silver and a rebound in gold prices but was partially offset by a decline in platinum prices. Gold and silver rose by 0.4% and 3.6% m-o-m respectively, amid weakness in the US dollar. Meanwhile, platinum prices receded by 2.1% over the same period under pressure from weaker industrial demand. Y-o-y, the index was up by 14.6%. Gold was also up by 12.6%, silver by 27.2% and platinum by 9.3% over the same period.

Investment flows into commodities

Total **money managers' net length** increased in July after two consecutive months of decreases, up by 65.4% m-o-m. Crude oil led the increase, followed by gold, and natural gas, though this was partially offset by a decrease in copper.

Meanwhile, **total open interest (OI)** decreased for the second consecutive month in July, falling by 3.8% m-o-m. Natural gas led the decline in OI, followed by crude oil and copper, but this was partially offset by an increase in gold.

Table 2 - 2: CFTC data on non-commercial positions, 1,000 contracts							
Selected commodity	Open in	terest		Net length			
Genecieu commonity	Jun 23	Jul 23	Jun 23	% OI	Jul 23	% OI	
Crude oil	2,348	2,233	100	4	147	7	
Natural gas	1,331	1,240	-44	-3	0	0	
Gold	614	650	97	16	113	17	
Copper	230	226	10	4	9	4	

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

Note: Data on this table is based on a monthly average.

Sources: CFTC and OPEC.

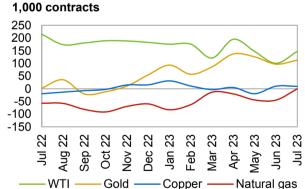
Total **crude oil (WTI) OI** decreased for the second consecutive month in July, falling by 4.9% m-o-m. Meanwhile, money managers' net length rose sharply over the same period, increasing by 47.2% m-o-m. The increase in net length was driven mainly by a reduction in short positions.

Total **Henry Hub natural gas OI** experienced a consecutive monthly decrease in July, falling by 6.9% m-o-m. Meanwhile, money managers increased their net length for the second consecutive month by 100.2% m-o-m. The increase in net length was supported by a m-o-m price rally amid higher demand.

Gold's OI rose in July, increasing by 5.9% m-o-m. Money managers also increased their net length sharply by 16.5% m-o-m over the same period. Weakness in the US dollar underpinned bullishness towards gold.

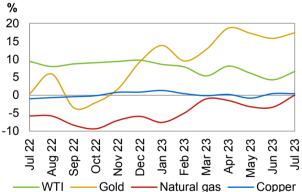
Copper's OI decreased by 1.6% m-o-m in July, erasing gains from the previous period. Money managers also decreased their net length by 7.3% m-o-m over the same period, amid profit taking.





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





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

World Economy

The United States, Brazil and Russia experienced economic growth that surpassed initial expectations in 1H23. The pattern of sound growth in India seems to have a solid foundation as well. And while China appears to face-selective challenges currently, the prospect of counterbalancing measures by the government will likely support the economy to achieve this year's growth target. In contrast, the Euro-zone witnessed somewhat lower-than-expected growth in 1H23, mainly due to a decline in the industrial sector, due to a contraction in the German economy. Taking into account these mainly positive factors, the global GDP growth projection for 2023 was revised up slightly to stand at 2.7%.

Indeed, some signs have emerged that slowing inflation and the possibility of a consequently more accommodative monetary policy, ongoing robust private household consumption and stable commodity prices may lead 2024 growth to be slightly higher than previously expected. Latin American central banks, notably the central bank of Brazil (BCB), were early in adopting relatively aggressive monetary tightening in order to fight spiralling inflation. With the region's normalising inflation level, the BCB, along with the central bank of Chile, has now started to considerably lower key policy rates. Not only could this offer some guidance for advanced economies' central bank monetary policies, but it is also likely to provide support for the region's growth in 2H23 and even more so in 2024. In addition, Russia's progress in overcoming its economic challenges in 2023 is likely to lead to higher growth in 2024 as well. These effects have led to a slight upward revision in 2024 global GDP growth to 2.6%.

Despite the latest positive developments, several uncertainties regarding economic growth in 2H23 and 2024 require cautious monitoring. These include ongoing high inflation, the possibility of further monetary tightening, particularly in the US, the Euro-zone and the UK, despite already elevated key interest rates, and the challenge of tight labour markets in advanced economies. Moreover, it is still unclear how and when the geopolitical conflict in Eastern Europe might be resolved. In light of high global interest rates, sovereign debt is a rising concern as well, as it is at a record high in many economies.

Upside potential may come from less-accentuated inflation, providing central banks with room for accommodative monetary policies towards the end of the year. Emerging Asia, particularly India, but also Brazil and Russia, could further surprise to the upside, with domestic demand and external trade accelerating. An even stronger-than-anticipated growth trend in China, supported by further fiscal and monetary stimulus, may provide additional support to global economic growth this year. Moreover, if the US continues to keep its 1H23 momentum, growth could turn out to be higher than expected.

C C				Euro-						
	World	OECD	US	zone	UK	Japan	China	India	Brazil	Russia
2023	2.7	1.2	1.8	0.6	0.0	1.1	5.2	5.6	1.7	0.6
Change from previous month	0.1	0.1	0.4	-0.1	0.0	0.0	0.0	0.0	0.4	0.2
2024	2.6	0.9	0.7	0.8	0.7	1.0	4.8	5.9	1.2	1.0
Change from previous month	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2

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

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

Update on the latest global developments

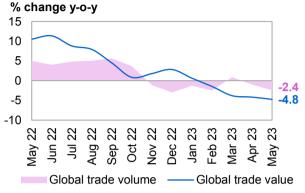
The GDP growth trend in 1H23 generally exceeded expectations, except the Euro-zone, which was primarily impacted by a decline in Germany during the first quarter, and a challenging situation in the industrial sector, including in France and Italy. India's growth remains well-supported. Despite elevated inflation and relatively high-interest rates, private household consumption maintained steady momentum across major economies. The prevailing themes influencing global economic progress over the past month have remained consistent. Inflation remains at persistently high levels, and major central banks continued their gradual monetary tightening efforts, even as the pace of inflation slowed. The services sector remains the primary driver of global growth momentum, while the industrial sector is experiencing a deceleration or even contraction in some economies.

Inflation continued to retract in most advanced economies, according to the latest available data. However, continuing high core inflation remains a concern for both the US Federal Reserve (US Fed) and the European Central Bank (ECB), which may lead central banks to continue tightening their monetary policies.

Additionally, the Bank of England (BoE) continued its monetary tightening efforts most recently, hiking interest rates by 25 bp, and the Bank of Japan started to accommodate tightening its yield curve control measures. These G4 central bank policies stand in contrast to Latin American central banks, particularly the Brazilian central bank (BCB), which took proactive measures to counter escalating inflation by implementing relatively aggressive monetary tightening as early as 2021. As inflation in the region retracted, both the BCB and the central bank of Chile have now initiated substantial reductions in key policy rates.

After a strong pandemic-driven recovery, global Graph 3 - 1: Global trade trade continued its normalising trend. In value terms, global trade declined by 4.8% y-o-y in May, after a decline of 4.2% y-o-y was seen in April, based on the CPB World Trade Monitor Index provided by the CPB Netherlands Bureau for Economic Policy Analysis. The decline in global commodity prices in both 1Q23 and 2Q23 played a role in this development. Commodity prices fell by 26.9% y-o-y in 1Q23 and 12.7% y-o-y in 2Q23, based on the Standard and Poor's Goldman Sachs Commodity Index.

Trade in volume terms fell by 2.4% y-o-y in May, after declining by 1% y-o-y in April.



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

Near-term global expectations

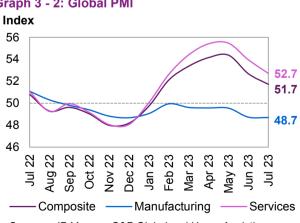
After strong growth in 1H23, the US is forecast to see a slight deceleration in 2H23, along with Japan. China's GDP growth dynamic is forecast to appreciate slightly. Russia's economy is also anticipated to gain traction in 2H23. India and Brazil are forecast to maintain steady growth from 1H23, but at a slightly lower level. The services sector is expected to continue as the primary driver of global economic growth, while industrial production is forecast to become more relevant again towards the end of the year.

The Euro-zone is forecast to recover somewhat in 2H23 from low 1H23 GDP growth. The short-term global growth outlook will depend largely on inflationary trends and the inflation expectations of central banks, as well as resulting monetary policies in key economies, particularly the US and the Euro-zone. General inflation is forecast to retract further in 2H23 and 2024. However, core inflation is forecast to remain sticky in major economies with only a gradual slowdown in 2024. As a result, the short-term expectation is that tight monetary measures will persist, marked by modest interest rate increases in the latter half of the year by the ECB, as well as the Fed, with key policy rates projected to reach their peak by the turn of the year. G4 central bank balance sheets will undergo a gradual reduction into 2024, though a shift towards a more accommodative monetary stance might only transpire in 2H24. The central banks of emerging economies will likely enjoy more room for accommodative policies towards the end of the year, given that inflation has retracted to more reasonable levels. Especially in Brazil and other Latin American economies - except Argentina - inflation has subsided, providing central banks with more room to manoeuvre.

Global purchasing managers' indices (PMIs) in Graph 3 - 2: Global PMI July reflect some decelerating trends in the services sector and an ongoing challenging situation in manufacturing.

The global manufacturing PMI was unchanged to stand at 48.7 in July, the same level as in June, remaining in contractionary territory since September of last year.

The global services sector PMI fell to 52.7 in July, compared with 53.9 in June.



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

global growth forecast for 2023 was revised up to 2023-2024*, % stand at 2.7%, compared with 2.6% the previous month.

Global economic growth for 2024 was revised up as well and is forecast to reach 2.6%, compared with 2.5% the previous month.

Taking sound 1H23 momentum into account, the Table 3 - 2: World economic growth rate and revision,

	World
2023	2.7
Change from previous month	0.1
2024	2.6
Change from previous month	0.1

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

OECD

OECD Americas

US

Update on the latest developments

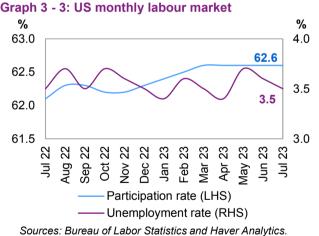
The US economy continues to expand at a higher-than-expected rate. GDP growth in 2Q23 was reported at 2.4% q-o-q SAAR, following 2% q-o-q SAAR in 1Q23, as provided by the Bureau of Economic Analysis. This follows GDP growth of 2.6% q-o-q SAAR in 4Q22 and 3.2% q-o-q SAAR in 3Q22. While private household consumption is holding up very well, debt-financed consumption in the US may become a challenge, as rising delinguencies in consumer credit-related financing point to potential near-term issues. The consumer confidence index, as reported by the Conference Board, recovered significantly in July, rising to 117 points, compared with 110.1 in June. This indicates that the solid consumer demand seen in 3Q23 may continue.

General inflation has continued to retract, while core inflation remains persistently high. The general price index slowed further to 3% in June, following 4% y-o-y in May. Nevertheless, core inflation remained at a

relatively higher level of 4.8% y-o-y in June, after Graph 3 - 3: US monthly labour market reaching 5.3% y-o-y in May, clearly surpassing general inflation. Thus, it remains to be seen how the US Fed will react. The Fed is also being steered by its guideline, the core index of personal consumption expenditures (PCE). This inflation index stood at 4.1% y-o-y in June, compared with a May level of 4.6% у-о-у.

The labour market improved further in July, with the unemployment rate falling to 3.5% from 3.6% in June. The participation rate remained unchanged at 62.6%, the same level for the fifth consecutive month.

Hourly earnings rose by 4.8% y-o-y in July, after a robust 4.7% was recorded in June.



Near-term expectations

After strong growth in both 1Q23 and 2Q23, the economy is expected to remain in relatively sound shape. Consumption, in particular, is forecast to continue supporting the US economy. However, it seems that persistently high core inflation may pressure the Fed to continue its monetary tightening cycle. The Fed already lifted its key policy rate by 525 bp since the end of 2021. The upper band of the key policy rate already stands at 5.5%, a level usually followed by a time of clear economic deceleration. Particularly when considering the burden of rapidly rising interest rates and ongoing relatively high inflation levels, uncertainties remain.

Despite significant interest rate hikes by the Fed, the US economy is expected to experience ongoing strong support from private household consumption in 2Q23. This is due to an ongoing tight labour market and the consequences of continuing robust disposable income. Additionally, the impact of monetary tightening is not being felt immediately and will take around 18 months or more to materialize. GDP growth of 2% q-o-q SAAR was seen in 1Q23, with 2.4% g-o-g SAAR in 2Q23. These strong growth levels in 1H23 are forecast to be followed by a gradual deceleration throughout the year. GDP growth in 2024 will then continue at a low rate of below 1% annualized guarterly growth on average in 2024.

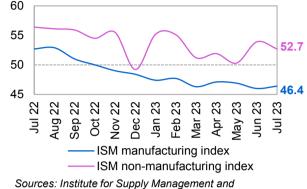
Following core inflation of 6.1% in 2022, the forecast for 2023 remains at around 4.5% and around 3% in 2024. This will likely lead the Fed to continue with its tight monetary policies, and the key policy rate may even reach 5.75% by the end of the year. Key policy rates are forecast to peak by then and experience a more accommodative policy stance by 2H24.

July PMI levels, as provided by the Institute for Graph 3 - 4: US-ISM manufacturing and Supply Management (ISM), reflect an ongoing non-manufacturing indices contraction in the manufacturing sector and a recovery in the services sector.

The July manufacturing PMI stood at 46.4, after reaching 46 in June, thus remaining below the growthindicating level of 50 for the ninth consecutive month.

The index level for the services sector, representing around 70% of the US economy, retracted as well in July to stand at 52.7, after reaching 53.9 in June.

Index 60



Haver Analytics.

2023 GDP growth forecast was revised up to 1.8%, 2023-2024*, % compared with the previous month's forecast of 1.4%.

Considering the dampening effect from high-interest rate levels and, albeit slowing, still elevated inflation levels, the US GDP growth estimate for 2024 is anticipated to slow to 0.7%.

Taking into account sound GDP growth in 1H23, the Table 3 - 3: US economic growth rate and revision,

	US
2023	1.8
Change from previous month	0.4
2024	0.7
Change from previous month	0.0

Note: * 2023 and 2024 = Forecast.

Source: OPEC.

OECD Europe

Euro-zone

Update on the latest developments

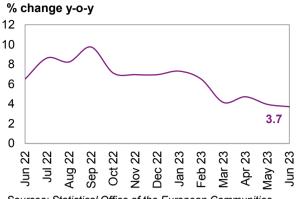
As became visible in the latest GDP growth numbers for 1H23, the consequences of monetary tightening, ongoing high inflation, and fallout from the tension in Eastern Europe have dampened the economic dynamic in the Euro-zone. In terms of economies, Germany in particular experienced a recession in 4Q22 and 1Q23, while in 2Q23 growth remained stagnant. While manufacturing sector-related activity seems to have created a significant drag, some signals from the industrial side indicate that the downturn in the goods sector may turn, or at least stabilise. Manufacturing orders in Germany picked up again, rising by 7% m-o-m in June in value and volume terms, according to data from the Deutsche Bundesbank. However, industrial production (IP) in the Euro-zone turned negative again in May, declining by 2.1% y-o-y, after rising by 0.4% y-o-y in April.

Inflation retracted in July to 5.2%, compared with 5.5% y-o-y in June and 6.1% y-o-y in May. However, following the global trend, core inflation remained persistently high, leading the ECB to continue its monetary tightening up to July. Core inflation stood at 6.4% y-o-y in July, following 6.8% y-o-y in June.

The **labour market** maintained its positive trajectory. According to the latest numbers from Eurostat, the unemployment rate stood at 6.4% in June, unchanged from the preceding two months and following 6.5% in 1Q23.

Growth in **retail sales** in value terms maintained good momentum, rising by 3.7% y-o-y in June, compared with May's rise of 4% y-o-y.

Graph 3 - 5: Euro-zone retail sales



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

Near-term expectations

After a 4Q22 contraction and stagnant growth in 2Q23, the **Euro-zone's GDP growth dynamic** is forecast to rebound for the remainder of 2023 and is anticipated to accelerate slightly into 2024. So far the services sector has been the main driver of the Euro-zone's economic activity, while the important industrial side has led the slowdown. The forecast anticipates a gradual recovery in the industrial sector, led by both domestic and external demand. Moreover, Germany was significantly impacted by the global downturn in industrial activity and is now forecast to recover again somewhat in 2023. After declining by 1.6% q-o-q SAAR in 4Q22 and 0.4% q-o-q SAAR in 1Q23, the country's economy rebounded to see growth of 0.1% q-o-q SAAR in 2Q23 and is forecast to recover to annualised quarterly growth rates of more than 1% in 2H23. This will have an impact on the Euro-zone, given Germany's economic size, accounting for around 30% of the Euro-zone's economy and its interconnectivity with the region's economies. However, ongoing inflation-related issues and consequently rising interest rates in the Euro-zone are forecast to lead to low growth momentum in 2023.

Inflation remained high in June, and core inflation, in particular, is expected to remain high in 2023 and gradually decelerate into 2024. Core inflation is forecast at more than 5% y-o-y in 2023, compared with 3.9% y-o-y in 2022, and is expected to retract to more than 2% in 2024.

As a result, the ECB's monetary policy trajectory is projected to follow ongoing tightening in 2H23, putting the main key policy rate at approximately 4.5%. Consequently, there is anticipation of a further deceleration in debt-financed investments, primarily stemming from bank-related lending activities within the Euro-zone. These investments typically play an important role in fostering growth across the region. This projected slowdown in lending activities is expected to lead to dampening effects, particularly in the real estate sector and broader business-related investments. Moreover, European banks are likely to implement more stringent lending rules in response to the global banking uncertainties experienced in 1Q23. This compounded effect is expected to lead to an additional deceleration in liquidity flows.

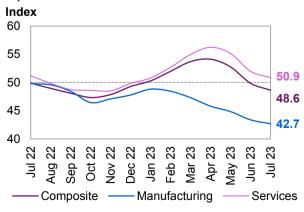
After 1Q23 GDP growth was almost stagnant at 0.1% q-o-q SAAR, growth in 2Q23 picked up by 1.1% q-o-q SAAR. In 3Q23, GDP growth is forecast to accelerate to stand at 1.6% q-o-q SAAR and to slow to 1.2% q-o-q SAAR in 4Q23. Quarterly growth in 2024 will stand within a very close range of between 0.4–0.8% annualised quarterly averages.

The **Euro-zone's July PMI** pointed to continuing challenges in the manufacturing sector – which remained in contractionary territory – and downward momentum in the services sector.

The **PMI for services**, the largest sector in the Euro-zone, retracted to 50.9 in July, following 52 in June.

The **manufacturing PMI** fell further and hence remained in contractionary territory, standing at 42.7 in July, after seeing 43.4 in June.





Sources: S&P Global and Haver Analytics.

Taking into consideration the decline in 1Q23 GDP Table 3 - 4: Euro-zone economic growth rate and growth and the further impact of a variety of revision, 2023-2024*, % dampening factors, including inflation and ongoing monetary tightening, GDP growth for 2023 was revised down to 0.6% from 0.7%. The forecast also anticipates some rebound from the 1Q23 GDP decline and rising services sector activity in the summer months. Despite numerous remaining challenges, **2024 GDP growth** is forecast at 0.8%, unchanged from the previous month.

	Euro-zone
2023	0.6
Change from previous month	-0.1
2024	0.8
Change from previous month	0.0

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

OECD Asia Pacific

Japan

Update on latest developments

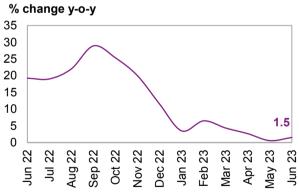
Japan's GDP growth in 1Q23 stood at 2.7% g-o-g SAAR, as reported by the Ministry of Economy, Trade and Industry (METI). Based on the latest consumer and business confidence indices and other lead indicators, the country's positive growth dynamic appears to have continued into 2Q23. This momentum has been very much driven by the services sector, a trend that accelerated in 2Q23. However, the industrial sector remained a weak spot in recent months. Inflation remains historically high, though relatively unchanged over recent months at 3.3% y-o-y in June, 3.2% y-o-y in May and 3.5% in April. Compared with the general inflationary trend, core inflation - excluding food and energy - a main guideline for central bank policies, was also steady, reaching 2.6% y-o-y in June, after hitting 2.7% in May and 2.5% in April.

Given the rising price environment, the Bank of Japan (BoJ) changed its course and started to gradually tighten its monetary policy. Though negative key-policy levels remained unchanged, it adapted its yield-curve control approach. The BoJ announced its intention to purchase 10-year Japanese government bonds at a rate of 1%. This move effectively broadens the range within which long-term yields can fluctuate. The central bank clarified that it is still technically upholding its previous ceiling of 0.5% on 10-year bond yields. Yet this threshold would now serve as a reference point rather than an inflexible constraint.

Exports remained slightly expansionary on an annual Graph 3 - 7: Japan's exports basis, but have witnessed a clear slowing trend in recent months. They rose by 4.8% in 1Q23, but growth slowed to 2.6% y-o-y in April, 0.6% in May and stood at 1.5% y-o-y in June, all on a non-seasonally adjusted basis. This ties into the challenging situation in the global goods sector seen in the past months.

Retail sales continued their expansionary trend, with robust domestic demand seen in 2Q23. Retail sales grew by 5.9% y-o-y in June in value terms, slightly higher than the 5.8% seen in May, on a seasonally adjusted basis.

Consumer confidence remained steady, suggesting that household expenditures were sound in 3Q23. The consumer confidence index stood at 36.4 in July, the same level as in June, marking the highest index point since February 2022.



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

Near-term expectations

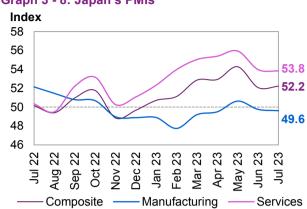
After very low growth in 4Q22 of 0.4% q-o-q SAAR, growth picked up again in 1Q23 to stand at 2.7% q-o-q SAAR. The GDP growth pattern is forecast to remain relatively stable, with GDP growth on average of around 0.5% q-o-q SAAR in the remaining three guarters. Hence, Japan's growth is forecast to continue to be low, but steady, in 2H23 and 2024. The ongoing services sector support trend is projected to continue, a dynamic driven by pent-up demand in contact-intensive segments of the economy, though it is expected to slow in 4Q23. As industrial production and exports are forecast to gradually pick up towards the end of the year, there is potential for Japan's growth trajectory to stabilize further.

The BoJ is forecast to continue pursuing only very gradual tightening, with a focus on yield curve control, and to maintain relatively accommodative monetary policy. Inflation stood at nearly 3.8% y-o-y in 4Q22 and 3.5% in 1Q23. Inflation is estimated to have averaged 3.6% y-o-y in total in 1H23, but is forecast to trend downwards towards the end of the year, when it may hover around 1.5%.

July's PMI numbers reflect an ongoing contraction in Graph 3 - 8: Japan's PMIs the manufacturing sector, but a stable positive trend in the services sector. Importantly, the manufacturing sector remained in contractionary territory, below the index level of 50.

The services sector PMI, which constitutes around two-thirds of the Japanese economy, retracted slightly to stand at 53.8 in July, following 54 in June.

The manufacturing PMI fell to 49.6 in July, compared with 49.8 in June.



Sources: S&P Global and Haver Analytics.

After solid growth in 1Q23 and the expectation of Table 3 - 5: Japan's economic growth rate and ongoing steady growth for the remainder of the year, revision, 2023-2024*, % the 2023 GDP growth forecast remains unchanged at 1.1%. The growth dynamic is forecast to be supported by domestic demand, mainly from the services sector, and by a gradual improvement in exports.

The projection for **2024** sees a slight deceleration to 1%. also unchanged from the previous month.

Non-OECD

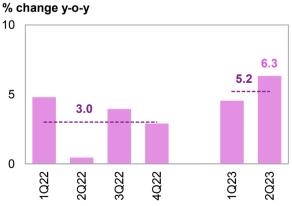
China

Update on the latest developments

Output measures, export trends and lead indicators Graph 3 - 9: China's GDP growth highlight an ongoing mixed picture in the current development of the Chinese economy. However. tepid growth in 2022 has been followed by a considerable rebound in 1H23. An important driver for the ongoing dynamic is pent-up demand in the services sector, particularly the contact-intensive sector, including leisure, tourism and transportation, which has enjoyed strong support. China's 2Q23 GDP **growth** was reported at 6.3% y-o-y, following growth of 4.5% in 1Q23. Thus, the country's economy has generally continued to improve after the postpandemic reopening at the end of last year.

	Japan
2023	1.1
Change from previous month	0.0
2024	1.0
Change from previous month	0.0
Note: * 2023 and 2024 = Forecast.	

Source: OPEC.



Sources: National Bureau of Statistics and Haver Analytics.

A factor that is important to monitor is international trade, considering China's economy is traditionally impacted by exports. After export volumes declined considerably over most of 2022 and in the first two months of 2023. they recovered strongly in March and April, rising v-o-y by 15.3% and 10.9%, respectively. However, export volumes declined in May to -0.3% v-o-y and fell by 1.8% v-o-y in June, as reported by China's General Administration of Customs.

The annual inflation rate retracted to stand at 0% in June, following 0.2% y-o-y in May and 0.1% in April. This has raised fears of deflationary developments in China. Nonetheless, it does grant the government a greater degree of flexibility should the need for fiscal or monetary policy intervention arise. Given the nearly negligible inflation rate, there appears to be a possibility that the central government, in collaboration with the People's Bank of China (PBOC), could embark on stimulus measures, as was recently announced by the central government. This may become important, especially given the persistent issue of youth unemployment, which exceeded the 20% threshold for the third consecutive month in June, registering 21.3%, following a figure of 20.8% in May. Retail trade growth decelerated considerably in June, though it picked up by 3.1% y-o-y, following 12.7% v-o-v in May and 18.4% in April.

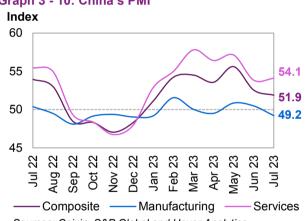
Near-term expectations

With projected inflation maintaining a low growth dynamic throughout 2023, there exists a degree of flexibility to provide economic support through monetary and fiscal means. This potential is further heightened due to elevated levels of youth unemployment and the potential for deflationary pressures to restrain short-term consumer spending. Thus far, this year has witnessed strong consumer expenditure within the services sector, with domestic demand for goods showing a limited dynamic, resulting in low activity in the manufacturing sector. However, the combination of reopening effects and ongoing government support is likely to aid growth to move towards the approximately 5% growth target for this year, though performance for the following year carries a somewhat greater degree of uncertainty. Current projections for GDP growth suggest a relatively even distribution throughout the year. After 1Q23 growth was reported at 4.5% y-o-y, 2Q23 GDP growth stood at 6.3%. This will be followed by around 5% in 2H23. This will lead the Chinese economy to expand by 5.2% y-o-y in 2023. In 2024, growth is forecast to slightly decelerate and be relatively equally distributed on a quarterly basis.

July PMI readings, as provided by S&P Global, show Graph 3 - 10: China's PMI the services sector to be performing very well. Activity in the manufacturing sector has slightly retracted, falling below the expansionary territory of 50.

The manufacturing PMI stood at 49.2 in July, after reaching 50.5 in June.

The services sector index expanded to stand at an index level of 54.1, following 53.9 in June.



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

Expectations for ongoing supportive pent-up demand revision, 2023-2024*, % in 2H23 and a continuously improving economy, in combination with additional measures undertaken by authorities to prop up economic growth, have not changed.

GDP growth in 2024 remains unchanged as well at 4.8%, a slight deceleration from this year's level. Note: * 2023 and 2024 = Forecast. However, with such a growth rate, China will provide Source: OPEC. the largest single share to global economic growth next year and still outgrow most other major economies.

The 2023 GDP growth forecast remains at 5.2%. Table 3 - 6: China's economic growth rate and

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

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Other Asia

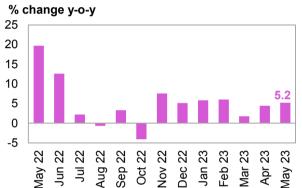
India

Update on the latest developments

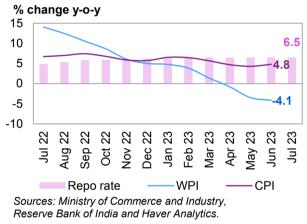
India's economy has demonstrated remarkable resilience and is likely to have surpassed the performance of most major economies during 1H23. Following stronger-than-anticipated growth in the first guarter of the year, leading indicators and output metrics indicate an ongoing favourable trend in 3Q23. As seen in many major economies, the services sector remains the primary growth driver for GDP, but India has also benefitted substantially from improvements in its manufacturing sector. Furthermore, inflation recently exhibited a notable deceleration. Although the central bank has maintained unchanged key policy rates, the decelerating inflation rate offers the central bank some room for potential rate reductions later in the year, if deemed necessary. GDP growth in 1Q23 was at 6.1% y-o-y, representing a distinct improvement from growth rates of 3.3% in 3Q22 and 4.4% in 4Q22.

The steady trajectory appears to have carried into 2Q23 and 3Q23. A major impulse for 1H23 growth seems to have come from investment in the economy, supported by government-led stimulus efforts and robust export performance. The IP advanced by 5.2% y-o-y in May, after reaching 4.5% y-o-y in April and compared with 1.7% y-o-y in March.





Graph 3 - 12: Repo rate and inflation in India



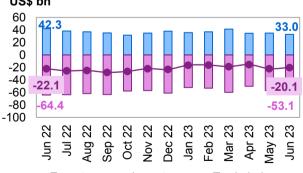
Sources: Ministry of Statistics and Program Implementation of India and Haver Analytics.

India's inflation slowed considerably in the past months but rose again most recently in June. The general CPI index rose to stand at 4.8% y-o-y in June, compared with 4.3% y-o-y in May and 4.7% in April. Core inflation was almost unchanged, standing at 5.1% y-o-y in June, following 5.2% y-o-y in May and compared with 5.1% in April.

India's trade balance posted a deficit of about Graph 3 - 13: India's trade balance \$20.1 billion in June, compared with \$22.1 billion in US\$ bn June of last year.

Monthly exports stood at \$33 billion in June. compared with \$42.3 billion in June of last year.

Monthly imports stood at \$53.1 billion in June, after \$64.4 billion was seen in June of last year.



Exports Exports — Trade balance Sources: Ministry of Commerce and Industry and Haver Analytics.

Near-term expectations

The forecast indicates that India's economy is poised for robust growth in 2023. However, following substantial growth experienced in 2022, a slightly decelerating trend is expected, partly due to the impact of the base effect. Despite some vulnerability in domestic demand, the manufacturing sector has seen sustained expansion, and government-led capital expenditure initiatives could provide a boost to construction activities as well. The services sector is projected to be the primary driver of GDP growth in 2023, maintaining its leading role, supported by strong export performance. Additionally, a slowdown in inflation over the past month, especially core inflation, may lead the Reserve Bank of India (RBI) to consider lowering its key policy rates later in the year. The RBI, in its latest meeting in July, held its key policy rate steady at 6.5%. The central bank is likely to maintain this rate for the coming months, with room for a first-rate cut materializing in the fourth quarter of 2023. Taking into account these recent developments, there is potential for economic growth to surpass the current GDP growth forecast for 2023. After 1Q23, GDP growth was reported at 6.1% y-o-y, with

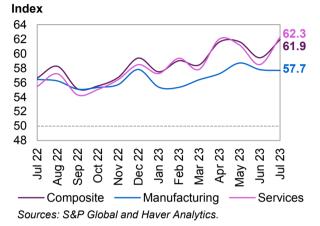
momentum forecast to decelerate slightly. GDP growth in 2Q23 is forecast at 5.8% y-o-y, while 3Q23 is forecast to stand at 5.3% and 4Q23 at 5.2%. However, this is with the expectation that the growth rate in 1H23 will surpass that of 2H22. Growth in 2024 is forecast to see some acceleration from 4Q23, with all quarterly growth levels to stand slightly below 6%, except in 4Q24.

The S&P Global manufacturing PMI was almost unchanged, remaining at a high level of 57.7 in July, after reaching 57.8 in June.

The services PMI indicates an ongoing steady dynamic. It rose to 62.3 in July, compared with 58.5 in June, reaching the highest index level since the beginning of this data series.

The GDP growth forecast for 2023 remains Table 3 - 7: India's economic growth rate and unchanged at 5.6%. Although this entails a yearly revision, 2023-2024*, % deceleration, the momentum observed in the first half of 2023 indicates a distinct recovery from India's modest growth of 2H22. Given the noticeable acceleration in growth during the first guarter of 2023, there's potential for this trend to gather even greater speed in 2Q23 and beyond, which could potentially surpass current GDP growth projections. The primary driving forces behind this are expected to be the services sector, fiscal stimulus initiatives, and a resurgence in consumption during 2H23.





India
5.6
0.0
5.9
0.0

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

With this dynamic expected to carry over into 2024, the growth forecast for the next year stands at 5.9%, also unchanged from the previous month's forecast.

Latin America

Brazil

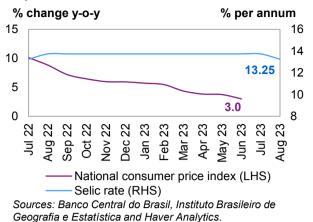
Update on latest developments

Several positive developments have been supportive of the Brazilian economy recently. The central bank was able to lower the SELIC key policy rate by a considerable half a percentage point to 13.25%. This was possible amid past months of considerable decline in the inflation rate, as a result of forceful monetary tightening that has started already in 2021.

Moreover, 1Q23 GDP growth of 4% y-o-y and positive momentum that carried over into 2Q23, in addition to also some government success in implementing new fiscal rules, were also supportive for sentiment. This led to ratings upgrades from both Standard & Poor's and Fitch, which was also supportive, acknowledging the progress that the economy has made.

Inflation retracted further to reach 3% y-o-y in June, Graph 3 - 15: Brazil's inflation vs. interest rate the lowest level seen since 4Q20. It stood at 3.7% y-o-y in May, 3.8% in April and 4.4% in March. This 15 compares with a 2022 inflation rate of 9.4%. Core inflation, however, was still elevated in June, standing at 6.6% y-o-y, compared with 7.2% y-o-y in June. The central bank's inflation target stands at 3.25% for 2023.

With encouraging developments in the Brazilian economy, the labour market experienced some positive momentum. Based on the usual three-month moving average, Brazil's unemployment rate saw an upward trend in 1Q23, but started to fall in 2Q23 and has now reached 8% in June, compared with 8.3% in May and 8.6% in April.



Consumer confidence rose in July to 93 index points, compared with a June level of 90.6 and 87.7 in May, as measured by the Fundação Getúlio Vargas Institute.

Near-term expectations

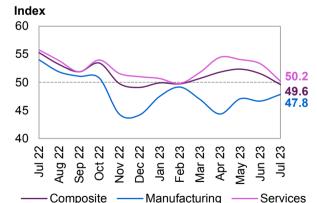
Brazil's economy is expected to witness robust growth in 2023. However, following exceptionally high growth observed in 1Q23, which was impacted by several positive - but transient - factors, the pace of growth is projected to decelerate in 2Q23. In terms of sectors, the 1Q23 trend was heavily driven by the agricultural sector, which expanded by a remarkable 18.8% y-o-y. The industrial sector demonstrated year-on-year growth of 1.9%, while the services sector exhibited an increase of 2.9%. Anticipating a further rebound in manufacturing and added contributions from the services sector, a solid foundation for GDP growth in 2023 is expected. Additionally, external trade has been boosted by China's ongoing recovery, which is foreseen to provide supplementary support. Also, the latest progress in fiscal reform, the anticipation of further monetary easing and improving prospects for Brazil's investment environment are all factors supporting sound growth in 2023, and possibly in the coming year.

Inflation is forecast to decelerate and remain at approximately 5% throughout 2023. This contrasts with the central bank's present inflation target of 3.25%. In 2024, inflation is projected to settle around 4%. Given the significant slowdown in the inflationary trajectory observed up to June, there is potential for a more accommodating monetary policy stance to emerge in 2H23. The SELIC rate is anticipated to stand at 12.25% at the end of the year and subsequently decline to approximately 8% by the end of 2024.

July PMI indices indicate ongoing support from the Graph 3 - 16: Brazil's PMIs services sector. The manufacturing sector's index level improved slightly, though it remained in contractionary territory.

The manufacturing PMI stood at 47.8 in July, following 46.6 in June. However, it remained below the growth-indicating level of 50 for the ninth consecutive month.

The services PMI retracted to reach 50.2 in July, after hitting 53.3 in June.



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

forecast for GDP growth in 2023 was revised up to revision, 2023-2024*, % 1.7%, compared with a forecast of 1.3% last month. Considering the current momentum and carry-over of the 1H23 dynamic into 2H23, further upside potential could materialise. Additionally, the possibility of more accommodative monetary policies in 2H23, coupled with expanding export opportunities, could lift growth Note: * 2023 and 2024 = Forecast. beyond current expectations.

Taking into consideration the current dynamic, the Table 3 - 8: Brazil's economic growth rate and

	Brazil
2023	1.7
Change from previous month	0.4
2024	1.2
Change from previous month	0.1

Source: OPEC.

This is forecast to be followed by GDP growth of 1.2% in 2024, compared with a growth forecast of 1.1% the previous month, anticipating a further acceleration amid the positive developments and considering in particular the lower interest rate regime.

Africa

South Africa

Update on the latest developments

While the **South African economy** has been impacted by a variety of issues, ranging from power supply issues to high inflation and rising interest rates, the situation has gradually improved. This comes after the economy contracted by 4.3% q-o-g SAAR in 4Q22. 1Q23 GDP growth was reported at a level of 1.1% q-o-g SAAR. Challenges persisted throughout 2Q23, raising the likelihood of only a minor expansion in GDP during 1H23. However, recent data indicates a potential acceleration in economic growth towards the end of 2Q23 and at the beginning of 3Q23. Inflation continues to stay elevated, mainly due to increased food prices; yet, the latest information suggests a gradual easing of these pricing pressures. As a result, the central bank has lessened its stringent monetary policy, abstaining from raising interest rates in June and July. Continued blackouts in South Africa have certainly complicated the central bank's fight against inflation. The central bank's key policy rate stands at 8.25%.

A key factor supporting the growth momentum is the notable decrease in power outages since the beginning of June. Before this period, the anticipation was for heightened demand during the winter season, potentially leading to more frequent implementation of the 20% rationing protocol for heavy industrial users. However, the severity of electricity shortages significantly lessened. The reduction in load shedding was largely attributed to a decrease in demand. According to Eskom, the private sector's increase in rooftop solar installations has significantly contributed to the reduction in demand. The future likelihood of power cuts remains highly uncertain due to the variable nature of unplanned breakdowns, but the recent improved performance helps mitigate potential risks to economic growth.

Headline inflation in urban areas retracted in June for the third consecutive month. Following an inflation level of 6.8% y-o-y in April, it stood at 6.3% y-o-y in May and at 5.4% in June. Core inflation remained almost unchanged to stand at 5% in June, following 5.2% y-o-y in May and 5.3% y-o-y in April.

Near-term expectations

There is potential for the economy to experience further improvement in 2Q23. Following a modest recovery in GDP growth in 1Q23 and the severe contraction in 4Q22, the upside of the improving growth trend seems to be, however, minor. This is due to the ongoing limitations stemming from South Africa's power sector, persistently high inflation, and the consequences of elevated interest rates. The economy is projected to expand at a subdued rate, and second-quarter growth in 2023 is expected to remain stagnant compared to the previous quarter's 1.1% q-o-q SAAR. The average quarterly growth rate is forecast to hover around 0.1% seasonally adjusted annualised quarterly growth in 2H23. Given high core inflation, it cannot be ruled out that the central bank will possibly lift the key policy rate by a further 25 bp to stand at 8.5% in 2H23. It also remains to be seen if further load-shedding this winter will continue.

The forward-looking seasonally adjusted composite **PMI**, as provided by S&P Global, fell slightly and therefore remained clearly in contractionary territory, below the index level of 50, indicating a continued challenging situation in the South African economy. It stood at 48.2 in July, following 48.7 in June and 47.9 in May.

standing at 0.2%. Nevertheless, downside risk and revision, 2023-2024*, % prevails and near-term developments will need close monitoring.

Growth in 2024 remains at 0.8%. Improvements in the domestic situation and also in external demand via commodity exports are anticipated.

The 2023 GDP growth forecast remains unchanged Table 3 - 9: South Africa's economic growth rate

	South Africa
2023	0.2
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

Russia's economy sustained its rebound and exhibited better-than-anticipated performance, even in the face of persistent external challenges and amid an improving domestic situation. The repercussions of the Eastern European conflict are apparent in indicators such as industrial production and exports. Nonetheless, the broader recovery seems to have remained intact, supported by robust revenues from the hydrocarbon sector and encouraging domestic demand trends. Monetary policy, however, remains cautious, and the central bank lifted its key policy rate by 1 percentage point in July. The Central Bank of Russia highlighted the rouble's

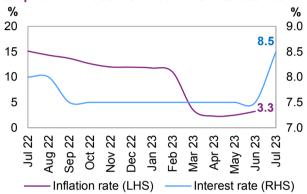
depreciation as a primary inflationary risk. By the end Graph 3 - 17: Russia's inflation vs. interest rate of July, the exchange rate stood at more than 90 roubles per US dollar, signifying a decline of more 20 than 20% since the beginning of the year.

Consumer inflation rebounded in June to stand at 3.3% y-o-y, following 2.5% in May and 2.3% in April, well below the central bank's inflation target of 4%. In February, inflation stood at 11% v-o-v, compared with 11.8% in January.

Russia's central bank increases its policy rate to 8.5% in July and has so far not provided indications it will lower the interest rate.

Moreover, Russia's jobless rate continued to stand at the very low level of 3.1% in June, following 3.3% in both May and April, with the 1Q23 total at 3.5%.





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

Near-term expectations

Despite the spectrum of uncertainties for Russia's near-term economic growth developments, the forecast suggests a gradual improvement in the country's growth momentum over the course of the year. This upswing is expected to be fuelled by hydrocarbon exports and the favourable impact of a bettering domestic situation. Taking into account the sustained positive trends in indicators such as industrial production, the labour market, and continuous consumer confidence support, the risks associated with Russia's growth in 2023 are skewed to the upside. With income levels showing resilience and consumption recovery on track in the short term, the momentum of consumption is anticipated to persist.

Furthermore, government-driven initiatives are projected to continue mitigating ongoing economic challenges. While the central bank possesses the flexibility to potentially implement a more accommodating monetary policy, it is anticipated to continue with its tight monetary policy for a while. Unless the rouble's weakness abates, the central bank is likely to implement additional interest rate hikes in 2023.

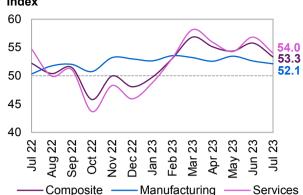
Following a reported 4Q22 GDP decline of 2.7% y-o-y, the contraction continued in 1Q23, when GDP growth declined by 1.8%. GDP growth in 2Q23 is forecast to grow by 1% y-o-y. The 1H23 appreciation is expected to be followed by a further expansion in 2H23, with average guarterly GDP growth rates of 1.2% y-o-y. While consumption is expected to rebound further, the government's counterbalancing measures are predicted to compensate for the negative impact of external pressure to a significant extent. However, uncertainties related to the impact of sanctions, domestic political developments, and the trend in the commodities sector remain.

Both the PMI index for manufacturing and the Graph 3 - 18: Russia's PMI services sector retracted in July, but the services Index sector reflects an ongoing strong trend.

July's S&P global manufacturing PMI declined slightly to stand at 52.1, compared with 52.6 in June.

The services PMI retracted as well to stand at 54 in July, compared with 56.8 in June.





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

GDP growth in 2023 was revised up to stand at 0.6%. Table 3 - 10: Russia's economic growth rate and

compared with last month's projection of 0.4%. revision, 2023-2024*, % Although the risk to the forecast is tilted towards the upside, the forecast remains subject to high levels of uncertainty amid ongoing challenges for the Russian economy.

GDP growth appreciation in 2023 is forecast to be followed by further improvements in 2024, when it is Note: * 2023 and 2024 = Forecast. expected to be 1%, compared with a growth projection Source: OPEC. of 0.8 the previous month.

	Russia
2023	0.6
Change from previous month	0.2
2024	1.0
Change from previous month	0.2

OPEC Member Countries

Saudi Arabia

After a growth of 8.7% in 2022, on a seasonally non-adjusted base, for the Saudi Arabian economy, growth is indicated to slow down to some extent this year. The economy expanded 1.1% y-o-y in 2Q23. Flash estimates indicated a 5.5% y-o-y rise in non-oil activities The PMI index is holding up well too, but retracted slightly, albeit from a very high level. It stood at 57.7 in July, following 59.6 in June and 58.5 in May. The unemployment rate stood at a low 5.1% in 1Q23, slightly above the 4Q22 level when it was at 4.8%, the lowest quarterly level last year. Inflation stood at 2.7% y-o-y in June, following 2.8% y-o-y in May. In July, the Saudi Central Bank increased the key policy rate by 25 bp to 6%, aligning with the US dollar interest rate regime. Growth in the near term is expected to remain strong, with both the oil and the non-oil sector supporting the momentum and with a strong commitment to government reform programmes.

Nigeria

After Nigeria's economy grew by 3.3% in 2022, it is forecast to decelerate in 2023. Growth in 1Q23 stood at 2.4% y-o-y, following growth of 3.6% in 4Q22, an indicator of this year's anticipated slowdown. High inflation continues to burden the economy. Inflation data for June shows an ongoing acceleration, with an annual rate of 22.8% y-o-y, following 22.4% y-o-y in May and 22.2% in April and 22% in March. Food inflation has been a key factor in this rise, reaching 25.1% y-o-y in June, after 24.8% y-o-y in May. In the meantime, the President proclaimed a state of emergency in response to the pressing issue of food insecurity. A combination of factors including conflict, the impact of climate change, population pressures, and the below-average output of the agricultural sector, has exacerbated the scarcity of food resources over recent years. To assist, the government has unveiled a comprehensive financial package amounting to 500 billion Naira. To lower inflation, the Central Bank of Nigeria lifted the key policy rate by 25 bp to 18.75% in July. As a consequence of the ongoing challenges, May's Stanbic IBTC Bank Nigeria PMI retracted to stand at 51.7 in July, after a level of 53.2 in June was reached.

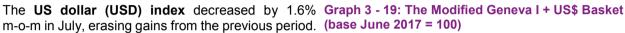
The United Arab Emirates (UAE)

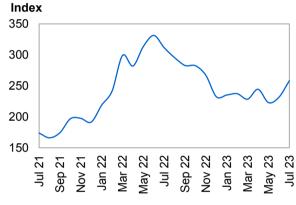
Following growth of 7.9% y-o-y in 2022, the **UAE's economy** is forecast to continue at a robust performance in 2023, albeit at a slightly lower rate, but with constant contributions from the non-oil sector, especially from tourism, leisure and real estate. The country's PMI was almost unchanged in July, standing at 56, following 56.9 in June and compared to a level of 55.5 in May. This suggests that the expansionary trend will be maintained. Also, the real estate market remains on an upward trajectory. 1H23 momentum witnessed a substantial surge in overall property transactions. This played a role in driving up residential property prices in Dubai by 16.9% y-o-y as of June, as reported by REIDIN. Finally, the Central Bank of the UAE mirrored the 25 bp increase in interest rates implemented by the US Federal Reserve in July, putting the key-policy rate at 5.4% and resulting in a total rise of 525 bp in just over a year. The short-term interest rate is now approaching its highest level since before the global financial crisis.

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

m-o-m in July, erasing gains from the previous period. (base June 2017 = 100) The dollar receded although the US Federal Reserve hiked interest rates by 25 basis points in July. This underscores a shift in risk sentiment as investors' global macroeconomic outlook improved, and financial markets wager that the US economy will avoid an economic recession. Y-o-y, the index was down by 5.2%.

The USD experienced mixed movement against major developed market currencies for a second consecutive month in July. It recovered against the euro by 2.2% m-o-m, but receded against the yen and the pound by 0.2% and 2.2%, respectively, over the same period. Y-o-y, the USD was up by 8.9% and 3.0% against the euro and yen, respectively; however, it was down by 7.1% against the pound over the same period.





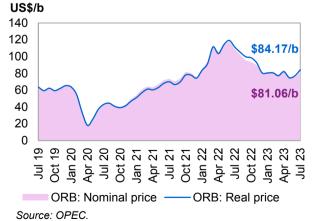
Sources: IMF and OPEC.

In terms of emerging market currencies, the USD declined for a second consecutive month in July against the rupee and the real by 0.1% and 1.1%, respectively, m-o-m. Meanwhile, it advanced against the yuan for a second consecutive month by 0.3% m-o-m. Y-o-y, the USD was up by 3.2% and 6.7% against the rupee and yuan, respectively; however, it was down by 10.6% against the real over the same period.

The differential between nominal and real ORB prices Graph 3 - 20: Impact of inflation and widened m-o-m. Inflation (nominal price minus real currency fluctuations on the spot ORB price price) went from negative \$1.78/b in June to negative (base June 2017 = 100) \$3.11/b in July, a 76.7% increase m-o-m.

In nominal terms, accounting for inflation, the ORB price went from \$75.19/b in June to \$81.06/b in July, a 7.8% increase m-o-m. Y-o-y, the ORB was down by 25.3% in nominal terms.

In real terms (excluding inflation), the ORB went from \$76.95/b in June to \$84.17/b in July, a 9.4% increase m-o-m. Y-o-y, the ORB was down by 24.4% in real terms.



World Oil Demand

For 2023, world oil demand is foreseen to rise by 2.4 mb/d to an average of 102.0 mb/d, unchanged from last month's estimate. Upward revisions to the 1Q23 based on actual data received for OECD America and OECD Europe were completely offset by downward revisions to 2Q23, mainly in Europe and Other Asia.

In the OECD region, oil demand in 2023 is anticipated to rise by 74 tb/d to an average of 46.0 mb/d. OECD Americas' demand is anticipated to have the largest regional rise in 2023, led by the US, on the back of recovering jet fuel demand and improvements in gasoline requirements. Light distillates are also projected to support demand growth this year.

In the non-OECD region, total oil demand is anticipated to rise by nearly 2.4 mb/d, to average 56.0 mb/d in 2023. A steady increase in transportation and industrial fuel demand, supported by a recovery in activity in China and other non-OECD regions, is projected to boost demand in 2023.

In 2024, solid global economic growth amid continued improvements in China is expected to boost the consumption of oil. World oil demand is anticipated to rise by 2.2 mb/d y-o-y, with total world oil demand projected to average 104.3 mb/d.

In the OECD, oil demand is anticipated to rise by 0.26 mb/d, to average 46.3 mb/d. Oil demand in the US is forecast to exceed the pre-pandemic level at 20.6 mb/d, mainly due to the recovery in jet fuel requirements and improvements in gasoline and light distillates demand. OECD Europe and the OECD Asia Pacific are anticipated to remain below pre-pandemic levels at 13.5 mb/d and 7.5 mb/d, respectively, due to anticipated slower economic activity in the two regions and ongoing supply chain bottlenecks that are expected to weigh on industrial activity, particularly in OECD Europe.

In the non-OECD, oil demand is forecast to show an increase of almost 2.0 mb/d y-o-y in 2024, to an average of 58.0 mb/d. China and India are anticipated to see the largest growth by country. Other regions, particularly the Middle East and Other Asia, are also expected to see considerable gains, supported by a positive economic outlook. In terms of fuels, jet kerosene, gasoline and diesel are assumed to lead oil demand growth next year.

Table 4 - 1: World oli demand in 2023°, mb/d								
	Change 2023/22					.3/22		
World oil demand	2022	1Q23	2Q23	3Q23	4Q23	2023	Growth	%
Americas	25.01	24.61	25.22	25.59	25.09	25.13	0.12	0.47
of which US	20.43	20.12	20.60	20.83	20.37	20.48	0.05	0.24
Europe	13.50	13.07	13.25	13.98	13.37	13.42	-0.08	-0.62
Asia Pacific	7.43	7.86	7.08	7.27	7.69	7.47	0.04	0.55
Total OECD	45.95	45.53	45.54	46.84	46.16	46.02	0.07	0.16
China	14.85	15.63	15.96	15.38	16.11	15.77	0.92	6.19
India	5.14	5.40	5.40	5.21	5.50	5.38	0.24	4.69
Other Asia	9.02	9.40	9.57	9.14	9.24	9.33	0.31	3.45
Latin America	6.44	6.60	6.55	6.73	6.68	6.64	0.20	3.18
Middle East	8.30	8.63	8.47	8.86	8.73	8.67	0.38	4.55
Africa	4.40	4.69	4.32	4.43	4.88	4.58	0.18	4.09
Russia	3.56	3.69	3.45	3.60	3.87	3.65	0.09	2.49
Other Eurasia	1.15	1.24	1.17	1.02	1.23	1.16	0.01	1.16
Other Europe	0.77	0.84	0.76	0.75	0.83	0.80	0.03	3.61
Total Non-OECD	53.62	56.12	55.64	55.13	57.06	55.99	2.36	4.41
Total World	99.57	101.65	101.18	101.96	103.21	102.01	2.44	2.45
Previous Estimate	99.56	101.61	101.22	101.95	103.21	102.00	2.44	2.45
Revision	0.00	0.05	-0.04	0.01	0.01	0.00	0.00	0.00

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

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

Table 4 - 2: World oil demand in 2024", mb/d								
	Change 2024/23				4/23			
World oil demand	2023	1Q24	2Q24	3Q24	4Q24	2024	Growth	%
Americas	25.13	24.79	25.39	25.79	25.25	25.31	0.18	0.72
of which US	20.48	20.25	20.74	20.99	20.51	20.62	0.14	0.70
Europe	13.42	13.12	13.31	14.05	13.41	13.48	0.06	0.41
Asia Pacific	7.47	7.89	7.09	7.30	7.70	7.49	0.02	0.29
Total OECD	46.02	45.81	45.79	47.15	46.36	46.28	0.26	0.56
China	15.77	16.20	16.42	16.00	16.78	16.35	0.58	3.68
India	5.38	5.63	5.64	5.44	5.69	5.60	0.22	4.09
Other Asia	9.33	9.66	9.82	9.50	9.60	9.64	0.31	3.32
Latin America	6.64	6.79	6.73	6.95	6.84	6.83	0.19	2.86
Middle East	8.67	8.91	8.91	9.41	8.98	9.05	0.38	4.38
Africa	4.58	4.80	4.51	4.60	5.01	4.73	0.15	3.27
Russia	3.65	3.75	3.56	3.75	3.94	3.75	0.10	2.75
Other Eurasia	1.16	1.27	1.20	1.08	1.28	1.21	0.04	3.81
Other Europe	0.80	0.86	0.77	0.77	0.84	0.81	0.01	1.73
Total Non-OECD	55.99	57.88	57.56	57.50	58.96	57.97	1.99	3.55
Total World	102.01	103.68	103.35	104.64	105.32	104.25	2.25	2.20
Previous Estimate	102.00	103.64	103.39	104.63	105.31	104.25	2.25	2.20
Revision	0.00	0.04	-0.05	0.01	0.01	0.00	0.00	0.00

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

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

OECD

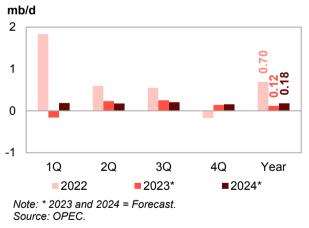
OECD Americas

Update on the latest developments

Oil demand in OECD Americas in May soared y-o-y Graph 4 - 1: OECD Americas oil demand, y-o-y by 839 tb/d, y-o-y, up from y-o-y growth of 386 tb/d in change April. The US and Canada accounted for the increase in demand, while Mexico recorded an annual decline. Details of the contribution of various products are discussed in the sub-section for the US.

Oil demand in the **US** saw y-o-y growth of 699 tb/d in May, which was supported by demand for petrochemical feedstock and jet kerosene.

General inflation has continued to retract significantly in the US, with the general price index having slowed for eleven consecutive months to stand at 4% in May, following 4.9% y-o-y in April. However, core inflation persists. The services PMI was at 50.3 in May, spending more than 13 months in the expansion zone.



Data from Federal Highway Administration shows that travel miles on all roads increased by 2.5% (+7.1 billion vehicle miles) for May 2023 as compared with May 2022. It also represents a 0.8% change (2.1 billion vehicle miles) compared with April 2023. Furthermore, the International Air Transport Association's (IATA) Air Passenger Market Analysis reported that domestic air travel in North America recorded a passenger load factor of 86.3% y-o-y in May. At the same time, the US domestic market experienced a 7.1% annual rise in passenger traffic this month.

However, the manufacturing PMI stood at 46.9 in May, remaining below 50 for the eighth consecutive month.

Oil demand growth in the US in May was driven by LPG, which recorded y-o-y growth of 472 tb/d, up from 153 tb/d, y-o-y growth in the previous month. The strong demand for LPG was supported by a weak baseline and the lower prices relative to naphtha, which led to increased demand as feedstock in petrochemical plants.

ay 22 % 14.3 11.3 0.0 7.2 1.4 -35.0 8.1 **3.4**

Similarly, the 'other products' category also saw y-o-y growth of 164 tb/d, y-o-y, in May, compared with 438 tb/d, y-o-y growth seen in the previous month. On the back of sustained air travel activity, jet/kerosene posted y-o-y growth of 113 tb/d from 86 tb/d, y-o-y, growth in the previous month. Diesel saw a y-o-y growth of 56 tb/d, slightly lower than the 92 tb/d y-o-y growth seen in April. Finally, naphtha grew by 16 tb/d, y-o-y, in May, following y-o-y growth of 6 tb/d, y-o-y in April. Gasoline demand was flat y-o-y, down from y-o-y growth of 242 tb/d in April. Nevertheless, gasoline demand in the US is holding up well, with increasing vehicle miles travelled in May y-o-y. M-o-m, gasoline demand was higher than in April.

Table 4 - 5: 05 on demand, mb/d				
				May 23/Ma
By product	May 22	May 23	Growth	
LPG	3.30	3.77	0.47	
Naphtha	0.14	0.16	0.02	
Gasoline	9.11	9.11	0.00	
Jet/kerosene	1.58	1.69	0.11	
Diesel	3.87	3.93	0.06	
Fuel oil	0.34	0.22	-0.12	
Other products	2.03	2.20	0.16	
Total	20.37	21.07	0.70	

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

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

Near-term expectations

In **3Q23**, GDP growth in the **US** is expected to remain healthy. Furthermore, inflation is expected to continue to decline. In terms of oil demand, the US is anticipated to see a boost in driving mobility and air travel during the summer holiday season, with transportation fuels – gasoline and jet kerosene – anticipated to drive growth. Accordingly, in this quarter, oil demand is anticipated to grow by 215 tb/d y-o-y. However, continued weakening manufacturing activity is likely to impact on demand for industrial fuels, particularly diesel

In **4Q23**, continued weak manufacturing activity is expected to impact the demand for industrial fuels. Consequently, the US is projected to grow y-o-y by 51 tb/d in this quarter. Transportation fuels, particularly, jet kerosene, and, to a lesser extent, gasoline, are anticipated to continue to drive oil demand.

In **2024**, the GDP of the US is anticipated to remain positive, in continuation of the growth seen in 2023. In addition, in line with anticipated rising services business activity in 1Q24, US oil demand is anticipated to grow by 135 tb/d. Transportation fuels and petrochemical feedstock, particularly LPG, are anticipated to be the main drivers of products demand. Overall, in 2024, the US is expected to see y-o-y growth of around 140 tb/d. However, the risks are still skewed to the downside with a focus on the macroeconomic performance of the US economy.

OECD Europe

Update on the latest developments

Oil demand in OECD Europe declined by 90 tb/d y-o-y in May, showing an improvement from the 309 tb/d y-o-y drop seen in April. All the oil products were in contraction, except for transportation fuels.

The Eurozone has been witnessing prolonged lacklustre oil demand, driven by weak industrial sector performance combined with persistently high core inflation which stood at 6.8% y-o-y in June, higher than the long-term average. The apparent weakness in industrial activity is impacting gasoil demand, whereas the services sector and personal consumption are driving gasoline and jet uptake.

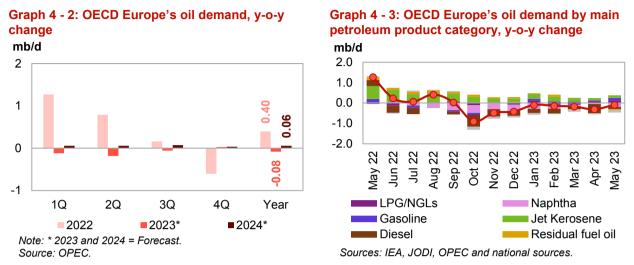
The May manufacturing PMI declined to 44.8 in May, after a level of 45.8 in April, remaining below the growthindicating level for the eighth consecutive month. Nevertheless, the PMI for services, the largest sector in the Eurozone, stood at a level of 55.1 in May.

IATA reported that the region's domestic airline revenue passenger kilometres (RPKs) stood above prepandemic levels for the 11th consecutive month. European airlines stood out in May with a 22.4% increase in domestic traffic compared to 2019 levels, which was the highest growth recorded across all regions.

Naphtha demand in the region contracted further by 193 tb/d y-o-y, from a y-o-y decline of 52 tb/d seen in April. European ethylene and derivatives have been under pressure due to low margins. Also putting pressure on the region are US exports, as supply chain disruptions, sharply lower freight costs and the lack of extreme weather events allow the US to be competitive in Europe's higher-cost market.

Europe, where naphtha is the dominant feedstock for crackers, has been seeing high production costs. Diesel and the 'other products' category saw a y-o-y decline by around 100 tb/d and 120 tb/d, respectively.

Nevertheless, diesel has shown a sign of improvement as compared to a plunge of 445 tb/d, y-o-y in the previous month. Residual fuels also contracted by around 50 tb/d, y-o-y.



On the positive side, continued improvements in airline activity and driving mobility supported transportation fuels. Accordingly, jet/kerosene grew by 123 tb/d, y-o-y. Gasoline also saw y-o-y growth of around 120 tb/d, a significant improvement from the 42 tb/d, y-o-y growth in the previous month. Finally, on the back of weaker naphtha demand, LPG demand also saw a y-o-y increase of more than 136 tb/d, up from the 90 tb/d y-o-y in the previous month.

Near-term expectations

In **3Q23** and **4Q23**, GDP growth in the region is projected to remain positive, albeit lower than what was seen in the previous quarters. Additionally, weakening manufacturing activity is also anticipated to continue due to slow economic activity and supply chain bottlenecks. These factors are anticipated to weigh on oil demand in the region to record a y-o-y decline of 58 tb/d in 3Q23 and slight growth of 26 tb/d in 4Q23. Moreover, in 4Q23, there is little indication of an industry recovery due to supply chain bottlenecks related to constraints with growth in the second half of the year to be entirely driven by the services sector. Thereby, oil demand is anticipated to be mainly supported by jet fuel and gasoline, while diesel and petrochemical feedstock will remain weak.

In **2024**, GDP growth in the region is anticipated to improve modestly, compared with the current year. Consistent with this expected uptick in GDP growth and relatively healthy performance of the services business activity, 1Q24 oil demand is forecast to grow by 57 tb/d, y-o-y. This is forecast to be mostly driven by jet fuel, and also supported by expected growth in demand for gasoline. Overall, the region is expected to see y-o-y growth of 55 tb/d, y-o-y in 2024. However, risks are skewed to the downside, hinging on the possibility of a further economic slowdown in the region.

OECD Asia Pacific

Update on the latest developments

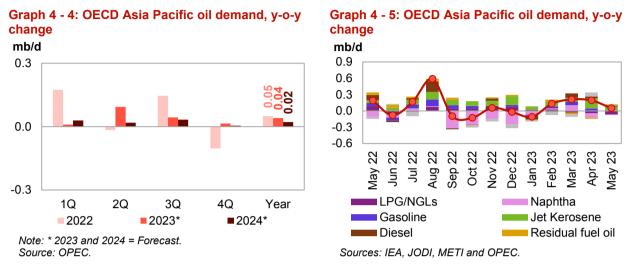
Oil demand in OECD Asia Pacific increased by 49 tb/d y-o-y in May, down from 193 tb/d y-o-y growth seen in April. The bulk of oil demand growth in the region was seen in Japan and Australia. Oil demand growth in South Korea remained negative for a second consecutive month on the back of macroeconomic headwinds and continued low manufacturing activity.

In Japan, the services sector PMI, which constitutes around two-thirds of the Japanese economy, rose to 55.9 in May, slightly up from 55.4 in April. The manufacturing PMI also improved in May to stand at 50.6 points, following 49.5 in April.

The Australian services PMI dipped to 51.8 in May, after 52.6 points in April, yet remained in expansionary territory. The manufacturing PMI, however, remains in the contraction zone at 48 points in May. According to the latest data from the Australian Bureau of Statistics (ABS), the monthly Consumer Price Index (CPI) indicator rose by 5.6% y-o-y in May 2023, down from 6.8% in April 2023.

The South Korean manufacturing PMI in April stood at 48 points for a third consecutive month. The consumer price index in South Korea increased 3.3% in May 2023 from a year ago, compared to a 3.7% rise in April and easing for a fourth consecutive month.

Airline activity in the OECD Asia Pacific region remains healthy, according to a report from IATA, as passenger load factors stood at 77.3% in May. Similarly, domestic RPKs of carriers in Asia Pacific maintained a positive momentum and surpassed their pre-pandemic levels by 4.7%.



On the back of healthy air travel activity, jet kerosene led oil demand by 77 tb/d, y-o-y. Diesel and residual fuels saw y-o-y growth of 15 tb/d and 23 tb/d, respectively. The 'other product' category posted y-o-y growth of 10 tb/d, down from a y-o-y growth of 74 tb/d in April.

However, demand for LPG as a petrochemical feedstock showed a y-o-y decline by 67 tb/d, y-o-y in May. Demand for naphtha was broadly flat, as average run rates at the major naphtha cracking centres had been declining due to the slowdown in the manufacturing and construction sectors in the region. Gasoline demand was also broadly unchanged y-o-y, following a growth of 45 tb/d y-o-y a month earlier.

Near-term expectations

GDP in OECD Asia Pacific is projected to remain positive in 2023, with variations among the countries of the region. The services PMIs in Japan and Australia are in the expansion zone, reaching 56 and 52.6 points, respectively, in June. Furthermore, petrochemical feedstock requirements in the region are likely to get a boost from renewed activity in the Chinese economy.

Relatively healthy economic activity in the region, combined with improvements in air traffic, driving and petrochemical industry operations are anticipated to support oil demand to grow by 44 tb/d y-o-y in **3Q23**. However, by **4Q23**, the oil demand growth momentum is expected to lessen, whereby the region is anticipated to see a y-o-y growth of 15 tb/d in the last quarter of the year.

In **2024**, the growth rate of the region's GDP is anticipated to increase on the back of healthy services business activity. Continued growth in air travel and petrochemical sector requirements in the region is projected to support oil demand to grow by 30 tb/d, y-o-y, in 1Q24. Overall, in 2024, the region is anticipated to see y-o-y growth of 22 tb/d.

Non-OECD

China

Update on the latest developments

Oil demand in China in June posted y-o-y growth of more than 2.0 mb/d for the second consecutive month, following stellar growth of more than 3.0 mb/d in April. Transportation fuels were the main drivers of demand growth amid healthy economic activity, supported by robust petrochemical feedstock requirements. Growth in June oil demand was also supported by a weak baseline from a year earlier.

The annual inflation rate in China retracted considerably to stand at 0% in June, following 0.2% y-o-y in May. June PMI readings show that the services sector is performing very well, with the services sector index posting 53.9. The manufacturing PMI moved back into the expansionary territory to stand at 50.5.

Driving mobility in China continued increasing and air travel activity remained healthy. A report from China's Civil Aviation Industry in June indicates that the domestic passenger volume in China increased y-o-y by 131% and international passenger volume grew by a staggering 2,067% y-o-y, considering that international air travel was locked down a year ago.

Oil demand in terms of products in June shows that Graph 4 - 6: China's oil demand, y-o-y change transportation fuels - diesel, gasoline and jet mb/d kerosene – were the main drivers of demand growth. Diesel posted y-o-y growth of 473 tb/d, up from the annual growth of 275 tb/d seen in the previous month. Similarly, gasoline saw y-o-y growth of 385 tb/d, increasing for a sixth consecutive month. On the back of steady air travel recovery, jet kerosene grew by about 327 tb/d, y-o-y, down from 540 tb/d seen in the previous month. Healthy petrochemical feedstock requirements supported LPG and naphtha to post y-o-y growth of 342 tb/d and 146 tb/d, respectively. Finally, residual fuels saw y-o-y growth of 278 tb/d, slightly less than in the previous month of May, while the "other products" category increased by 82 tb/d.

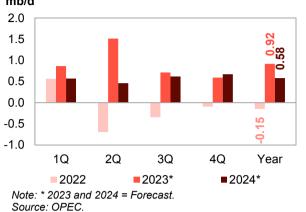


Table 4 - 4: China's oil demand*, mb/d

			Change	Jun 23/Jun 22
By product	Jun 22	Jun 23	Growth	%
LPG	2.51	2.85	0.34	13.6
Naphtha	1.50	1.65	0.15	9.7
Gasoline	3.35	3.74	0.38	11.5
Jet/kerosene	0.40	0.73	0.33	81.6
Diesel	3.63	4.10	0.47	13.0
Fuel oil	0.75	1.03	0.28	37.2
Other products	2.34	2.42	0.08	3.5
Total	14.47	16.51	2.03	14.0

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

China's GDP growth is anticipated to remain firm at 5.2% in 2023. With inflation at almost zero, it seems likely that the central government, together with the People's Bank of China (PBOC), may become engaged in nearterm stimulus measures seeking to boost consumption in support of the economy's recovery. This is particularly likely when considering that youth unemployment stood above the 20% level for the second consecutive month in May, reaching 20.8%. Nevertheless, China is anticipated to see lower-than-expected oil demand growth in 2H23. Recent economic indicators for the Chinese economy have shown a slowing trend in industrial production. Accordingly, these factors are likely to reduce the momentum of oil demand from the earlier anticipated strong growth. Oil demand in 3Q23 is anticipated to grow by 710 tb/d, y-o-y and by 590 tb/d, y-o-y in 4Q23, slightly moderated from the strong y-o-y growth seen in the first half of the year.

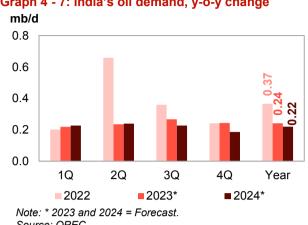
In 2024, China's GDP growth is anticipated to decelerate slightly. Continued healthy services sector activity, including leisure, travel and tourism, as well as a recovery of manufacturing activity and petrochemical sector requirements are expected to support oil demand. Thereby, oil demand is forecast to see y-o-y growth of 570 tb/d in 1Q24. Jet fuel will again drive oil demand growth in this quarter, with millions of air passengers expected to support air travel activity for local and business travellers from and into China throughout the 40day spring festival travel season. Light distillates are also expected to continue rising, with the continued expansion of petrochemical industries. Increased mobility and rising construction activity will boost demand for gasoline and diesel. For the year, China is anticipated to see y-o-y growth of 580 tb/d on average.

India

Update on the latest developments

Oil demand in India in June grew by 184 tb/d y-o-y, **Graph 4 - 7: India's oil demand, y-o-y change** after an annual increase of 476 tb/d in May. The demand growth in June was affected by a comparison with a strong baseline a year earlier.

Both the manufacturing and services sectors in India have significantly been in expansion territory for over one year, thereby supporting oil demand. The manufacturing PMI reached a strong level of 57.8 in June. Similarly, the services PMI remained at a high level, standing at 58.5 in June, compared with 61.2 in May. India's consumer price index (CPI) inflation rose to 4.81% in June 2023, higher than expectations, but still below the RBI's upper tolerance limit of 6%.



Source: OPEC.

According to the Indian automotive content creator, autopunditz.com, India's car sales increased by over 2% in June when compared to the same period last year, and declined by 2% on a m-o-m comparison with May 2023.

Similarly, a report from business-standard.com shows that 76.93 million passengers were carried by Indian domestic airlines during January-June 2023, compared with 57.25 million during the corresponding period of 2022. Thereby, domestic airlines in India registered an annual growth of 32.92% and monthly growth of 18.78%.

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

			Change	Jun 23/Jun 22
By product	Jun 22	Jun 23	Growth	%
LPG	0.89	0.89	0.00	0.3
Naphtha	0.31	0.31	0.01	2.6
Gasoline	0.86	0.91	0.05	6.1
Jet/kerosene	0.19	0.20	0.02	8.2
Diesel	1.93	1.99	0.06	3.0
Fuel oil	0.16	0.15	-0.01	-4.4
Other products	0.97	1.02	0.05	5.5
Total	5.30	5.48	0.18	3.5

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

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

In terms of oil products in June, diesel led oil demand growth by 60 tb/d, y-o-y, down from 220 tb/d y-o-y growth seen in May. Gasoline and the 'other fuels' category grew y-o-y by 52 tb/d and 54 tb/d, respectively in June. Growth in demand for petrochemical feedstock – LPG and naphtha – was insignificant in June and residual fuels declined slightly y-o-y.

Near-term expectations

Looking forward, with steady and healthy economic activity and ongoing air travel recovery, India's demand for oil products is anticipated to remain strong at an average of around 250 tb/d y-o-y in 2H23.

In **3Q23**, oil demand is projected to rise by around 270 tb/d, y-o-y. The government's proposed increase in capital spending in construction and manufacturing is expected to boost the momentum of economic activity. These factors, combined with a steady rise in airline activity, will support healthy oil demand growth. Transportation fuels – gasoline and jet fuel – are anticipated to be the main drivers of demand growth in this quarter. However, diesel demand is anticipated to be affected by the impact of the monsoon season from July to September.

In **4Q23**, oil demand is expected to decelerate slightly, but will show y-o-y growth of around 240 tb/d, with transportation fuels, notably gasoline, transportation diesel and jet/kerosene expected to drive oil demand growth.

In 2024, India is projected to record better GPD growth than in 2023. Further, the positive momentum in oil demand, due to the ongoing healthy services business activity, including air travel recovery and mobility as well as manufacturing and agricultural activity, is expected to support oil demand in 1Q24 to grow by around 230 tb/d, y-o-y. In this quarter, diesel is anticipated to be the major driver of oil demand growth, supported by transportation fuels. For the year, India is anticipated to see y-o-y growth of oil demand by an average of 220 tb/d.

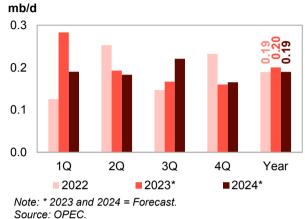
Latin America

Update on the latest developments

Oil demand in Latin America increased y-o-y by Graph 4 - 8: Latin America's oil demand, y-o-y 357 tb/d in May from 216 tb/d y-o-y growth seen in change April. Brazil and Venezuela continue to be the main drivers of oil demand in the region.

The annual inflation rate in Brazil retracted further to reach 3.8% y-o-y in May from 4.2% in April, the lowest since October 2020, however remaining above the central bank's current inflation target of 3.25%. The services PMI in Brazil stood at 54.1 points in May. At the same time, the manufacturing PMI index in May remained below the growth-indicating level, to stand at 47.1 in Mav.

In terms of domestic RPKs, Latin American carriers continued to outperform their pre-pandemic levels by around 10% in May, while showing improvements in passenger load factor to average 81.1% y-o-y in the same month. Similarly, international RPKs saw y-o-y growth of 25.8% in May.



For the fifth consecutive month, gasoline remained the main driver of oil demand in the region, supported by a recovery in mobility, as gasoline grew by 196 tb/d, up from 106 tb/d y-o-y growth in the previous month. Residual fuels also saw 88 tb/d y-o-y growth in May, slightly lower than what was seen in the previous month. Similarly, diesel saw a y-o-y growth of 51 tb/d, from zero growth in April. Finally, jet/kerosene saw y-o-y growth of 34 tb/d, broadly the same as what was seen in the previous month. In terms of petrochemical feedstock, LPG saw a marginal y-o-y decline of 5 tb/d, albeit seeing improvement from an annual decline of 16 tb/d in the previous month. Finally, demand for naphtha remained broadly flat y-o-y in both May and April.

Near-term expectations

Since the beginning of 2023, the economy of **Brazil**, one of the largest contributors to oil demand in the region, has enjoyed better-than-expected growth. GDP growth in 1Q23 was strong at 4% y-o-y. The latest available 2Q23 data points to a continuation of this robust momentum. Positively, inflation has also slowed and both consumer and business confidence have risen. These factors are anticipated to support oil demand in the region. Oil demand in Latin America is projected to grow y-o-y by 170 tb/d in 3Q23 and by 160 tb/d in 4Q23.

In 2024, the GDP of the region is projected to remain at the previous year's growth rate. Furthermore, services business activity is expected to continue improving. In particular, mobility and air travel are expected to support transportation fuels demand to continue with greater momentum and show overall y-o-y oil demand growth of 190 tb/d y-o-y in 1Q24. On average, the region is anticipated to grow by 190 tb/d, y-o-y. The outlook for oil demand growth sees transportation fuels grow the most, followed by diesel and petrochemical feedstock.

Middle East

Update on the latest developments

Oil demand in the Middle East grew y-o-y by 275 tb/d in May, up from 176 tb/d, y-o-y of growth in April. The demand growth was led by requirements from Iraq for the second consecutive month.

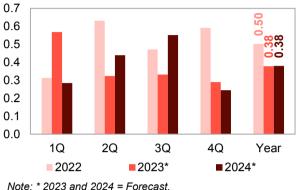
The economic activity in the two largest economies has been healthy and supportive of oil demand in the region. The Saudi Arabian economy is estimated to have expanded by 3.8% y-o-y in 1Q23, with indications of a 5.4% rise in non-oil activities. 1Q23 government expenditures remained strong and rose by 16.2% y-o-y. Similarly, the composite purchasing managers' indices (PMIs) for May stood at 58.5.

The **UAE's** economy remains robust, with constant contributions from the non-oil sector, especially from tourism, leisure and real estate. The country's PMI rose again in May to stand at 55.5.

In terms of air travel, IATA reported that Middle East carriers have made remarkable progress in recovering from the pandemic. Passenger load factors stood at 79.9% in May. Similarly, International RPKs continued to climb, with Middle Eastern carriers experiencing a surge in traffic to now stand at 17.2% above 2019 levels in May.

The contributions of oil products in May oil demand for the **Middle East** show that diesel was the main driver of oil demand by 107 tb/d, y-o-y, up from a decline of 13 tb/d, y-o-y seen in the previous month. Gasoline recorded growth of 87 tb/d, y-o-y, from annual growth of 38 tb/d in April. Residual fuels saw y-o-y growth of 80 tb/d, y-o-y for the second consecutive month. Jet/kerosene and LPG saw y-o-y growth of 10 tb/d each. However, naphtha and the 'other fuels' category softened by around 10 tb/d, y-o-y each.

The contributions of oil products in May oil demand Graph 4 - 9: Middle East's oil demand, y-o-y change for the Middle East show that diesel was the main mb/d



Source: OPEC.

			Change	Jun 23/Jun 22
By product	Jun 22	Jun 23	Growth	%
LPG	0.04	0.05	0.01	26.1
Gasoline	0.53	0.51	-0.02	-3.9
Jet/kerosene	0.08	0.11	0.03	32.7
Diesel	0.59	0.60	0.01	1.6
Fuel oil	0.79	0.75	-0.04	-5.5
Other products	0.76	0.61	-0.15	-19.4
Total	2.79	2.63	-0.17	-5.9

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

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

Near-term expectations

Ongoing steady economic activity combined with strong composite PMIs are supporting the major consuming countries in the **Middle East**. Together with strong growth in airline activity, the dynamic is expected to support oil demand in the region to grow by more than 300 tb/d, y-o-y on average in both **3Q23** and **4Q23**. Moreover, demand growth in the region is expected to be supported by direct crude burning and fuel oil for electricity generation, particularly in Iraq and Saudi Arabia, in the hot summer months as air conditioning demand hits peak summer levels. Transportation fuels are expected to provide additional support.

In **2024**, the GDP of the region is projected to remain strong, albeit slightly below the growth 2023 rates for all the major consuming countries of the region. In 1Q24, the region is anticipated to see y-o-y growth of 285 tb/d. Transportation fuels – gasoline, transportation diesel and jet kerosene – are expected to be the main drivers of oil demand. Overall, in 2024, the Middle East is anticipated to see y-o-y growth of nearly 380 tb/d, y-o-y. The bulk of demand growth is expected to come from Iraq and Saudi Arabia.

World Oil Supply

Non-OPEC liquids production in 2023 is expected to grow y-o-y by 1.5 mb/d to an average of 67.3 mb/d. Downward revisions to Canada, Azerbaijan and OECD Europe were more than offset by upward revisions to liquids production in Russia and the US.

The main growth drivers for 2023 are anticipated to be the US. Brazil, Norway, Kazakhstan Guyana and China, whereas oil production is forecast to decline primarily in Russia. Nevertheless, there remain uncertainties related to US shale oil output potential and unplanned maintenance across the rest of the year.

Non-OPEC liquids production in 2024 is forecast to grow by 1.4 mb/d to an average of 68.7 mb/d (including 50 tb/d in processing gains), unchanged from the previous month. OECD liquids supply is forecast to increase next year by 0.9 mb/d, and the non-OECD region is projected to grow by 0.4 mb/d. The main drivers for liquids supply growth are expected to be the US, Canada, Guyana, Brazil, Norway and Kazakhstan, with the majority of the increase expected to come from existing project ramp-ups. At the same time, production is forecast to see the largest declines in Mexico and Azerbaijan.

OPEC NGLs and non-conventional liquids production in 2023 is forecast to grow by around 50 tb/d to an average of 5.4 mb/d. For 2024, it is forecast to grow by 65 tb/d to an average of 5.5 mb/d. OPEC-13 crude oil production in July decreased by 836 tb/d m-o-m to average 27.31 mb/d, according to available secondary sources.

Non-OPEC liquids production in July, including OPEC NGLs, is estimated to have risen m-o-m by 0.7 mb/d to an average of 73.4 mb/d. This is up by 2.2 mb/d v-o-v. As a result, preliminary data indicates that July's global oil supply decreased by 0.2 mb/d m-o-m to average 100.7 mb/d, up by 0.6 mb/d y-o-y.

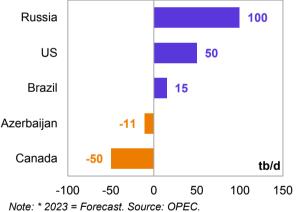
Non-OPEC liquids production in 2023 is forecast to Graph 5 - 1: Major revisions to annual supply expand by 1.5 mb/d. This is up by 0.1 mb/d from the change forecast in 2023*, MOMR Aug 23/Jul 23 previous month's growth assessment, mainly due to some upward revisions in Russia. It is worth noting that this expected contraction takes into account the recently announced voluntary production adjustment to the end of 2023.

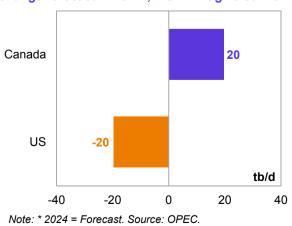
Overall OECD supply growth expectations for 2023 were revised down slightly. While OECD Europe saw a downward revision mainly due to the UK, OECD Americas and OECD Asia Pacific remained unchanged.

Non-OECD supply growth projections for 2023 have been revised up by 0.1 mb/d. It is now expected to remain largely unchanged y-o-y.

Non-OPEC liquids production growth in 2024 Graph 5 - 2: Major revisions to annual supply remained broadly unchanged compared to the change forecast in 2024*, MOMR Aug 23/Jul 23 previous month's assessment.

The upward revision to the supply forecast for Canada was entirely offset by the downward revision to the US supply.



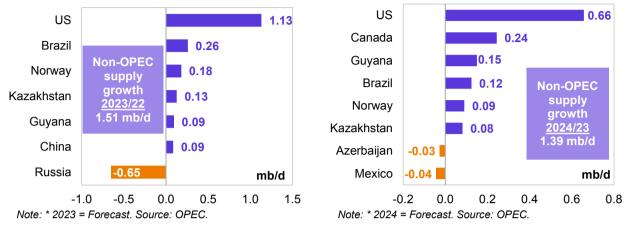


Key drivers of growth and decline

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

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





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 Azerbaijan.

Non-OPEC liquids production in 2023 and 2024

							Change 2	2023/22
Non-OPEC liquids production	2022	1Q23	2Q23	3Q23	4Q23	2023	Growth	%
Americas	26.87	27.90	27.97	28.25	28.45	28.14	1.28	4.76
of which US	19.23	20.10	20.56	20.34	20.45	20.36	1.13	5.88
Europe	3.57	3.66	3.62	3.80	3.94	3.75	0.18	4.97
Asia Pacific	0.48	0.45	0.45	0.48	0.47	0.46	-0.01	-2.83
Total OECD	30.92	32.01	32.04	32.53	32.86	32.36	1.44	4.67
China	4.48	4.63	4.63	4.50	4.50	4.56	0.09	1.91
India	0.77	0.76	0.78	0.79	0.78	0.78	0.00	0.58
Other Asia	2.30	2.31	2.27	2.34	2.36	2.32	0.02	0.82
Latin America	6.34	6.69	6.76	6.70	6.79	6.74	0.40	6.30
Middle East	3.29	3.27	3.29	3.29	3.30	3.29	0.00	0.08
Africa	1.29	1.24	1.28	1.33	1.31	1.29	0.00	-0.17
Russia	11.03	11.20	10.85	9.93	9.57	10.38	-0.65	-5.91
Other Eurasia	2.83	3.00	2.93	2.98	2.98	2.97	0.14	4.93
Other Europe	0.11	0.11	0.11	0.11	0.10	0.11	0.00	-0.85
Total Non-OECD	32.44	33.22	32.89	31.96	31.70	32.44	-0.01	-0.02
Total Non-OPEC production	63.36	65.23	64.92	64.49	64.56	64.80	1.44	2.27
Processing gains	2.40	2.47	2.47	2.47	2.47	2.47	0.07	2.96
Total Non-OPEC liquids production	65.76	67.70	67.39	66.96	67.03	67.27	1.51	2.30
Previous estimate	65.73	67.69	67.39	66.51	67.00	67.14	1.41	2.15
Revision	0.02	0.00	0.01	0.45	0.03	0.12	0.10	0.15

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

*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

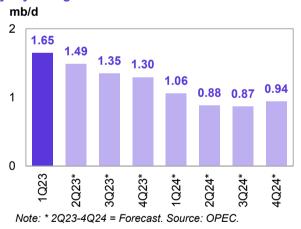
		,,					Change 2	2024/23
Non-OPEC liquids production	2023	1Q24	2Q24	3Q24	4Q24	2024	Growth	%
Americas	28.14	28.66	28.70	29.16	29.47	29.00	0.86	3.04
of which US	20.36	20.68	20.90	21.17	21.33	21.02	0.66	3.23
Europe	3.75	3.94	3.78	3.79	3.89	3.85	0.10	2.54
Asia Pacific	0.46	0.47	0.44	0.45	0.44	0.45	-0.01	-2.87
Total OECD	32.36	33.07	32.92	33.40	33.80	33.30	0.94	2.90
China	4.56	4.58	4.57	4.54	4.54	4.56	-0.01	-0.11
India	0.78	0.79	0.79	0.79	0.78	0.79	0.01	1.69
Other Asia	2.32	2.30	2.27	2.25	2.25	2.27	-0.05	-2.26
Latin America	6.74	6.91	6.98	7.10	7.18	7.04	0.31	4.54
Middle East	3.29	3.34	3.33	3.32	3.32	3.33	0.04	1.14
Africa	1.29	1.30	1.33	1.36	1.37	1.34	0.05	3.77
Russia	10.38	10.20	10.32	10.45	10.56	10.38	0.00	-0.01
Other Eurasia	2.97	3.03	3.02	3.00	3.04	3.02	0.06	1.85
Other Europe	0.11	0.10	0.10	0.10	0.10	0.10	0.00	-1.13
Total Non-OECD	32.44	32.55	32.72	32.92	33.15	32.84	0.40	1.23
Total Non-OPEC production	64.80	65.62	65.64	66.32	66.96	66.14	1.34	2.07
Processing gains	2.47	2.52	2.52	2.52	2.52	2.52	0.05	2.03
Total Non-OPEC liquids production	67.27	68.14	68.16	68.84	69.48	68.66	1.39	2.06
Previous estimate	67.14	68.01	68.03	68.72	69.35	68.53	1.39	2.07
Revision	0.12	0.12	0.12	0.12	0.12	0.12	0.00	0.00

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

OECD

OECD liquids production in 2023 is forecast to Graph 5 - 5: OECD quarterly liquids supply, expand by 1.4 mb/d to an average of 32.4 mb/d. This y-o-y changes is revised lower by a minor 7 tb/d, mainly due to downward revisions in OECD Europe.

Growth is set to be led by OECD Americas, which is forecast to expand by 1.3 mb/d to an average of 28.1 mb/d. This is largely unchanged compared with last month's assessment. Yearly liquids production in OECD Europe is anticipated to grow by 0.2 mb/d to an average of 3.8 mb/d. This is down by 7 tb/d compared with the previous month. OECD Asia Pacific is expected to drop by around 10 tb/d to an average of 0.5 mb/d.



For 2024, oil production in the OECD is likely to grow by 0.9 mb/d to an average of 33.3 mb/d. Again, the growth will be led by OECD Americas, with an expected increase of 0.9 mb/d to an average of 29.0 mb/d. Yearly oil production in OECD Europe is anticipated to grow by 0.1 mb/d to an average of 3.8 mb/d, while OECD Asia Pacific is expected to decline by 13 tb/d y-o-y to an average of 0.5 mb/d.

OECD Americas

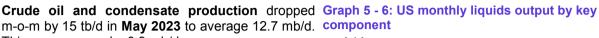
US

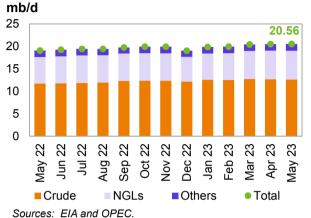
US liquids production in May rose m-o-m by 52 tb/d to an average of 20.6 mb/d, the highest level on record. This was up by 1.5 mb/d compared with May 2022.

m-o-m by 15 tb/d in May 2023 to average 12.7 mb/d. component This was up y-o-y by 0.9 mb/d.

In terms of the crude and condensate production breakdown by region (PADDs), production decreased mainly in the US Gulf Coast (USGC) region, which dropped by 44 tb/d to an average of 9.2 mb/d. Production in the Midwest and Rocky Mountain regions, rose by around 20 tb/d and 14 tb/d, respectively. Output in the East Coast and West Coast remained broadly unchanged m-o-m.

Production growth in the main regions was primarily driven by a strong recovery in Texas and North Dakota fields, while output in onshore New Mexico and the offshore Gulf of Mexico (GoM) declined.





NGLs production was largely unchanged m-o-m at an average of 6.4 mb/d in May. This was higher y-o-y by 0.5 mb/d. According to the US Department of Energy (DoE), production of **non-conventional liquids** (mainly ethanol) rose by 64 tb/d to an average of 1.5 mb/d. Preliminary estimates see non-conventional liquids averaging around 1.5 mb/d in June, largely unchanged from May.

GoM production fell m-o-m by 30 tb/d to an average of 1.7 mb/d in May. Normal production was seen in most Gulf Coast offshore platforms with the exceptions being BP's Thunder Horse platform due to planned maintenance. In the onshore Lower 48, crude and condensate production increased m-o-m by 19 tb/d to an average of 10.5 mb/d in May.

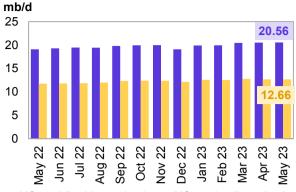
				Change					
State	May 22	Apr 23	May 23	m-o-m	у-о-у				
Texas	5,029	5,446	5,494	48	465				
New Mexico	1,561	1,861	1,803	-58	242				
Gulf of Mexico (GOM)	1,607	1,735	1,705	-30	98				
North Dakota	1,050	1,104	1,114	10	64				
Colorado	440	450	453	3	13				
Oklahoma	433	441	445	4	12				
Alaska	447	434	430	-4	-17				
Total	11,734	12,677	12,662	-15	928				

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

Sources: EIA and OPEC.

Looking at individual states, New Mexico's oil production fell by 58 tb/d to an average of 1.8 mb/d, which is 242 tb/d higher than a year ago. Production from Texas was up by 48 tb/d to an average of 5.5 mb/d, which is 465 tb/d higher than a year ago. In the Midwest, North Dakota's production rose m-o-m by 10 tb/d to an average of 1.1 mb/d, up y-o-y by 64 tb/d. Oklahoma's production was up m-o-m by a minor 4 tb/d to an average of 0.4 mb/d. Production in Alaska and Colorado remained largely unchanged.

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



US total liquids production US crude oil production Sources: EIA and OPEC.

US tight crude output in May is estimated to have Graph 5 - 9: US tight crude output breakdown risen m-o-m by 61 tb/d to an average of 8.7 mb/d, according to the latest estimate from the US Energy Information Administration (EIA). This was 0.8 mb/d higher than in the same month last year.

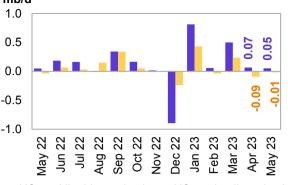
The m-o-m increase from shale and tight formations using horizontal wells came mainly from Permian shale production in Texas, where output rose by 68 tb/d to an average of 5.4 mb/d. This was up y-o-y by 740 tb/d.

In North Dakota, Bakken shale oil output remained largely unchanged m-o-m at an average of 1.1 mb/d. up by 58 tb/d y-o-y. Tight crude output at Eagle Ford in Texas dropped by a minor 4 tb/d to an average of 0.9 mb/d, which is down y-o-y by 36 tb/d. Production in Niobrara-Codell in Colorado and Wyoming was unchanged at an average of 0.4 mb/d.

US liquids production in 2023, excluding processing Graph 5 - 10: US liquids supply developments by gains, is forecast to expand y-o-y by 1.1 mb/d to an component average of 20.4 mb/d. This is up by 50 tb/d compared with the previous assessment due to higher-thanexpected output in previous months. Despite declining drilling activity since the start of this year, fewer supply chain/logistical issues in the prolific Permian, Eagle Ford and Bakken shale sites are still assumed for the remainder of 2023. Given a sound level of oil field drilling and well completions, crude oil and condensate output is anticipated to increase y-o-y by 0.8 mb/d to average 12.7 mb/d. Average tight crude output in 2023 is forecast at 8.7 mb/d, up y-o-y by 0.8 mb/d. At the same time, NGLs production and non-conventional liquids, particularly ethanol, are forecast to increase y-o-y by 0.3 mb/d and 40 tb/d, to average 6.2 mb/d and 1.5 mb/d, respectively.

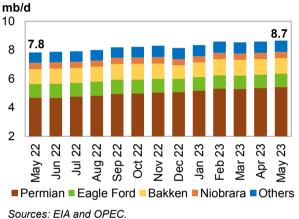
Graph 5 - 8: US monthly crude oil and total liquids supply, m-o-m changes

mb/d

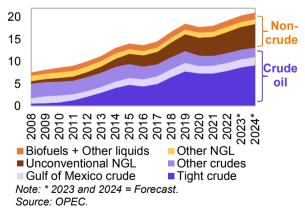


US total liquids production US crude oil production Sources: EIA and OPEC.





mb/d



US liquids production in 2024, excluding processing gains, is expected to grow y-o-y by 0.7 mb/d to average 21.0 mb/d, assuming a modest level of drilling activities and less supply chain issues in the prolific Permian, Bakken and Eagle Ford shale sites. Crude oil output is anticipated to jump by 0.4 mb/d y-o-y to an average of 13.1 mb/d. At the same time, NGLs production and non-conventional liquids, particularly ethanol, are projected to increase by 0.2 mb/d and 30 tb/d y-o-y to average 6.4 mb/d and 1.5 mb/d, respectively. Average tight crude output in 2024 is expected at 9.2 mb/d, up by 0.5 mb/d.

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
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Table I de ligando pre						
		Change		Change		
US liquids	2022	2022/21	2023*	2023/22	2024*	2024/23
Tight crude	7.93	0.58	8.69	0.76	9.18	0.49
Gulf of Mexico crude	1.73	0.02	1.82	0.09	1.84	0.02
Conventional crude oil	2.25	0.04	2.16	-0.09	2.06	-0.10
Total crude	11.91	0.64	12.66	0.75	13.08	0.42
Unconventional NGLs	4.74	0.43	5.13	0.39	5.37	0.24
Conventional NGLs	1.14	0.03	1.09	-0.05	1.06	-0.03
Total NGLs	5.88	0.46	6.22	0.33	6.43	0.21
Biofuels + Other liquids	1.44	0.08	1.48	0.04	1.52	0.03
US total supply	19.23	1.18	20.36	1.13	21.02	0.66

Note: * 2023 and 2024 = *Forecast.*

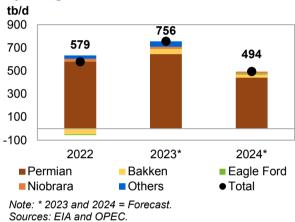
Sources: EIA, OPEC and Rystad Energy.

US tight crude production in the **Permian** in 2023 is **Graph 5 - 11: US tight crude output by shale play**, expected to increase y-o-y by 0.6 mb/d to 5.4 mb/d. It **y-o-y changes**

is forecast to grow y-o-y by 0.4 mb/d to an average of 5.9 mb/d in 2024.

In **North Dakota**, the **Bakken** shale production is still expected to remain below the pre-pandemic average of 1.4 mb/d. In 2023, growth is forecast at just 44 tb/d to an average of 1.1 mb/d. Growth of 25 tb/d for 2024 is anticipated, to average 1.1 mb/d, demonstrating signs of maturity in the basin.

The **Eagle Ford** in Texas saw an output of 1.2 mb/d in 2019, followed by declines in the period 2020 to 2022. Having no growth expected for 2023, the output rests at an average of 0.95 mb/d. Marginal growth is expected for 2024, with an increase of 10 tb/d to average 0.96 mb/d.



Niobrara's production is expected to have grown y-o-y by 19 tb/d in 2023 to an average of 456 tb/d. It is then forecast to increase by 17 tb/d in 2024 to an average of 473 tb/d. Given a moderate pace of drilling and completion activities, production in other tight plays is expected to show an increase of 48 tb/d in 2023 and then remain steady in 2024.

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

		Change		Change		Change
US tight oil	2022	2021/20	2023*	2023/22	2024*	2024/23
Permian tight	4.78	0.58	5.42	0.65	5.87	0.44
Bakken shale	1.03	-0.05	1.07	0.04	1.10	0.03
Eagle Ford shale	0.95	-0.01	0.95	0.00	0.96	0.01
Niobrara shale	0.44	0.02	0.46	0.02	0.47	0.02
Other tight plays	0.73	0.03	0.78	0.05	0.78	0.00
Total	7.93	0.58	8.69	0.76	9.18	0.49

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 28 July 2023 fell by 5 to 664, according to Baker Hughes. This was down by 103 rigs compared with a year ago. The number of active offshore rigs rose by one w-o-w to 19. This was higher by two compared with the same month a year earlier. Onshore oil and gas rigs were lower w-o-w by 7 to stand at 640 rigs, with five rigs in inland waters. This is down by 106 rigs y-o-y.

The US horizontal rig count fell w-o-w by 8 to 592, Graph 5 - 12: US weekly rig count vs. US crude oil compared with 697 horizontal rigs a year ago. The output and WTI price number of drilling rigs for oil dropped w-o-w by one to US\$/b Rigs 529. At the same time, gas-drilling rigs fell w-o-w by three to 128.

The Permian's rig count rose by one w-o-w to 334. Rig counts dropped by two in Eagle Ford to 55. The rig counts remained unchanged w-o-w in the Williston, Cana Woodford and DJ-Niobrara at 35, 22 and 14, respectively.

No operating oil rig remained in the Barnett basin, down by one w-o-w, for the first time since February 2022.

spudded, completed and started oil-producing wells in in US shale plays all US shale plays, based on EIA-DPR regions. including 917 horizontal wells spudded in June (as per preliminary data). This is up m-o-m by 107, and 4% higher than in June 2022.

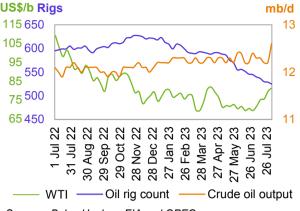
Preliminary data for June indicates a lower number of completed wells at 922, which is up y-o-y by 11%. The number of started wells is estimated at 784, which is 11% higher than a year earlier.

Preliminary data for July 2023 sees 585 spudded, 992 completed and 984 started wells, according to Rystad Energy.

In terms of identified US oil and gas fracking operations by region, Rystad Energy reported that 1,188 wells were fracked in May 2023. In June and July, it stated that 1,188 and 1,066 wells began fracking, respectively. Preliminary numbers are based on analysis of high-frequency satellite data.

Preliminary June data showed that 261 and 219 wells were fracked in the Permian Midland and Permian Delaware, respectively. Compared with May, there was a decline of 33 wells in the Midland and a drop of 19 in the Delaware. Data also indicated that 69 wells were fracked in the DJ Basin, 105 in the Eagle Ford and 101 in the Bakken in June.

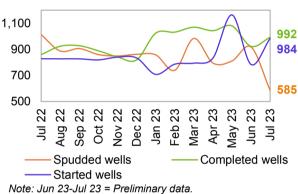




Sources: Baker Hughes, EIA and OPEC.

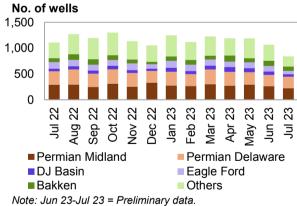
Wells





Sources: Rystad Energy and OPEC.

Graph 5 - 14: Fracked wells count per month



Sources: Rystad Energy Shale Well Cube and OPEC.

Canada

Canada's liquids production in June is estimated to Graph 5 - 15: Canada's monthly liquids production have dropped significantly m-o-m by 337 tb/d to an development by type average of 5.0 mb/d. This is the lowest output seen mb/d since October 2020.

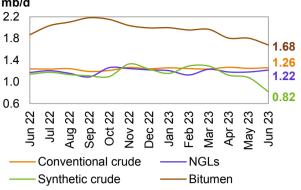
Conventional crude production rose m-o-m in June by 12 tb/d to an average of 1.3 mb/d, while NGLs output increased by 35 tb/d to an average of 1.2 mb/d.

Crude bitumen production output fell m-o-m by 259 tb/d, and synthetic crude declined m-o-m by 125 tb/d. Taken together, crude bitumen and synthetic crude production dropped by 384 tb/d to 2.5 mb/d.

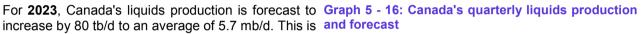
The drop in June was related to significant maintenance at the oil sands mines and the upgraders including Suncor's Syncrude, Imperial's Kearl, and Canadian Natural Resources Horizon mines.

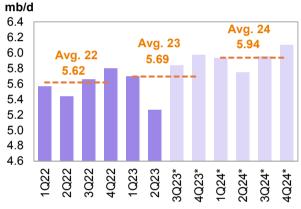
increase by 80 tb/d to an average of 5.7 mb/d. This is and forecast down by 50 tb/d compared with the previous assessment. Canada's production in 2Q23 was considerably lower-than-expected and under pressure due to maintenance and seasonal wildfires.

The recent wildfire has been the worst fire season for some decades disrupting operations across northwest Alberta throughout May to July. At the same time, scheduled maintenance programmes during 2Q23 and 3Q23 are expected to soften output. However, lower maintenance is expected for 3Q23 and the Terra Nova Floating Production Storage and Offloading unit (FPSO) is also expected to restart production in mid-2023.



Sources: Statistics Canada, Alberta Energy Regulator and OPFC





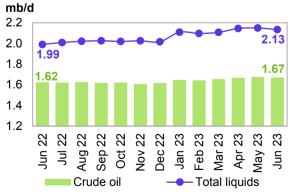
Note: * 3Q23-4Q24 = Forecast. Source: OPEC.

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

Mexico

Mexico's crude output decreased m-o-m by a minor Graph 5 - 17: Mexico's monthly liquids and 4 tb/d in June to an average of 1.7 mb/d, and NGLs crude production development output fell by 11 tb/d. Mexico's total June liquids output m-o-m dropped by 15 tb/d to an average of 2.1 mb/d, according to the Comisión Nacional de Hidrocarburos (CNH). This was in line with our expectation, as the ramp-up of some new fields and a minor recovery in production from the Xanab field were offset by declines elsewhere.

For 2023, liquids production is now forecast to rise by around 80 tb/d to an average of 2.1 mb/d. This is unchanged from the previous assessment. However, in addition to the recent outages after the explosion at the Nohoch Alfa oil platform at the Bay of Campeche, declines from other fields could start offsetting monthly gains from new fields once again in 2H23.



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

For 2024, liquids production is forecast to decline by 45 tb/d to an average of 2.0 mb/d. In general, it is expected that declines from mature fields offset gains from new 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 a few start-ups, namely TM-01, Paki, and AE-0150-Uchukil.

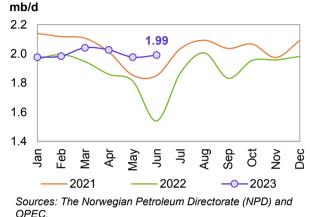
OECD Europe

Norway

Norwegian liquids production in June rose by Graph 5 - 18: Norway's monthly liquids production 14 tb/d m-o-m to an average of 2.0 mb/d. While the development main oil fields have been produced on schedule, there were some unexpected declines due to outages and maintenance in a number of gas fields.

Norway's crude production increased by 29 tb/d m-o-m in June to an average of 1.8 mb/d, albeit higher y-o-y by 480 tb/d. Monthly oil production was 0.6% more than the Norwegian Petroleum Directorate's (NPD) forecast.

Production of NGLs and condensates, however, dropped m-o-m by 15 tb/d to an average of 0.2 mb/d, according to NPD data.



For 2023, Norwegian liquids production is forecast to expand by 0.2 mb/d, largely unchanged compared with last month's forecast, to an average of 2.1 mb/d. The Johan Sverdrup ramp-up is projected to be the main source of growth following its phase 2 start-up in December 2022. Norway's Nyhamna gas processing plant and some of the other gas fields were under extended maintenance in June. The maintenance activity is assumed to impact around 78 million cf/d of gas export capacity.

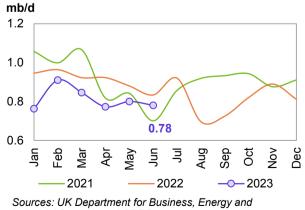
For 2024, Norwegian liquids production is forecast to grow by 90 tb/d to an average of 2.2 mb/d. Some smallto-large projects are scheduled to ramp up in 2024. At the same time, project start-ups are expected from offshore projects like Balder/Ringhorne, Eldfisk, Kristin, Alvheim FPSO, Hanz, Aasgard FPSO, and PL636. Kobra East and Gekko (KEG) is planned to come online in early 2024 which will be tied back to the Alvheim FPSO. Johan Castberg is projected to be the main source of output increases, with the first oil planned for 4Q24.

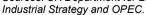
UK

In June, UK liquids production fell m-o-m by Graph 5 - 19: UK monthly liquids production 20 tb/d to an average of 0.8 mb/d. Crude oil output development decreased m-o-m by 10 tb/d to an average of 0.7 mb/d, which was lower by 27 tb/d y-o-y, according to official data. NGLs output also dropped by 10 tb/d to an average of 72 tb/d. UK liquids output in June was down 6% compared to June 2022, mainly due to natural declines and outages.

For 2023, UK liquids production is forecast to average 0.9 mb/d, down by a minor 5 tb/d from the previous assessment due to lower-than-expected June 2023 output.

For 2024, UK liquids production is forecast to stay steady at an average of 0.9 mb/d. Production rampups will be seen in the ETAP and Clair, as well as the Anasuria and Captain EOR start-up projects. The

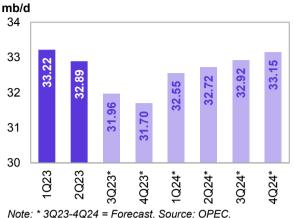




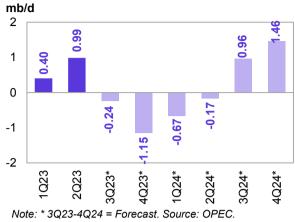
start-up for Penguins redevelopment is now expected in 1Q24. However, liquids production in the UK is expected to continue to face challenges, given an inadequate number of new projects and low investment levels.

Non-OECD

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







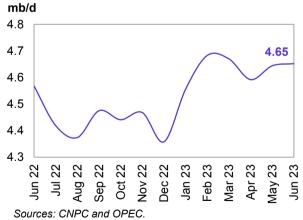
China

China's liquids production rose m-o-m in **June** by a minor 8 tb/d to an average of 4.7 mb/d. This is up by 84 tb/d y-o-y, according to official data. Crude oil output in June averaged 4.3 mb/d, up by 8 tb/d compared with the previous month, and higher y-o-y by 81 tb/d. NGLs and condensate production was largely stable m-o-m, averaging 48 tb/d.

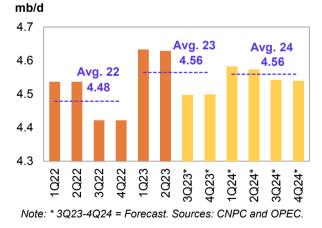
For **2023**, y-o-y growth of 85 tb/d is forecast for an average of 4.6 m/d. This is unchanged from last month's assessment. Natural decline rates are expected to be offset by additional growth through more infill wells and EOR projects amid efforts by state-owned oil companies to safeguard energy supplies. Chinese companies have special attention towards ultra-deep drilling in search of energy security. CNPC's recent record-breaking 11 km exploration borehole in the Taklamakan Desert could represent their focus on one of the world's deepest reservoirs.

For **2024**, Chinese liquid production is expected to remain steady y-o-y and is forecast to average 4.6 m/d. For next year, Liuhua 11-1, Shayan and Liuhua 4-1 (redevelopment) are planned to come on stream under CNOOC and PetroChina. At the same time, the main ramp-ups are expected from the Changqing, Kenli 10-2, Wushi 17-2 and Kenli 6-4.





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

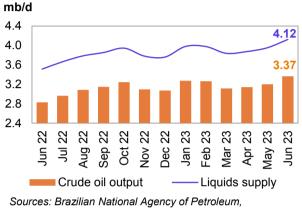


Latin America

Brazil

Brazil's crude output in June rose m-o-m by 166 tb/d to an average of 3.4 mb/d, mainly due to new project start-ups. NGLs production, however, was broadly unchanged at an average of 85 tb/d and it is expected to remain flat in July. Biofuels output (mainly ethanol) remained broadly unchanged at an average of 671 tb/d, with preliminary data showing a stable trend in July. The country's total liquids production increased by 170 tb/d in June to an average of 4.1 mb/d. This is the new highest liquid production rate on record after a peak of 4.0 mb/d in January 2023.

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







Natural Gas and Biofuels (ANP) and OPEC.

Note: * 3Q23-4Q24 = Forecast. Sources: ANP and OPEC.

For 2023, Brazil's liquids supply, including biofuels, is forecast to rise y-o-y by 0.3 mb/d to an average of 4.0 mb/d, revised up by 15 tb/d from the previous forecast due to strong output in June. Crude oil output is set to increase through production ramp-ups in major offshore fields.

Two new FPSOs started production during May, with Petrobras pumping the first oil from the FPSO Anna Nery installed at the Marlim complex in the offshore Campos Basin. According to Petrobras, the Buzios subsalt fields also received its fifth production unit, with the FPSO Almirante Barroso. Petrobras' oil output fell by around 0.6% in the 2Q23 v-o-v due to losses from maintenance, in addition to the natural decline of mature oil fields and some asset sales. However, the crude oil output is expected to be supported by offshore start-ups announced at the beginning of the year.

For 2024, Brazil's liquids supply forecast, including biofuels, is forecast to increase by around 120 tb/d y-o-y to an average of 4.1 mb/d. Crude oil output is expected to increase through production ramp-ups in the Mero (Libra NW), Buzios (Franco), Tupi (Lula), Peregrino and Itapu (Florim) fields. Oil project start-ups are anticipated in Atlanta, Pampo-Enchova Cluster and Vida.

Russia

Russia's liquids production in June fell m-o-m by 100 tb/d to an average of 10.8 mb/d. This includes 9.5 mb/d of crude oil and 1.3 mb/d of NGLs and condensate.

For 2023, Russian liquids production is forecast to drop by 0.65 mb/d to an average of 10.4 mb/d, revised up by 100 tb/d from the previous month's assessment. It is worth noting that the expected contraction takes into account recently announced voluntary production adjustments to the end of 2023.

For 2024, Russian liquids production is forecast to remain unchanged y-o-y and average 10.4 mb/d. In addition to project ramp-ups from several oil fields, there will be some start-ups by Rosneft, Russneft, Lukoil, Gazprom, Neftisa and TenderResurs. However, the overall additional liquids production is expected to be offset by declines from mature fields. It should be noted that the Russian oil forecast is subject to uncertainty.

mb/d 12 11 10 9 8 Sep 22 Oct 22 Nov 22 Dec 22 Jan 23 23 22 22 23 23 23 33 23 Aug 2 Feb ; Ы Ы Mar Apr Лау n Sources: Nefte Compass and OPEC

Graph 5 - 26: Russia's monthly liquids production

Caspian

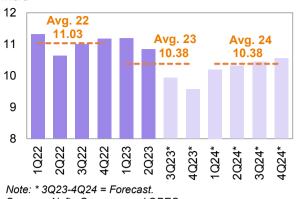
Kazakhstan & Azerbaijan

m-o-m to an average of 1.9 mb/d in June. development by selected country Crude production was up m-o-m by 16 tb/d to an mb/d average of 1.6 mb/d, while NGLs and condensate 2.2 output rose m-o-m by a minor 5 tb/d to an average of 0.4 mb/d.

For 2023, liquids supply is forecast to increase by 0.1 mb/d to an average of 1.9 mb/d, revised up by 9 tb/d compared with the previous forecast mainly due to better-than-expected output in June.

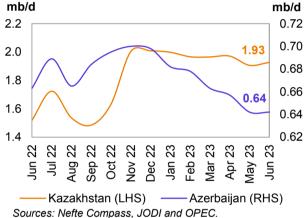
Oil production in early July has been disrupted at ^{1.4} several oil fields in Kazakhstan due to a major power outage at fields in key oil-producing regions of Mangistau and Atyrau in Western Kazakhstan but the oil exports are estimated to be unaffected.





Sources: Nefte Compass and OPEC.





For 2024, liquids supply is forecast to increase by around 80 tb/d to an average of 2.0 mb/d, mainly due to production ramp-ups in the Tengiz oil field through expansion at the Tengizchevroil Future Growth Project (FGP) and wellhead pressure management project. 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 June remained broadly stable m-o-m, averaging 0.6 mb/d, which is a drop of 26 tb/d y-o-y. Crude production averaged 500 tb/d, with NGLs output at 142 tb/d, according to official sources.

Azerbaijan's liquids supply for 2023 is forecast to rise by 11 tb/d to an average of 0.7 mb/d. This is a downward revision of 11 tb/d, due to lower-than-expected major oil field production in June.

The main declines in legacy reservoirs, like Azeri-Chirag-Guneshli (ACG) oil fields, are expected to be offset by ramp-ups in other fields this year.

Azerbaijan's liquids supply for 2024 is forecast to decline by around 30 tb/d to an average of 0.7 mb/d. Growth is forecast to partly come 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 rate will be higher than the planned ramp-ups.

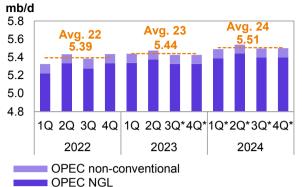
OPEC NGLs and non-conventional oils

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

NGLs output in 2Q23 is expected to have averaged 5.37 mb/d, while non-conventional output remained steady at 0.1 mb/d. Taken together, 5.48 mb/d is expected for June, according to preliminary data.

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

OPEC NGLs and non-conventional liquids are Graph 5 - 29: OPEC NGLs and non-conventional



------ OPEC NGL & non-conventional annual average Note: * 3Q23-4Q24 = Forecast. Source: OPEC.

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

OPEC NGL and	(Change	(Change					C	Change
non-coventional oils	2022	22/21	2023	23/22	1Q24	2Q24	3Q24	4Q24	2024	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 27.31 mb/d in July 2023, lower by 836 tb/d m-o-m. Crude oil output production declined mainly in Saudi Arabia, Libya and Nigeria, while production in IR Iran, Angola and Iraq increased.

Table 5 - 7. OPEC Clu				ccondary	3001003	,			
Secondary									Change
sources	2021	2022	4Q22	1Q23	2Q23	May 23	Jun 23	Jul 23	Jul/Jun
Algeria	913	1,017	1,030	1,015	979	973	954	955	1
Angola	1,123	1,140	1,084	1,062	1,110	1,124	1,114	1,170	56
Congo	264	262	252	270	264	269	260	270	9
Equatorial Guinea	98	84	63	53	60	58	64	60	-4
Gabon	182	197	199	194	207	205	206	211	4
IR Iran	2,392	2,554	2,568	2,571	2,694	2,698	2,760	2,828	68
Iraq	4,046	4,439	4,505	4,372	4,135	4,135	4,162	4,203	40
Kuwait	2,419	2,704	2,712	2,684	2,585	2,555	2,550	2,558	7
Libya	1,143	981	1,153	1,157	1,164	1,169	1,162	1,110	-52
Nigeria	1,372	1,204	1,172	1,345	1,226	1,284	1,295	1,255	-40
Saudi Arabia	9,114	10,530	10,605	10,358	10,152	9,976	9,989	9,021	-968
UAE	2,727	3,066	3,094	3,044	2,940	2,894	2,895	2,900	5
Venezuela	553	675	663	696	735	743	734	772	37
Total OPEC	26,346	28,854	29,099	28,822	28,252	28,084	28,146	27,310	-836

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

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

									Change
Direct communication	2021	2022	4Q22	1Q23	2Q23	May 23	Jun 23	Jul 23	Jul/Jun
Algeria	911	1,020	1,030	1,011	971	962	953	955	2
Angola	1,124	1,137	1,071	1,046	1,098	1,111	1,119	1,149	30
Congo	267	262	261	278	280	285	277	282	5
Equatorial Guinea	93	81	56	51	59	61	67	62	-4
Gabon	181	191	183	201	203	218	193	193	0
IR Iran									
Iraq	3,971	4,453	4,505	4,288	3,959	3,955	3,985		
Kuwait	2,415	2,707	2,721	2,676	2,590	2,548	2,548	2,548	0
Libya	1,207			1,195	1,181	1,158	1,186	1,173	-13
Nigeria	1,323	1,138	1,137	1,277	1,144	1,184	1,249	1,081	-168
Saudi Arabia	9,125	10,591	10,622	10,456	10,124	9,959	9,956	9,013	-943
UAE	2,718	3,064	3,093	3,041	2,941	2,891	2,893	2,894	1
Venezuela	636	716	693	731	808	819	796	810	14
Total OPEC									

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

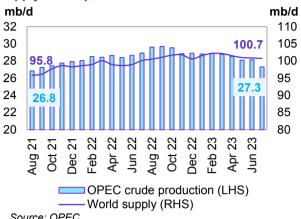
World oil supply

Preliminary data indicates that global liquids production in July decreased by 0.2 mb/d to average 100.7 mb/d compared with the previous month.

NGLs) is estimated to have increased m-o-m in supply development July 2023 by 0.7 mb/d to an average of 73.4 mb/d. mb/d This was higher y-o-y by 2.2 mb/d. Preliminary 32 estimated production drops in July were mainly driven 30 by Russia and China which were more than offset by 28 rises in Canada, Other Eurasia and Other Asia.

The share of OPEC crude oil in total global production in July, decreased by 0.8 pp to stand at 22 27.1% compared with the previous month. Estimates 20 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.

Non-OPEC liquids production (including OPEC Graph 5 - 30: OPEC crude production and world oil



Source: OPEC.

Product Markets and Refinery Operations

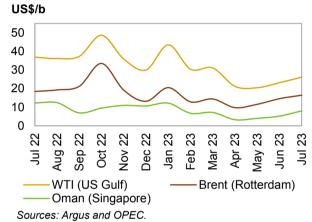
In July, refinery margins continued to rise to show solid gains across regions. In the USGC, margins increased for the second consecutive month. This was mainly driven by the robust performance associated with transport fuels – particularly gasoline, which led to the gains – brought by strong demand in the region amid supportive product exports. In Rotterdam, firm product exports to the US and high regional middle distillate requirements boosted product markets, while in Singapore, margin gains were driven by sizeable stock draws and healthy regional product demand, with notable strength registered at the middle and bottom sections of the barrel.

Global refinery intake in July continued to trend upwards and, according to preliminary estimates, was 793 tb/d higher m-o-m at 81.9 mb/d. In the coming months, refinery intakes are expected to remain backed by seasonally supportive fuel consumption levels given the onset of the summer season.

Refinery margins

USGC refining margins against WTI increased for Graph 6 - 1: Refining margins

the second consecutive month, with gains seen all across the barrel except naphtha. Most of this improvement was attributed to robust transport fuel performance, with gasoline, outperforming all other products by showing a sizeable rise, the largest monthly gain since January 2023. This outcome was a reflection of the seasonal boost in transport fuels due to higher transport activities. In addition, strong US product exports, and the unplanned shutdown of an FCC unit at Marathons Petroleum Galveston Bay 625 tb/d refinery, combined, weighed on the country's product balances and led to considerable product stock draws and a sharp decline in gasoline, jet/ kero and fuel oil stocks in the USGC. These supportive product demand and supply side impacts, coupled



with the stronger crude prices registered in July, exerted upward pressure on US fuel prices and contributed to the strengthening of USGC refining economics.

In terms of operations, US refinery intake continued to increase and gained 190 tb/d m-o-m to an average of 17.09 mb/d in July. USGC margins against WTI averaged \$26.14/b, up by \$2.99 m-o-m, but this was down \$10.73 y-o-y.

Refinery margins in Rotterdam against Brent increased for the third consecutive month, with considerable strength manifested all across the barrel except fuel oil and naphtha. Middle distillates, especially jet/kerosene, represented the main margin contributor in the region and strong regional demand in response to supportive air travel activities. Moreover, firm product exports to the US and West Africa led to significant declines in the Amsterdam-Rotterdam-Antwerp trading hub, pointing to a contracting product balance despite the elevated refinery runs in the region. Throughout July, some European refineries returned from unplanned shutdowns, which drove product output levels higher, likely limiting further gains in refining economics.

Refinery throughput in Europe continued to rise in July. According to preliminary data, it was 280 tb/d higher at an average of 9.80 mb/d. Refinery margins against Brent in Europe averaged \$16.44/b in July, \$1.88 higher compared with a month earlier, but \$2.00 lower y-o-y.

Singapore refining margins against Oman extended their positive momentum seen since April 2023 albeit at a lower pace compared to their Western counterparts. Gasoil crack spreads showed the largest monthly gain across the barrel in Singapore, with strong product exports to the Atlantic Basin, as gasoline and middle distillate inventories in the OECD Europe and Americas remain below the five-year average, leading to strong arbitrage openings and solid economic incentives for East to West product flows. In China, gasoline exports have remained strong, contributing to ample supplies in the region. This kept the monthly gain in gasoline crack spreads considerably limited and led to it showing the weakest positive performance across the barrel in Singapore. On the other hand, naphtha markets continued to weaken; although the loss registered was much more limited to that registered in the previous month, as supply-side pressures amid low gas prices and

subsequently lower demand from the petrochemical sector led to a naphtha overhang in the region. However, this negative impact was rather moderate, with limited impact on Asian refining economics and was insufficient to offset the strong positive contributions registered across the barrel.

In July, refinery intakes showed partial recovery following the decline seen in the previous month, gaining 120 tb/d relative to the previous month to an average of 27.12 mb/d, according to preliminary data. Refinery margins against Oman in Asia gained \$2.80 m-o-m to average \$8.03/b, which was \$4.27 lower y-o-y.

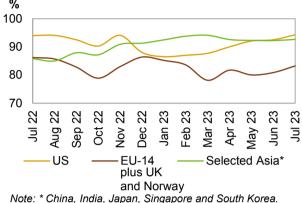
Refinery operations

US refinery utilization rates increased in July to an **Graph 6 - 2: Refinery utilization rates** average of 93.55%, which corresponds to a % throughput of 17.09 mb/d. This represented a rise of 100

1.0 pp and 190 tb/d compared with June. Y-o-y, the July refinery utilization rate was down by 0.5 pp, with throughput showing a 186 tb/d rise.
European refinery utilization averaged 83.22% in July, corresponding to a throughput of 9.80 mb/d.

July, corresponding to a throughput of 9.80 mb/d. This is a m-o-m rise of 2.4 pp or 280 tb/d. On a y-o-y basis, the utilization rate was down by 3.0 pp, while throughput was lower by 278 tb/d.

In **Selected Asia** – comprising Japan, China, India, Singapore and South Korea – refinery utilization rates fell to an average of 92.67% in July, corresponding to a throughput of 27.12 mb/d. Compared with the previous month, utilization rates were up by 0.4 pp,



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

Refinery utilization, %

and throughput was higher by 120 tb/d. However, y-o-y utilization rates were higher by 6.9 pp, and throughput was up by 124 tb/d.

Table 6 - 1: Refinery operations in selected OECD countries Refinery throughput, mb/d

	· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·		
			Change				Change
May 23	Jun 23	Jul 23	Jul/Jun	May 23	Jun 23	Jul 23	Jul/Jun
16.76	16.91	17.09	0.19	92.09	92.52	93.55	1.0 pp
9.42	9.52	9.80	0.28	80.02	80.87	83.22	2.4 pp
0.96	0.95	0.98	0.03	82.98	82.89	85.55	2.7 pp
1.54	1.58	1.60	0.02	75.16	77.11	78.21	1.1 pp
1.17	1.24	1.30	0.06	61.53	65.32	68.59	3.3 pp
1.05	0.93	0.96	0.03	89.34	78.86	81.78	2.9 pp
26.88	26.99	27.12	0.12	92.30	92.25	92.67	0.4 pp
	16.76 9.42 0.96 1.54 1.17 1.05	16.76 16.91 9.42 9.52 0.96 0.95 1.54 1.58 1.17 1.24 1.05 0.93	16.76 16.91 17.09 9.42 9.52 9.80 0.96 0.95 0.98 1.54 1.58 1.60 1.17 1.24 1.30 1.05 0.93 0.96	May 23 Jun 23 Jul 23 Jul/Jun 16.76 16.91 17.09 0.19 9.42 9.52 9.80 0.28 0.96 0.95 0.98 0.03 1.54 1.58 1.60 0.02 1.17 1.24 1.30 0.06 1.05 0.93 0.96 0.03	May 23Jun 23Jul 23Jul/JunMay 2316.7616.9117.090.1992.099.429.529.800.2880.020.960.950.980.0382.981.541.581.600.0275.161.171.241.300.0661.531.050.930.960.0389.34	May 23 Jun 23 Jul 23 Jul/Jun May 23 Jun 23 16.76 16.91 17.09 0.19 92.09 92.52 9.42 9.52 9.80 0.28 80.02 80.87 0.96 0.95 0.98 0.03 82.98 82.89 1.54 1.58 1.60 0.02 75.16 77.11 1.17 1.24 1.30 0.06 61.53 65.32 1.05 0.93 0.96 0.03 89.34 78.86	May 23 Jun 23 Jul 23 Jul/Jun May 23 Jun 23 Jul 23 16.76 16.91 17.09 0.19 92.09 92.52 93.55 9.42 9.52 9.80 0.28 80.02 80.87 83.22 0.96 0.95 0.98 0.03 82.98 82.89 85.55 1.54 1.58 1.60 0.02 75.16 77.11 78.21 1.17 1.24 1.30 0.06 61.53 65.32 68.59 1.05 0.93 0.96 0.03 89.34 78.86 81.78

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

gnput, mb/	a						
2020	2021	2022	3Q22	4Q22	1Q23	2Q23	3Q23
16.59	17.79	18.66	19.00	18.53	18.04	18.88	19.00
14.72	15.66	16.46	16.82	16.35	15.78	16.71	16.98
10.65	10.92	11.43	11.79	11.38	11.25	11.27	11.22
0.67	0.69	0.84	0.96	0.78	0.83	0.86	0.92
1.72	1.72	1.83	1.83	1.87	1.64	1.56	1.57
1.11	1.23	1.32	1.41	1.29	1.28	1.28	1.39
0.92	0.92	1.04	1.02	1.03	1.03	1.00	0.95
5.87	5.76	6.04	6.17	5.97	6.09	5.76	6.00
2.48	2.49	2.71	2.73	2.73	2.77	2.43	2.69
33.12	34.47	36.13	36.96	35.88	35.38	35.90	36.22
3.20	3.50	3.36	3.38	3.32	3.41	3.50	3.53
6.10	6.80	7.28	7.34	7.40	7.31	7.43	7.82
1.79	1.77	1.76	1.76	1.73	1.72	1.88	1.95
4.42	4.73	5.00	4.69	4.89	5.35	5.28	5.27
13.48	14.07	13.49	13.00	14.14	14.57	14.78	14.89
4.72	4.72	4.89	4.87	4.77	5.06	4.93	4.85
5.39	5.61	5.46	5.50	5.59	5.67	5.40	5.58
1.10	1.23	1.15	1.13	1.15	1.23	1.26	1.29
	- · · ·	0 4 0	0.54	0.49	0.44	0.49	0.50
0.43	0.41	0.48	0.54	0.45	0.77	0.45	0.50
0.43 40.63	0.41 42.85	42.87	42.21	43.48	44.76	44.96	45.68
	2020 16.59 14.72 10.65 0.67 1.72 1.11 0.92 5.87 2.48 33.12 3.20 6.10 1.79 4.42 13.48 4.72 5.39	16.59 17.79 14.72 15.66 10.65 10.92 0.67 0.69 1.72 1.72 1.11 1.23 0.92 0.92 5.87 5.76 2.48 2.49 33.12 34.47 3.20 3.50 6.10 6.80 1.79 1.77 4.42 4.73 13.48 14.07 4.72 4.72 5.39 5.61	2020 2021 2022 16.59 17.79 18.66 14.72 15.66 16.46 10.65 10.92 11.43 0.67 0.69 0.84 1.72 1.72 1.83 1.11 1.23 1.32 0.92 0.92 1.04 5.87 5.76 6.04 2.48 2.49 2.71 33.12 34.47 36.13 3.20 3.50 3.36 6.10 6.80 7.28 1.79 1.77 1.76 4.42 4.73 5.00 13.48 14.07 13.49 4.72 4.72 4.89 5.39 5.61 5.46	2020 2021 2022 3Q22 16.59 17.79 18.66 19.00 14.72 15.66 16.46 16.82 10.65 10.92 11.43 11.79 0.67 0.69 0.84 0.96 1.72 1.72 1.83 1.83 1.11 1.23 1.32 1.41 0.92 0.92 1.04 1.02 5.87 5.76 6.04 6.17 2.48 2.49 2.71 2.73 33.12 34.47 36.13 36.96 3.20 3.50 3.36 3.38 6.10 6.80 7.28 7.34 1.79 1.77 1.76 1.76 4.42 4.73 5.00 4.69 13.48 14.07 13.49 13.00 4.72 4.72 4.89 4.87 5.39 5.61 5.46 5.50	2020 2021 2022 3Q22 4Q22 16.59 17.79 18.66 19.00 18.53 14.72 15.66 16.46 16.82 16.35 10.65 10.92 11.43 11.79 11.38 0.67 0.69 0.84 0.96 0.78 1.72 1.72 1.83 1.83 1.87 1.11 1.23 1.32 1.41 1.29 0.92 0.92 1.04 1.02 1.03 5.87 5.76 6.04 6.17 5.97 2.48 2.49 2.71 2.73 2.73 33.12 34.47 36.13 36.96 35.88 3.20 3.50 3.36 3.38 3.32 6.10 6.80 7.28 7.34 7.40 1.79 1.77 1.76 1.76 1.73 4.42 4.73 5.00 4.69 4.89 13.48 14.07 13.49 <td< td=""><td>2020 2021 2022 3Q22 4Q22 1Q23 16.59 17.79 18.66 19.00 18.53 18.04 14.72 15.66 16.46 16.82 16.35 15.78 10.65 10.92 11.43 11.79 11.38 11.25 0.67 0.69 0.84 0.96 0.78 0.83 1.72 1.72 1.83 1.83 1.87 1.64 1.11 1.23 1.32 1.41 1.29 1.28 0.92 0.92 1.04 1.02 1.03 1.03 5.87 5.76 6.04 6.17 5.97 6.09 2.48 2.49 2.71 2.73 2.77 33.12 34.47 36.13 36.96 35.88 35.38 3.20 3.50 3.36 3.38 3.32 3.41 6.10 6.80 7.28 7.34 7.40 7.31 1.79 1.77 1.76 1.73</td><td>2020 2021 2022 3Q22 4Q22 1Q23 2Q23 16.59 17.79 18.66 19.00 18.53 18.04 18.88 14.72 15.66 16.46 16.82 16.35 15.78 16.71 10.65 10.92 11.43 11.79 11.38 11.25 11.27 0.67 0.69 0.84 0.96 0.78 0.83 0.86 1.72 1.72 1.83 1.83 1.87 1.64 1.56 1.11 1.23 1.32 1.41 1.29 1.28 1.28 0.92 0.92 1.04 1.02 1.03 1.00 1.03 1.00 5.87 5.76 6.04 6.17 5.97 6.09 5.76 2.48 2.49 2.71 2.73 2.77 2.43 33.12 34.47 36.13 36.96 35.88 35.38 35.90 3.20 3.50 3.36 3.38 3.32</td></td<>	2020 2021 2022 3Q22 4Q22 1Q23 16.59 17.79 18.66 19.00 18.53 18.04 14.72 15.66 16.46 16.82 16.35 15.78 10.65 10.92 11.43 11.79 11.38 11.25 0.67 0.69 0.84 0.96 0.78 0.83 1.72 1.72 1.83 1.83 1.87 1.64 1.11 1.23 1.32 1.41 1.29 1.28 0.92 0.92 1.04 1.02 1.03 1.03 5.87 5.76 6.04 6.17 5.97 6.09 2.48 2.49 2.71 2.73 2.77 33.12 34.47 36.13 36.96 35.88 35.38 3.20 3.50 3.36 3.38 3.32 3.41 6.10 6.80 7.28 7.34 7.40 7.31 1.79 1.77 1.76 1.73	2020 2021 2022 3Q22 4Q22 1Q23 2Q23 16.59 17.79 18.66 19.00 18.53 18.04 18.88 14.72 15.66 16.46 16.82 16.35 15.78 16.71 10.65 10.92 11.43 11.79 11.38 11.25 11.27 0.67 0.69 0.84 0.96 0.78 0.83 0.86 1.72 1.72 1.83 1.83 1.87 1.64 1.56 1.11 1.23 1.32 1.41 1.29 1.28 1.28 0.92 0.92 1.04 1.02 1.03 1.00 1.03 1.00 5.87 5.76 6.04 6.17 5.97 6.09 5.76 2.48 2.49 2.71 2.73 2.77 2.43 33.12 34.47 36.13 36.96 35.88 35.38 35.90 3.20 3.50 3.36 3.38 3.32

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

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

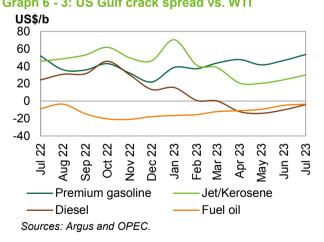
Sources: AFREC, APEC, EIA, IEA, Euroilstock, PAJ, Ministry data, including Ministry of Energy of the Russian Federation, Ministry of Petroleum and Natural Gas of India, OPEC and JODI.

Product markets

US market

The USGC gasoline crack spread exhibited a robust Graph 6 - 3: US Gulf crack spread vs. WTI performance and gained substantial ground backed by strong mobility activity that exerted pressure on gasoline balances nationwide. USGC wholesale gasoline 93 prices jumped m-o-m by \$12.35/b to an average of \$129.29/b in July. This was the largest monthly price gain across the barrel in the USGC and was a reflection of healthy exports and consequently significant stock draws throughout the month. However, total US gasoline inventory levels remain below the five-year average.

Expectations of strong consumption levels in the coming months, given the onset of the summer season, point to solid upside potential for US gasoline markets going forward. The USGC gasoline crack spread gained \$6.81 m-o-m to average \$53.44/b in July. This was \$1.68 higher y-o-y.



The USGC jet/kerosene crack spread extended its upward trend, showing gains for the second consecutive month. Ongoing improvements in the aviation sector, given the onset of the peak holiday season, likely provided a boost in jet fuel requirements. Wholesale prices increased by \$10.95/b over the month to an average of \$105.79/b. The US jet/kerosene crack spread against WTI averaged \$29.94/b, up by \$5.41 m-o-m, albeit down by \$15.72 y-o-y.

The USGC gasoil crack spread increased further with the ongoing improvements in gasoil pricing and gasoil production profits for refiners following the collapse registered in 1H23. Soft demand from the domestic manufacturing and industrial sectors is likely to be offset by a demand pick-up from the services sectors, and exports in the near term. Improvements in US macroeconomic indicators have set the stage for further upside potential in the near term. Gasoil inventories in the US trended slightly higher in July; however, on a wider spectrum, inventories remain low and well below their five-year average. Gasoil prices averaged \$71.68/b in July, up \$11.48 relative to July. The US gasoil crack spread against WTI averaged minus \$4.17/b, up by \$5.94 m-o-m, but down by \$28.46 y-o-y.

The USGC fuel oil crack spread against WTI maintained its positive momentum for the eighth consecutive month, although it remained in negative territory. This improvement was mostly attributed to a contraction in the product's domestic balance over the month due to supportive FCC margins, as gasoline market improvements likely provided better economic incentives for fuel oil to gasoline conversion. Concerns over lower heavy crude production levels contributed to worries over fuel oil output levels and likely exerted upward pressure on crack spreads. In July, the US fuel oil crack spread against WTI averaged minus \$3.44/b, higher by \$1.35/b m-o-m, and up by \$5.12 y-o-y.

European market

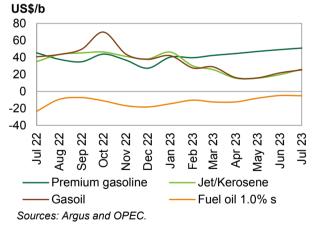
Gasoline crack spreads in Rotterdam increased, benefitting from exports of gasoline to the US and West Africa in July. Although gasoline refinery output levels were on the rise, gasoline balances remained under pressure, while a demand pick-up linked to the summer season and the resulting ongoing bullish market likely drove crack spreads higher. Going forward, gasoline crack spreads are set to benefit from strong export opportunities amid expectations of supportive mobility activity. The gasoline crack spread against Brent averaged \$51.03/b in July, which was \$1.85/b higher m-o-m, and higher by \$5.64 y-o-y.

In July, jet/kerosene crack spreads gained massive ground to become the stronger margin contributor across the barrel in NWE, supported by improving demand-side dynamics despite rising refinery output levels. In the coming months, jet/kerosene markets are expected to remain strong as air travel activities remain healthy over the summer. The Rotterdam iet/kerosene crack spread against Brent averaged \$26.18/b. up by \$6.42 m-o-m. but down by \$8.83 y-o-y.

Gasoil 10 ppm crack spreads became the second Graph 6 - 4: Rotterdam crack spreads vs. Brent margin leader across the barrel supported by inventory drawdowns. Despite a significant rise in refinery throughputs and product output in the region. inventory levels at the Amsterdam-Rotterdam-Antwerp storage hub suffered significant declines. This provided further backing for gasoil markets in the region. The gasoil crack spread against Brent averaged \$25.30/b, up by \$3.56 m-o-m, but down \$15.36 v-o-v.

At the bottom of the barrel, fuel oil 1.0% crack spreads suffered a mild loss as stronger crude prices, weaker bunker demand and consequently ample availability in the region weighed on the products' performance.





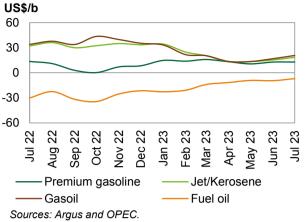
In terms of prices, fuel oil 1.0% increased in value m-o-m to an average of \$75.02/b, which was \$5.08 higher relative to the previous month. In NWE, 1% fuel oil cracks against Brent averaged minus \$5.07/b in July, having lost 28¢ m-o-m but gained \$18.30 y-o-y.

Asian market

The Asian gasoline 92 crack saw a mild increase as Graph 6 - 5: Singapore crack spreads vs. Dubai supportive arbitrage economics provided an open window for deliveries to the US and Europe. The negative impact of heavy rains and floods registered in parts of Asia during the month, as well as strong output levels from China likely exerted pressure on regional consumption levels, preventing further strength in Asian gasoline markets. The Singapore gasoline crack spread against Dubai in July averaged \$12.80/b. This was up \$2.17 m-o-m but lower by \$23.24 y-o-y.

Asian naphtha crack spreads lost some ground to reach their lowest level since October 2022, although the loss witnessed in July was considerably more limited to that seen in the previous month. The weakness was attributed to unfavourable supply-side





dynamics as strong flows from the Middle East amid the latest new refinery capacity additions, as well as firm volume arrivals from Russia which contributed to naphtha overhang in the region.

In addition, the currently low natural gas price environment incentivized petrochemical intake shift from naphtha to LPG, which led to stronger LPG imports in the regions and subdued naphtha buying interest. The Singapore naphtha crack spread against Oman averaged minus \$17.90/b, dropping by 21¢ m-o-m, but was up by \$2.27 V-O-V.

In the middle of the barrel, jet/kerosene crack spreads increased despite exhibiting to show notable improvement reaching a four-month high. This was largely backed by demand improvements from the region's aviation sector across the regions. Expectations of further improvement in international air travel activity in the coming months, and stronger export requirements to the OECD Europe and Americas, will most likely keep regional jet/kerosene markets well supported in the near term. The Singapore jet/kerosene crack spread against Oman averaged \$18.52/b, up by \$3.16 m-o-m, but down by \$13.51 y-o-y.

The Singapore gasoil crack spread extended its upward trend for the second consecutive month and exhibited robust performance, with gasoil representing the largest source of strength in the Asian product market, followed by jet/kerosene. Strong exports to the OECD Europe and Americas provided support, while consumption levels within the region remained somewhat capped due to soft industrial and manufacturing gasoil demand. The Singapore gasoil crack spread against Oman averaged \$20.69/b, up by \$3.87 m-o-m but down by \$13.26 y-o-y.

The Singapore **fuel oil 3.5% crack spread** showed considerable recovery from the downturn registered in the previous month to show the highest levels reached since April 2022, although remaining in negative territory. Lower heavier crude availability, and strong residual fuel buying interest for feedstock blending amid supportive conversion margins most likely boosted fuel oil processing rates and led to stronger markets for the same product.

Going forward, strong fuel oil requirements for power generation - particularly in the Middle East - and gasoline market strength in OECD countries should support fuel crack spreads. Singapore's high sulphur fuel oil crack spreads against Oman averaged minus \$6.94/b, which was up by \$2.51 m-o-m and by \$23.24 y-o-y.

Event	Time frame	Observations	Asia	Europe	US
Summer and peak holiday season	Aug 23– Oct 23	Based on seasonal trends, and lower fuel prices y-o-y, US gasoline demand is expected to pick up and is set to support crack spreads for the same product in the near term.	Support for gasoline and jet/kero markets	Support for gasoline and jet/kero markets	 Support for gasoline and jet/kero markets
Power generation (cooling)	Aug 23– Sep 23	Higher fuel oil demand is expected during the summer months to fuel cooling systems in the Middle East. This, in addition to the rerouting of Russian fuel oil flows, will likely lead to a boost in fuel oil crack spreads.	↑ Support fuel oil markets	Support fuel oil markets	↑ Support fuel oil markets
Hurricane season	Aug 23– Oct 23	The risk of product supply disruptions could exacerbate the impact of potential summer improvements in demand by exerting pressure on product availability and pushing up fuel values, particularly in the US.	Upward pressure on product crack spreads	↑ Upward pressure on product crack spreads	Upward pressure on product crack spreads

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

Source: OPEC.

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

	,			Change	Annual avg.	Year-to-date
		Jun 23	Jul 23	Jul/Jun	2022	2023
US Gulf (Cargoes FOB)						
Naphtha*		69.31	66.45	-2.86	89.24	74.15
Premium gasoline	(unleaded 93)	116.94	129.29	12.35	134.59	119.18
Regular gasoline	(unleaded 87)	102.40	112.75	10.35	123.34	106.49
Jet/Kerosene		94.84	105.79	10.95	140.17	110.17
Gasoil	(0.2% S)	60.20	71.68	11.48	122.10	71.63
Fuel oil	(3.0% S)	65.53	72.52	6.99	76.84	62.36
Rotterdam (Barges FoB)						
Naphtha		60.68	63.22	2.54	85.08	70.53
Premium gasoline	(unleaded 98)	123.91	131.12	7.21	136.26	124.77
Jet/Kerosene		94.49	106.27	11.78	139.86	105.47
Gasoil/Diesel	(10 ppm)	96.47	105.39	8.92	142.32	105.24
Fuel oil	(1.0% S)	69.94	75.02	5.08	88.77	70.29
Fuel oil	(3.5% S)	71.91	75.34	3.43	78.86	67.38
Mediterranean (Cargoes FO	B)					
Naphtha		59.28	61.32	2.04	82.26	68.04
Premium gasoline**		98.25	106.13	7.88	120.04	100.79
Jet/Kerosene		92.00	102.93	10.93	135.36	101.46
Diesel		95.30	104.35	9.05	135.91	103.78
Fuel oil	(1.0% S)	74.14	78.65	4.51	94.51	74.93
Fuel oil	(3.5% S)	63.22	73.28	10.06	72.30	62.03
Singapore (Cargoes FOB)						
Naphtha		57.01	62.43	5.42	83.91	67.99
Premium gasoline	(unleaded 95)	92.30	98.60	6.30	115.05	96.87
Regular gasoline	(unleaded 92)	87.43	93.13	5.70	111.02	92.62
Jet/Kerosene		90.06	98.85	8.79	126.76	99.28
Gasoil/Diesel	(50 ppm)	91.91	101.39	9.48	134.94	100.79
Fuel oil	(180 cst)	90.45	99.55	9.10	129.75	96.80
Fuel oil	(380 cst 3.5% S)	65.25	73.39	8.14	76.63	65.70

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

Tanker Market

The tanker market drifted lower in July with Aframax and Suezmax spot freight rates approaching the lowest levels seen so far this year on diminished activities for these vessels in the Atlantic basin. Aframax spot freight rates on the Mediterranean-to-Northwest Europe route declined 22%, while Suezmax rates on the US Gulf Coast-to-Europe route fell 11%.

Very lage crude carrier (VLCC) rates experienced less of a decline, as long-haul demand out of the Atlantic basin offset reduced activities out of the Middle East. Spot freight rates on the Middle East-to-East route declined 15% m-o-m. Overall, however, freight rates remain at elevated levels amid trade shifts supporting tonne-mile growth.

Clean rates were mixed, with activities in the Atlantic basin supporting the West of Suez market, while the return of Asian refineries from maintenance weighed on the East of Suez market. The intra-Med route was up 23% m-o-m.

Spot fixtures

Global spot fixtures declined sharply in July, falling 5.4 mb/d or 35% to average around 9.9 mb/d. Declines were seen across all monitored routes. Compared with the previous year, spot fixtures were 6.0 mb/d or 38% lower.

OPEC spot fixtures declined 5.0 mb/d, or almost 45%, to average 6.2 mb/d in July. Compared with the same month in 2022, fixtures were 5.1 mb/d, or 45% lower.

Middle East-to-East fixtures fell by almost half, dropping by 3.1 mb/d or 49%, to average 3.2 mb/d. Compared with the same month in 2022, eastward flows from the Middle East were 3.6 mb/d, or over 53% lower.

Spot fixtures on the **Middle East-to-West** route fell m-o-m by 0.2 mb/d, or about 17%, to an average of 1.1 mb/d. Y-o-y, fixtures declined 1.2 mb/d, or almost 54%.

Fixtures on routes **outside the Middle East** gave up the previous month's gains, declining m-o-m by 1.8 mb/d, or 47%, to average 2.0 mb/d. Compared to the same month last year, fixtures on the route were 0.3 mb/d, or 13% lower.

				Change
Spot fixtures	May 23	Jun 23	Jul 23	Jul 23/Jun 23
All areas	13.67	15.22	9.85	-5.37
OPEC	9.32	11.27	6.23	-5.04
Middle East/East	4.62	6.24	3.17	-3.07
Middle East/West	1.23	1.27	1.06	-0.21
Outside Middle East	3.47	3.76	2.00	-1.76

Table 7 - 1: Spot fixtures, mb/d

Sources: Oil Movements and OPEC.

Sailings and arrivals

OPEC sailings declined further in July to an average of 22.6 mb/d. This represents a m-o-m drop of about 0.5 mb/d or 2%. However, compared to the same month last year, OPEC sailings were up by almost 1.0 mb/d or 4%. **Middle East sailings** averaged just under 17 mb/d in July, representing a marginal increase of close to 0.1 mb/d, or less than 1%. Y-o-y, sailings from the region increased by 0.3 mb/d, or close to 2%.

Crude arrivals in July rose on all monitored routes. **North American arrivals** saw a gain of 0.1 mb/d, or about 1%, to average 9.4 mb/d. Y-o-y, arrivals in North America were 0.8 mb/d, or 9% higher. **Arrivals in Europe** increased by 0.4 mb/d, or about 3% m-o-m, to an average of close to 13 mb/d. Compared to the same month last year, however, arrivals to Europe were 0.5 mb/d, or over 3% lower.

Far East arrivals averaged 18.4 mb/d, representing a gain of 1.3 mb/d, or almost 8%, compared with the previous month. This was around 5.1 mb/d, or about 38%, higher y-o-y. **Arrivals** in **West Asia** partly recovered from the previous month's decline, up 1.0 mb/d, or over 13%, to an average of 8.9 mb/d. Y-o-y, arrivals in the region were up by 0.9 mb/d, or 11%.

Tanker Market

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

				Change
Sailings	May 23	Jun 23	Jul 23	Jul 23/Jun 23
OPEC	23.06	23.05	22.58	-0.47
Middle East	17.11	16.89	16.98	0.09
Arrivals				
North America	9.04	9.31	9.43	0.12
Europe	12.19	12.57	12.96	0.39
Far East	17.24	17.08	18.37	1.29
West Asia	9.13	7.90	8.94	1.04

Sources: Oil Movements and OPEC.

Dirty tanker freight rates

Very large crude carriers (VLCCs)

VLCC spot rates partially relinquished the previous month's gains, declining 13% m-o-m on average, as reduced activity out of the Middle East weighed on large vessel demand. VLCC rates were down 8% compared to the same month last year.

On the **Middle East-to-East** route, rates declined m-o-m by 15% to average WS52 points. This represented a y-o-y decrease of 10%. Rates on the **Middle East-to-West** route fell 10% m-o-m to average WS37 points. However, compared to the same month last year, rates on the route were up 6%.

West Africa-to-East spot rates declined 12% m-o-m to average WS53 points in July. Compared with the same month of 2022, rates were 12% higher.

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

	Size				Change
VLCC	1,000 DWT	May 23	Jun 23	Jul 23	Jul 23/Jun 23
Middle East/East	230-280	48	61	52	-9
Middle East/West	270-285	36	41	37	-4
West Africa/East	260	49	60	53	-7

Sources: Argus and OPEC.

Suezmax

Suezmax rates in July fell a further 18% m-o-m amid weakening activity in the Atlantic basin for this vessel class. Compared with the same month of 2022, rates were down 35%.

Spot freight rates on the **West Africa-to-US Gulf Coast** (USGC) route declined by 24% m-o-m in July, after holding steady the previous month. Rates averaged WS81 points, representing a y-o-y decline of 35%.

Rates on the **USGC-to-Europe** route declined 11% to average WS74 points. Compared with the same month of 2022, they were 34% lower.

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

	Size				Change
Suezmax	1,000 DWT	May 23	Jun 23	Jul 23	Jul 23/Jun 23
West Africa/US Gulf Coast	130-135	106	106	81	-25
US Gulf Coast/ Europe	150	104	83	74	-9

Sources: Argus and OPEC.

Aframax

Aframax spot freight rates continued to retreat in July, with declines on all routes for the second month in a row. On average, Aframax rates fell 19% in July. Compared with the same month of 2022, rates were down by 43%.

Rates on the **Indonesia-to-East route** dropped 14% m-o-m to an average WS125 in July. Compared with the same month last year, rates were 32% lower.

Spot rates on the Caribbean-to-US East Coast (USEC) route continued to decline from the very strong levels seen in May, down by 21% to average WS133 points in July. Y-o-y, rates were down by around 46%.

Table 7 - 5. Dirty Altamax spot talker neight fates, W5									
	Size				Change				
Aframax	1,000 DWT	May 23	Jun 23	Jul 23	Jul 23/Jun 23				
Indonesia/East	80-85	154	146	125	-21				
Caribbean/US East Coast	80-85	256	169	133	-36				
Mediterranean/Mediterranean	80-85	179	145	120	-25				
Mediterranean/Northwest Europe	80-85	157	141	110	-31				

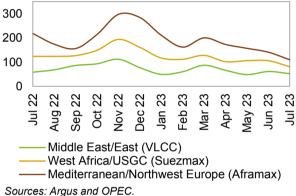
Sources: Argus and OPEC.

Cross-Med spot freight rates declined by 17% m-o-m to average W120 points. This represented a 43% decline y-o-y. On the Mediterranean-to-Northwest Europe (NWE) route, rates fell 22% m-o-m to average WS110 points. Compared with the same month of 2022, rates were down by around 50%.

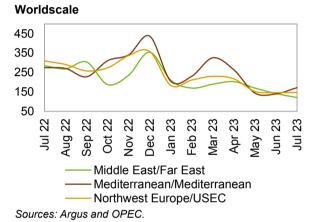








monthly average



Clean tanker freight rates

Clean rates were mixed, with activities in the Atlantic basin supporting the West of Suez market, while the return of Asian refineries from maintenance weighed on the East of Suez market. On average, rates rose 5% m-o-m but were down 49% compared with July 2022 levels.

	Size				Change
East of Suez	1,000 DWT	May 23	Jun 23	Jul 23	Jul 23/Jun 23
Middle East/East	30-35	170	142	121	-21
Singapore/East	30-35	235	181	171	-10
West of Suez					
Northwest Europe/US East Coast	33-37	152	146	147	1
Mediterranean/Mediterranean	30-35	144	140	172	32
Mediterranean/Northwest Europe	30-35	154	150	182	32

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

Sources: Argus and OPEC.

Rates on the Middle East-to-East route declined by 15% m-o-m to average WS121. Y-o-y, rates were 58% lower. Clean spot freight rates on the Singapore-to-East route fell 6% m-o-m to average WS171. This was down 57% compared with the same month of 2022.

Spot freight rates on the NWE-to-USEC route rose 1% m-o-m to average WS147 points in July but were 52% lower y-o-y. Rates for the Cross-Med route rose 23% to average WS172 points, while rates on the Med-to-NWE route increased 21% to average WS182 points. Compared with the same month of 2023, rates were lower by 37% and 36%, respectively.

Crude and Refined Products Trade

Preliminary data shows that US crude imports remained broadly unchanged at strong levels in July, averaging 6.5 mb/d, with higher flows from the Middle East and West Africa. US crude exports fell back below 4 mb/d in July, amid reduced flows to Asia. Product exports surged to a new record high of 6.6 mb/d, according to preliminary data, amid higher flows of gasoline and diesel to Mexico.

China's crude imports jumped to the second-highest rate on record in June, averaging 12.7 mb/d. Product imports were broadly steady near the previous month's high levels, averaging 2.4 mb/d. Gains in LPG, diesel, and jet fuel helped offset a sharp drop in naphtha. Product exports declined by almost 6% to an average of 1.2 mb/d amid sharp declines in gasoline and diesel flows. Preliminary customs data for July show China's crude imports fell to a six-month low of 10.3 mb/d, representing a m-o-m decline of almost 2.4 mb/d, as higher inventories weighed in import needs.

India's crude imports declined m-o-m for the fourth month in a row to an average of 4.7 mb/d in June, as the country moved towards the lower demand monsoon season. Product imports edged marginally higher, averaging 1.0 mb/d. Gains were supported by a jump in gasoline inflows, which offset a decline in LPG. Product exports declined by 2% to an average of 1.3 mb/d amid a sharp drop in diesel outflows.

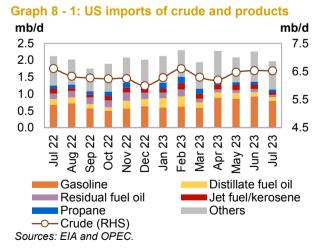
Japan's crude imports declined for the second consecutive month to reach a 12-month low of 2.3 mb/d in June. Product imports, including LPG, partly recovered from the previous month's decline, averaging 896 tb/d. Inflows of gasoline reached a record high following a series of refinery outages. Product exports were broadly flat, averaging 387 tb/d in June.

Preliminary estimates show OECD Europe crude imports showing strength at the start of 3Q23. Product imports were seen down slightly, as the decline in gasoline inflows outpaced gains in diesel imports.

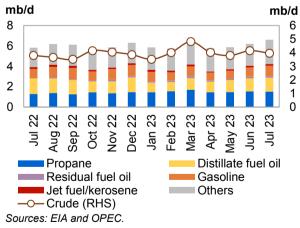
US

Preliminary data shows that **US crude imports** remained broadly unchanged at strong levels in July, averaging 6.5 mb/d, with higher flows from the Middle East and West Africa. Compared with the same month last year, crude imports were about 1% lower.

Canada remained the **top supplier** of crude in May, with a share of 62%, according to the latest monthly data from the US Energy Information Administration (EIA). Mexico was second with 11% and Saudi Arabia was third with a 5% share.



Graph 8 - 2: US exports of crude and products



US crude exports fell back below 4 mb/d in July, amid reduced flows to Asia. Crude outflows declined 0.2 mb/d, or over 4% m-o-m. Compared to the same month last year, exports were 0.2 mb/d, or 4%, higher.

In terms of **destination**, the latest EIA monthly data shows Europe receiving a 46% share of US crude exports in May. Canada took 8% and both South Korea and China took 7% each.

Based on preliminary weekly data, US **net crude imports** averaged 2.6 mb/d in July. This compares with almost 2.4 mb/d the month before and 2.8 mb/d in the same month last year.

On the **products** side, **imports** fell below 2 mb/d for the first time since March 2022, declining 0.3 mb/d or around 13% to an average of 1.97 mb/d. Compared with the same month last year, product inflows fell 0.2 mb/d, or around 7%.

Product exports surged to a new record high of 6.6 mb/d, according to preliminary data, amid higher flows of gasoline and diesel to Mexico. Compared with the previous month, exports jumped by 0.4 mb/d or around 7%. Y-o-y, product outflows were around 0.8 mb/d, or about 13%, higher.

As a result, preliminary data showed **US net product exports** averaging 4.6 mb/d in July, compared with 3.9 mb/d in June and 3.7 mb/d in the same month last year.

Preliminary data indicates that US **net crude and product exports** averaged 2.1 mb/d in July. This compares with 1.6 mb/d the month before and about 0.9 mb/d in the same month last year.

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

				Change
US	May 23	Jun 23	Jul 23	Jul 23/Jun 23
Crude oil	2.68	2.39	2.56	0.18
Total products	-3.78	-3.94	-4.64	-0.70
Total crude and products	-1.10	-1.56	-2.08	-0.52

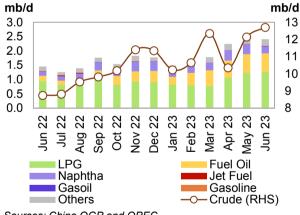
Note: Totals may not add up due to independent rounding. Sources: EIA and OPEC.

Looking ahead, US crude imports are likely to remain steady amid an active driving season, while US crude exports are seen recovering on renewed demand from Asia. US product exports are likely to be supported by higher demand from Asia.

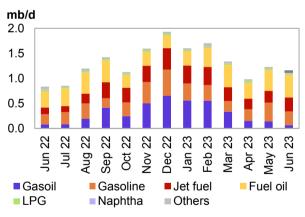
China

China's crude imports jumped to the second-highest on record in June, averaging 12.7 mb/d. Compared with the previous month, crude inflows rose 0.6 mb/d, or almost 5%. Y-o-y, China's crude imports increased by almost 4 mb/d, or over 45%. Preliminary customs data for July show China's crude imports fell to a six-month low of 10.3 mb/d, representing a m-o-m decline of almost 2.4 mb/d.









Sources: China OGP and OPEC.

In terms of **crude imports by source**, Russia remained in the top spot in June with 20%. Saudi Arabia was second, with a share of 15%, while Malaysia was third with almost 11%.

Product imports were broadly steady near the previous month's high levels, averaging 2.4 mb/d, representing a loss of less than 2%. Gains in LPG, diesel, and jet fuel helped offset a sharp drop in naphtha. Compared to the same period last year, imports were 1.0 mb/d, or around 66%, higher.

Sources: China OGP and OPEC.

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

				Change
China	Apr 23	May 23	Jun 23	Jun 23/May 23
Crude oil	10.35	12.11	12.67	0.56
Total products	1.26	1.23	1.25	0.02
Total crude and products	11.61	13.33	13.92	0.59

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

Product exports declined by almost 6% to an average of 1.2 mb/d. Gasoline and diesel flows declined sharply, offsetting gains in jet fuel, fuel oil and naphtha. Compared to the same period last year, product exports were 0.3 mb/d or 39% higher.

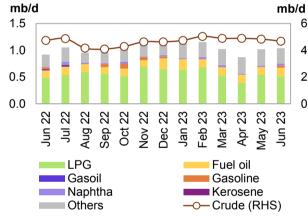
Looking ahead, China's crude imports are expected to fall back from near-record highs, amid ample inventories, dwindling quotas, and uncertainties regarding the pace of the recovery in Chinese oil demand. Product exports are expected to recover amid small increases across major products.

India

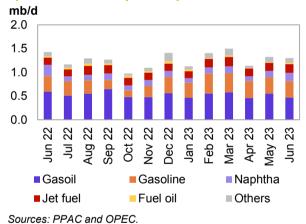
India's crude imports declined m-o-m for the fourth month in a row to an average of 4.7 mb/d in June, as the country moved into the lower demand monsoon season. Compared to the previous month, crude inflows were down 156 tb/d, or over 3%. Y-o-y, crude imports slipped by just over 1%.

In terms of **crude imports by source**, Kpler data shows Russia was the top supplier of crude to India in June with a share of 45%. Iraq was second, with 17%, followed by Saudi Arabia with 16%.

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



Graph 8 - 6: India's exports of products



In terms of **products**, **imports** continued to edge higher, up by about 2% to an average of 1.0 mb/d in June. The increase was driven largely by a jump in gasoline inflows, which offset a decline in LPG. Compared with the same month last year, product imports were 120 tb/d or 13% higher.

Product exports declined by about 2% to an average of 1.3 mb/d m-o-m. The decline was due to a sharp drop in diesel outflows, partly offset by gains in naphtha and fuel oil. Y-o-y, product exports fell by 128 tb/d, or almost 9%.

As a result, India remained a **net product exporter** in June at 262 tb/d, which compares to 303 tb/d the month before. In June 2022, India's net exports averaged 510 tb/d.

Table 0 - 5. India 5 crude and product net imports, inb/d				
				Change
India	Apr 23	May 23	Jun 23	Jun 23/May 23
Crude oil	4.89	4.84	4.68	-0.16
Total products	-0.27	-0.30	-0.26	0.04
Total crude and products	4.62	4.53	4.42	-0.11

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

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.

Sources: PPAC and OPEC.

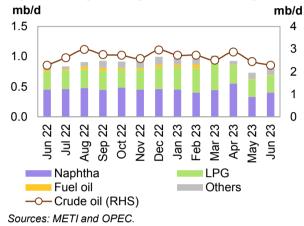
Looking ahead, India's crude imports from Russia potentially topped out in May, declining in June and July. Total crude inflows in July are seen lower with the start of refinery turnarounds. Meanwhile, product imports are seen higher on increased inflows of LPG, while exports are likely to remain steady, at levels seen in recent months.

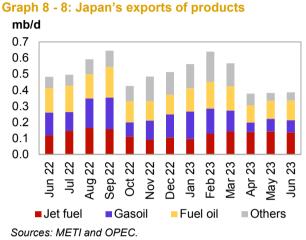
Japan

Japan's crude imports declined for the second consecutive month to reach a 12-month low of 2.3 mb/d in June, falling 0.2 mb/d or around 7% m-o-m. Crude imports marked a similarly low level in the same month last year.

In terms of **crude imports by source**, Saudi Arabia resumed the top spot in June, with a share of over 41%. The United Arab Emirates was second, with over 37%, followed by Kuwait with about 10%.

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





Product imports, including LPG, partly recovered from the previous month's decline, averaging 896 tb/d. This represented an increase of 166 tb/d or over 23%. Inflows of gasoline reached a record high following a series of refinery outages. Compared to the same month last year, imports rose 76 tb/d or 9%.

Product exports, including LPG, were broadly flat, averaging 387 tb/d in June. Gains in kerosene and fuel oil were offset by declines in LPG and jet fuel. Compared with the same month last year, outflows declined by 96 tb/d or almost 20%.

Consequently, Japan's **net product imports**, including LPG, averaged 509 tb/d in June. This compares with 347 tb/d the month before and 337 tb/d in June 2022.

				Change
Japan	Apr 23	May 23	Jun 23	Jun 23/May 23
Crude oil	2.87	2.45	2.28	-0.17
Total products	0.55	0.35	0.51	0.16
Total crude and products	3.42	2.79	2.79	0.00
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Table 8 - 4: Japan's crude and product net imports, mb/d

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

Sources: METI and OPEC.

Looking ahead, Japan's crude imports are expected to pick up in July but remain below levels seen over most of last year. Product exports are seen increasing further in July amid higher flows of fuel oil to China.

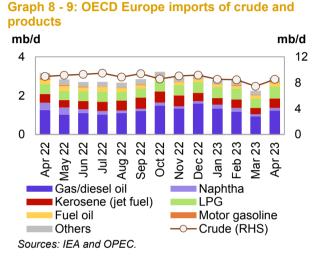
OECD Europe

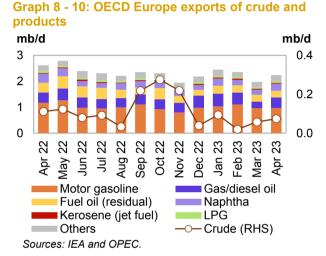
The latest regional data shows **OECD Europe imports** recovered the previous month's losses, averaging 8.5 mb/d in **April**. Crude flows into the region jumped by almost 1.1 mb/d, or about 15% m-o-m. However, crude imports were down 0.4 mb/d, or almost 5%, from the elevated levels seen in the same month last year.

In terms of **import sources** from outside the region, the US was the top supplier in March with over 1.5 mb/d. Kazakhstan and Saudi Arabia came in second and third, respectively, with 0.9 mb/d each.

Crude exports averaged 74 tb/d, as crude continued to be consumed in the region. This represented a m-o-m increase of 16 tb/d. Y-o-y, crude exports out of the region were 37 tb/d lower. China was the destination for April crude exports outside the region.

Net crude imports averaged 8.5 mb/d in April, compared with 7.4 mb/d the month before and almost 8.9 mb/d in April 2022.





In terms of **products**, **imports** jumped to a four-month high of 2.9 mb/d. This reflects a 0.7 mb/d or about 30% increase m-o-m. All major products contributed to the increase, led by diesel and jet fuel. Compared with April 2022, product inflows were down by 0.2 mb/d or about 7%.

Product exports partly recovered from the previous month's decline, averaging 2.2 mb/d amid increased diesel and naphtha flows. Compared to the previous month, product outflows were 0.3 mb/d or almost 13% higher, while y-o-y exports were 0.4 mb/d or about 15% lower.

Net product imports averaged 0.7 mb/d in April, compared with net imports of 0.3 mb/d the month before and 0.5 mb/d in April 2022.

Combined, **net crude and product imports** averaged almost 9.2 mb/d in April. This compares with 7.7 mb/d the month before and 9.4 mb/d in April 2022.

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

				Change
OECD Europe	Feb 23	Mar 23	Apr 23	Apr 23/Mar 23
Crude oil	8.44	7.39	8.46	1.06
Total products	0.46	0.27	0.70	0.43
Total crude and products	8.90	7.66	9.16	1.49

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

Sources: IEA and OPEC.

Looking ahead, preliminary estimates show OECD Europe crude imports showing strength at the start of 3Q23. Meanwhile, product imports were seen down slightly, as the decline in gasoline inflows outpaced gains in diesel imports.

Eurasia

Total crude oil exports from Russia and Central Asia averaged 6.6 mb/d in June. This represents a loss of almost 0.4 mb/d, or over 5%, compared to the previous month. Flows were broadly unchanged compared with the same month last year.

Crude exports through the **Transneft system** fell in June, with losses on all outlets except the Druzhba pipeline. Outflows averaged almost 3.9 mb/d, representing a m-o-m decline of 316 tb/d, or about 8%. Compared with the same month last year, exports were 502 tb/d, or 11%, lower. Exports from the **Baltic Sea** led declines, falling by 0.3 mb/d or 16% to average 1.5 mb/d. Flows from Primorsk fell 221 tb/d, or 20%, to average 0.9 mb/d. Exports from Ust-Luga declined 76 tb/d, or about 10%, to average 653 tb/d. Shipments from the **Black Sea** port of Novorossiysk slipped 15 tb/d or 2% to average of 694 tb/d.

In contrast, shipments via the **Druzhba** pipeline rose 25 tb/d or over 9% to average 300 tb/d in June. Compared to the same month last year, exports on the pipeline were down by 0.4 mb/d, or 57%, reflecting trade dislocations. Exports to mainland China via the **ESPO pipeline** rose 19 tb/d, or about 4%, to average 569 tb/d in June. This was about 8% lower than the same month last year. Flows to the Pacific port of **Kozmino** declined 49 tb/d, or over 5% m-o-m, to average 832 tb/d. This was about 4% lower than the same month last year.

In the **Lukoil system**, exports via the Varandey offshore platform in the Barents Sea increased m-o-m by almost 13% to average 123 tb/d in June. There were no exports from the Kaliningrad terminal for the seventh month in a row.

On other routes, the combined **Russia's Far East** exports from the De Kastri and Aniva ports decreased by about 14% to average 233 tb/d in June. This was a 158 tb/d, or 208%, gain compared to the volumes shipped in the same month last year, during a period when De Kastri flows fell to zero.

Central Asian exports averaged 212 tb/d in June, a decline of 16 tb/d, or about 7%, from the month before, and a decline of over 1% y-o-y.

Black Sea total exports from the **CPC terminal** dropped by about 2%, or 29 tb/d, to average 1.4 mb/d in June. This was a decline of 317 tb/d or 29% compared with the same month last year. Flows on the Supsa pipeline remained at zero in June. Exports via the **Baku-Tbilisi-Ceyhan (BTC) pipeline** increased in June, up by over 4%, or 30 tb/d, to average 651 tb/d.

Total product exports from Russia and Central Asia declined by less than 1% m-o-m, to average 2.2 mb/d in June. M-o-m losses were driven by primarily naphtha but also fuel oil and jet fuel, which offset gains in gasoil and gasoline. Y-o-y, total product exports declined 10%, or 259 tb/d, in June, driven by lower exports of naphtha and fuel oil.

Commercial Stock Movements

Preliminary June 2023 data sees total OECD commercial oil stocks up m-o-m by 4.2 mb. At 2,828 mb, they were 74 mb lower than the latest five-year average and 119 mb below the 2015–2019 average. Within the components, crude stocks fell by 5.1 mb, m-o-m, while products stocks rose by 9.3 mb.

OECD commercial crude stocks stood at 1,395 mb in June. This was 18 mb below the latest five-year average and 70 mb lower than the 2015–2019 average. Total product inventories rose by 9.3 mb in June to stand at 1,433 mb. This is 55 mb lower than the latest five-year average and 49 mb below the 2015–2019 average.

In terms of days of forward cover, OECD commercial stocks fell m-o-m by 0.1 days in June to stand at 60.4 days. This is 3.2 days above the June 2022 level, but 2.7 days lower than the latest five-year average and 1.4 days less than the 2015–2019 average.

Preliminary data for July 2023 showed that total US commercial oil stocks rose m-o-m by 4.9 mb to stand at 1,266 mb. This is 50.6 mb, or 4.2%, higher than the same month in 2022, but 27.8 mb, or 2.1%, below the latest five-year average. Crude stocks fell by 12.4 mb, while product stocks rose by 17.3 mb, m-o-m.

OECD

Preliminary June 2023 data sees total OECD Graph 9 - 1: OECD commercial oil stocks commercial oil stocks up m-o-m by 4.2 mb. At 2,828 mb, they were 164 mb higher than the same time one year ago, but 74 mb lower than the latest five-year average and 119 mb below the 2015–2019 average. Historical range 2018-22

Within the components, crude stocks fell by 5.1 mb, m-o-m, while products stocks rose by 9.3 mb. Within OECD regions, total commercial oil stocks in June increased in OECD America and OECD Asia Pacific, while they fell in OECD Europe.

OECD commercial **crude stocks** stood at 1,395 mb in June. This was 96 mb higher than the same time a year ago, but 18 mb below the latest five-year average and 70 mb lower than the 2015–2019 average.

mb mb 3.300 3.300 3,200 3,200 **Historical range** 3,100 3,100 2018-22 3,000 3,000 2,900 2.900 -0 2.800 0 2.800 2,700 2,700 2,600 2,600 2,500 2,500 Jun Aug Dec Feb ٨ay In Sep Oct ş Jan Var Apr 2021 2022 ----- Average 2018-22

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

M-o-m, OECD Americas saw a crude stock draw of 8.6 mb, while stocks in OECD Asia Pacific rose by 3.5 mb. Meanwhile, OECD Europe stocks in June remained unchanged m-o-m.

Total product inventories rose by 9.3 mb in June to stand at 1,433 mb. This is 68 mb above the same time a year ago, but 55 mb lower than the latest five-year average and 49 mb below the 2015–2019 average. M-o-m, product stocks in OECD Americas and OECD Asia Pacific witnessed a product stock build of 9.9 mb and 1.4 mb, respectively, while product stocks in OECD Europe fell by 2.0 mb.

					Change
OECD stocks	Jun 22	Apr 23	May 23	Jun 23	Jun 23/May 23
Crude oil	1,299	1,407	1,400	1,395	-5.1
Products	1,365	1,411	1,424	1,433	9.3
Total	2,664	2,819	2,824	2,828	4.2
Days of forward cover	57.2	61.1	60.5	60.4	-0.1

Table 9 - 1: OECD commercial stocks, mb

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

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

In terms of **days of forward cover**, OECD commercial stocks fell m-o-m by 0.1 days in June to stand at 60.4 days. This is 3.2 days above the June 2022 level, but 2.7 days lower than the latest five-year average and 1.4 days less than the 2015–2019 average.

Within OECD regions, OECD Americas stood 3.5 and OECD Europe 2.9 days below the latest five-year average, standing at 59.2 days and 67.4 days respectively, while OECD Asia-Pacific was 0.6 days above the latest five-year average, standing at 51.1 days.

OECD Americas

OECD Americas' total commercial stocks rose by 1.3 mb m-o-m in June to settle at 1,515 mb. This is 78 mb higher than the same month in 2022, but 33 mb below the latest five-year average.

Commercial **crude oil stocks** in OECD Americas dropped m-o-m by 8.6 mb in June to stand at 758 mb, which is 25 mb higher than in June 2022, but 18 mb below the latest five-year average. The monthly drop in crude oil stocks can be attributed to higher crude runs in the US, which increased by around 150 tb/d to 16.91 mb/d.

By contrast, **total product stocks** in OECD Americas rose m-o-m, increasing by 9.9 mb in June to stand at 757 mb. This is 54 mb higher than the same month in 2022, but 15 mb below the latest five-year average. Lower overall consumption in the region was behind the product stock build.

OECD Europe

OECD Europe's total commercial stocks fell m-o-m by 2.0 mb in June to settle at 942 mb. This is 32 mb higher than the same month in 2022, but 40 mb below the latest five-year average.

OECD Europe's **commercial crude stocks** remained unchanged m-o-m to end June at 435 mb. This is 21 mb higher than one year ago, but 2.3 mb below the latest five-year average.

Europe's **product stocks** fell m-o-m by 2.0 mb to end June at 508 mb. This is 11 mb above the same time a year ago, but 38 mb below the latest five-year average.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks rose m-o-m by 4.9 mb in June to stand at 371 mb. This is 53 mb higher than the same time a year ago, but in line with the latest five-year average.

OECD Asia Pacific's **crude inventories** rose m-o-m by 3.5 mb to end June at 202 mb. This is 50 mb higher than one year ago, and 2.0 mb above the latest five-year average.

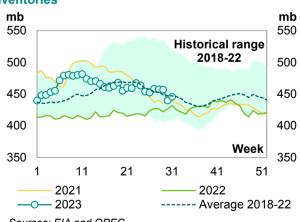
OECD Asia Pacific's **product inventories** also rose by 1.4 mb m-o-m to end June at 169 mb. This is 3.3 mb higher than one year ago, but 2.0 mb below the latest five-year average.

US

Preliminary data for July 2023 showed that total Graph 9 - 2: US weekly commercial crude oil US commercial oil stocks rose m-o-m by 4.9 mb to inventories stand at 1,266 mb. This is 50.6 mb, or 4.2%, higher than the same month in 2022, but 27.8 mb, or 2.1%, below the latest five-year average. Crude stocks fell by 12.4 mb, while product stocks rose by 17.3 mb. 500

US commercial **crude stocks** in July stood at 439.8 mb. This is 15.6 mb, or 3.7%, higher than the same month of 2022, but 7.1 mb, or 1.6%, less than the latest five-year average. The monthly drop in crude oil stocks can be attributed to higher crude runs, which increased by around 190 tb/d to 17.09 mb/d.

By contrast, **total product stocks** rose in July to stand at 826.3 mb. This is 35.1 mb, or 4.4%, higher than July 2022 levels, but 20.7 mb, or 2.4%, lower than the latest five-year average. The product stock build could be attributed to lower product consumption.



Sources: EIA and OPEC.

Gasoline stocks fell m-o-m by 0.4 mb in July to settle Graph 9 - 3: US weekly gasoline inventories at 219.1 mb. This is 6.5 mb, or 2.9%, less than the same month of 2022 and 16.2 mb, or 6.9%, below the latest five-year average.

Residual fuel oil stocks also fell m-o-m by 3.4 mb in July. At 27.5 mb. this was 1.6 mb. or 5.5%. lower than a year earlier, and 3.4 mb, or 10.9%, below the latest five-year average

Jet fuel stocks also fell m-o-m by 0.3 mb, ending July at 41.1 mb. This is 0.2 mb, or 0.4%, lower than the same month in 2022, and 0.9 mb, or 0.2%, below the latest five-year average.

By contrast, distillate stocks rose m-o-m, increasing by 3.8 mb in July to stand at 117.2 mb. This is 4.6 mb, or 4.1%, higher than the same month of 2022, but 22.5 mb, or 16.1%, below the latest five-year average.



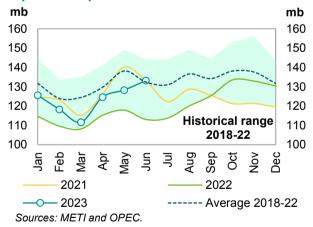
					Change
US stocks	Jul 22	May 23	Jun 23	Jul 23	Jul 23/Jun 23
Crude oil	424.2	460.8	452.2	439.8	-12.4
Gasoline	225.6	222.1	219.5	219.1	-0.4
Distillate fuel	112.5	113.1	113.4	117.2	3.8
Residual fuel oil	29.1	32.8	30.9	27.5	-3.4
Jet fuel	41.2	42.5	41.4	41.1	-0.3
Total products	791.2	799.2	809.0	826.3	17.3
Total	1,215.4	1,260.0	1,261.2	1,266.1	4.9
SPR	468.0	354.4	347.2	346.8	-0.4

Sources: EIA and OPEC.

Japan

In Japan, total commercial oil stocks in June Graph 9 - 4: Japan's commercial oil stocks rose m-o-m by 4.9 mb to settle at 133.2 mb. This is 20.1 mb, or 17.8%, higher than the same month in 2022, and 0.8 mb, or 0.6%, above the latest five-year average. Crude and products stocks rose m-o-m by 3.5 mb and 1.4 mb respectively.

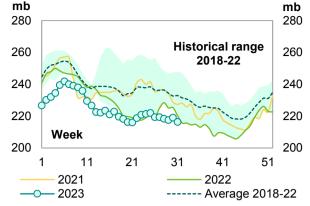
Japanese commercial crude oil stocks rose m-o-m by 3.5 mb in June to stand at 77.8 mb. This is 17.9 mb, or 30.0%, higher than the same month of 2022, and 3.0 mb, or 4.1%, above the latest five-year average. This crude stock build came on the back of lower crude runs, which decreased m-o-m by around 148 tb/d, or 6.4%, to stand at 2.32 mb/d.



Gasoline stocks fell m-o-m by 0.4 mb to stand at 10.2 mb in June. This was 0.3 mb, or 2.8%, above a year earlier, but 0.8 mb, or 7.6%, lower than the latest five-year average. The fall came on the back of higher gasoline consumption, which increased m-o-m by 0.2%.

By contrast, total residual fuel oil stocks rose m-o-m by 0.7 mb to end June at 12.7 mb. This is 1.3 mb, or 11.6%, higher than in the same month of 2022, and 0.4 mb, or 3.5%, above the latest five-year average. Within the components, fuel oil A and fuel oil B.C stocks rose by 0.5% and 8.6% m-o-m respectively.

Meanwhile, distillate stocks remained unchanged m-o-m to end June at 23.2 mb. This is 0.9 mb, or 3.9%, above the same month of 2022, but 1.7 mb, or 6.7%, below the latest five-year average.



Sources: EIA and OPEC.

Within distillate components, jet fuel and gasoil stocks dropped by 4.2% or 4.1% respectively, while kerosene stocks rose m-o-m by 6.1%.

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

					Change
Japan's stocks	Jun 22	Apr 23	May 23	Jun 23	Jun 23/May 23
Crude oil	59.8	70.0	74.2	77.8	3.5
Gasoline	10.0	10.5	10.6	10.2	-0.4
Naphtha	9.6	10.7	8.3	9.4	1.1
Middle distillates	22.3	22.1	23.2	23.2	0.0
Residual fuel oil	11.3	11.5	12.0	12.7	0.7
Total products	53.3	54.7	54.1	55.5	1.4
Total**	113.1	124.7	128.3	133.2	4.9

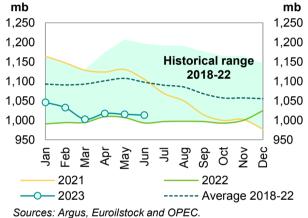
Note: * At the end of the month. ** Includes crude oil and main products only. Sources: METI and OPEC.

EU-14 plus UK and Norway

Preliminary data for June showed that total Graph 9 - 5: EU-14 plus UK and Norway total oil European commercial oil stocks fell m-o-m by stocks 2.0 mb to stand at 1,013 mb. At this level, they were 20.0 mb, or 2.0%, above the same month of 2022, but 84.5 mb, or 7.7%, lower than the latest five-year average. Crude stocks remained unchanged m-o-m, while product stocks fell by 2.0 mb m-o-m.

European crude inventories stood at 436.0 mb in June. This is 2.0 mb, or 0.5%, lower than the same month in 2022, and 42.4 mb, or 8.9%, below the latest five-year average. Crude oil inventories in June remained unchanged m-o-m, despite higher refinery throughput in the EU-14, plus the UK and Norway increasing m-o-m by around 100 tb/d to stand at 9.52 mb/d in June.





By contrast, total European product stocks fell by 2.0 mb m-o-m to end June at 577.0 mb. This is 22.0 mb or 1.0% higher than the same month of 2022, but 42.1 mb, or 6.8%, below the latest five-year average.

Gasoline stocks fell m-o-m by 1.0 mb in June to stand at 107.0 mb. At this level, they were 1.0 mb, or 0.9%, higher than the same time in 2022, but 3.7 mb, or 3.3%, below the latest five-year average.

Middle distillate stocks also fell m-o-m by 1.0 mb in June to stand at 382.0 mb. This is 24.0 mb, or 6.7%, higher the same month in 2022, but 31.8 mb, or 7.7%, lower than the latest five-year average.

Meanwhile, residual fuel stocks remained unchanged m-o-m in June to stand at 59.0 mb. This is 1.0 mb, or 1.7%, lower than the same month in 2022, and 5.8 mb, or 8.9%, below the latest five-year average.

Naphtha stocks also remained unchanged in June, ending the month at 29.0 mb. This is 2.0 mb, or 6.5%, lower than the June 2022 level, and 0.9 mb, or 2.9%, below the latest five-year average.

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

					Change
EU stocks	Jun 22	Apr 23	May 23	Jun 23	Jun 23/May 23
Crude oil	438.0	431.4	436.0	436.0	0.0
Gasoline	106.0	109.1	108.0	107.0	-1.0
Naphtha	31.0	30.3	29.0	29.0	0.0
Middle distillates	358.0	384.9	383.0	382.0	-1.0
Fuel oils	60.0	61.5	59.0	59.0	0.0
Total products	555.0	585.8	579.0	577.0	-2.0
Total	993.0	1,017.2	1,015.0	1,013.0	-2.0

Sources: Argus, Euroilstock and OPEC.

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

Singapore

In **June**, **total product stocks in Singapore** rose m-o-m by 0.4 mb to reach 42.4 mb. This is 1.9 mb, or 4.3%, lower than the same month in 2022 and 4.0 mb, or 8.6%, below the latest five-year average.

Light distillate stocks fell m-o-m by 0.9 mb in June to stand at 14.2 mb. This is 1.3 mb, or 8.4%, lower than the same month of 2022, but 0.7 mb, or 5.6 %, above the latest five-year average.

Middle distillate stocks also fell by 0.1 mb m-o-m in June to stand at 7.9 mb. This is in line with the last year at the same time, but 3.2 mb, or 28.7%, lower than the latest five-year average.

By contrast, **residual fuel oil stocks** rose m-o-m by 1.4 mb, ending June at 20.3 mb. This is 0.6 mb, or 2.9% lower than June 2022 and 1.6 mb, or 7.2%, less than the latest five-year average.

ARA

Total product stocks in ARA fell m-o-m by 2.1 mb in **June.** At 43.7 mb, they were 4.3 mb, or 10.9%, higher than the same month in 2022, but 2.0 mb, or 4.4%, lower than the latest five-year average.

Gasoline stocks in June rose by 0.1 mb m-o-m to stand at 11.5 mb. This is 1.2 mb, or 11.1%, higher than the same month of 2022 and 1.7 mb, or 17.5%, higher than the latest five-year average.

Fuel oil stocks also increased by 1.1 mb m-o-m in June to stand at 9.2 mb, which is 1.2 mb, or 14.3%, higher than in June 2022 and 0.1 mb, or 1.4% above the latest five-year average.

By contrast, **gasoil stocks** fell by 2.2 mb m-o-m, ending June at 14.9 mb. This is 3.6 mb, or 31.6%, higher than June 2022, but 2.1 mb, or 12.4%, less than the latest five-year average.

Jet oil stocks also fell by 0.7 mb m-o-m to stand at 6.0 mb. This is 0.3 mb, or 5.2%, lower than levels of June 2022 and 0.8 mb, or 12.1% less than the latest five-year average.

Fujairah

During the week ending 31 July 2023, **total oil product stocks in Fujairah** rose w-o-w by 0.95 mb to stand at 19.72 mb, according to data from Fed Com and S&P Global Commodity Insights. At this level, total oil stocks were 3.67 mb lower than at the same time a year ago.

Light distillate stocks rose w-o-w by 1.35 mb to stand at 7.58 mb, which is 0.01 mb lower than a year ago.

By contrast, **middle distillate stocks** fell w-o-w by 0.17 mb to stand at 2.65 mb, which is 0.66 mb lower than the same time last year.

Heavy distillate stocks also fell by 0.23 mb w-o-w to stand at 9.49 mb, which is 2.99 mb lower than the same period a year ago.

Balance of Supply and Demand

Demand for OPEC crude in 2023 is revised down by 0.1 mb/d from the previous assessment to stand at 29.3 mb/d. This is around 0.9 mb/d higher than in 2022.

According to secondary sources, OPEC crude production averaged 28.8 mb/d in 1Q23, which is 0.3 mb/d higher than the demand for OPEC crude. In 2Q22, OPEC crude production averaged 28.3 mb/d, which is 0.1 mb/d lower than the demand for OPEC crude.

Demand for OPEC crude in 2024 is also revised down by 0.1 mb/d from the previous assessment to stand at 30.1 mb/d, 0.8 mb/d higher than the estimated level in 2023.

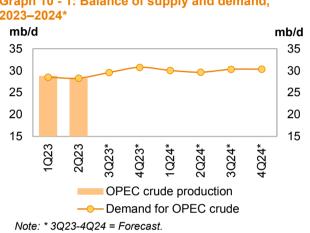
Balance of supply and demand in 2023

Demand for OPEC crude in 2023 is revised down by
0.1 mb/d from the previous assessment to stand at
29.3 mb/d. This is around 0.9 mb/d higher than in
2022.Graph 10 - 1: Balance of supply and demand,
2023–2024*
mb/d
35

Compared with the previous assessment, 2Q23 and 3Q23 were revised down by 0.1 mb/d and 0.4 mb/d, respectively, while both 1Q23 and 4Q23 remained unchanged.

Compared with the same quarters in 2022, demand for OPEC crude in 2Q23, 3Q23 and 4Q23 are expected to be higher by 0.3 mb/d, 1.3 mb/d and 2.0 mb/d, respectively. Meanwhile, OPEC crude in 1Q23 is estimated to remain as the same level as in 1Q22.

According to secondary sources, OPEC crude production averaged 28.8 mb/d in 1Q23, which is



Source: OPEC.

0.3 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.

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

							Change
	2022	1Q23	2Q23	3Q23	4Q23	2023	2023/22
(a) World oil demand	99.57	101.65	101.18	101.96	103.21	102.01	2.44
Non-OPEC liquids production	65.76	67.70	67.39	66.96	67.03	67.27	1.51
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	71.15	73.13	72.87	72.39	72.45	72.71	1.56
Difference (a-b)	28.42	28.52	28.31	29.57	30.76	29.30	0.88
OPEC crude oil production	28.85	28.82	28.25				
Balance	0.44	0.30	-0.06				

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

Change

Balance of supply and demand in 2024

Demand for OPEC crude in 2024 is also revised down by 0.1 mb/d from the previous assessment to stand at 30.1 mb/d, 0.8 mb/d higher than the estimated level in 2023.

Compared with the previous assessment, 1Q24, 3Q24 and 4Q24 were revised down by 0.1 mb/d each, while 2Q24 is revised down by 0.2 mb/d.

Compared with the same quarters in 2023, demand for OPEC crude in 1Q24, 2Q24 and 3Q24 is forecast to be 1.5 mb/d, 1.3 mb/d and 0.7 mb/d higher, respectively, while 4Q24 is expected to be lower by 0.4 mb/d.

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

							Change
	2023	1Q24	2Q24	3Q24	4Q24	2024	2024/23
(a) World oil demand	102.01	103.68	103.35	104.64	105.32	104.25	2.25
Non-OPEC liquids production	67.27	68.14	68.16	68.84	69.48	68.66	1.39
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	72.71	73.63	73.70	74.34	74.98	74.16	1.45
Difference (a-b)	29.30	30.05	29.65	30.31	30.34	30.09	0.79

*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	2020	2021	2022		LGLU	0420		2020	19(2-1	2027	0 6(2-1	TQLT	2024
Americas	22.45	24.32	25.01	24.61	25.22	25.59	25.09	25.13	24.79	25.39	25.79	25.25	25.31
of which US	18.35	20.03	20.43	20.12	20.60	20.83	20.37	20.48	20.25	20.74	20.99	20.51	20.62
Europe	12.41	13.11	13.50	13.07	13.25	13.98	13.37	13.42	13.12	13.31	14.05	13.41	13.48
Asia Pacific	7.17	7.38	7.43	7.86	7.08	7.27	7.69	7.47	7.89	7.09	7.30	7.70	7.49
Total OECD	42.03	44.80	45.95	45.53	45.54	46.84	46.16	46.02	45.81	45.79	47.15	46.36	46.28
China	13.94	15.00	14.85	15.63	15.96	15.38	16.11	15.77	16.20	16.42	16.00	16.78	16.35
India	4.51	4.77	5.14	5.40	5.40	5.21	5.50	5.38	5.63	5.64	5.44	5.69	5.60
Other Asia	8.13	8.67	9.02	9.40	9.57	9.14	9.24	9.33	9.66	9.82	9.50	9.60	9.64
Latin America	5.90	6.25	6.44	6.60	6.55	6.73	6.68	6.64	6.79	6.73	6.95	6.84	6.83
Middle East	7.45	7.79	8.30	8.63	8.47	8.86	8.73	8.67	8.91	8.91	9.41	8.98	9.05
Africa	4.08	4.22	4.40	4.69	4.32	4.43	4.88	4.58	4.80	4.51	4.60	5.01	4.73
	3.39	3.62	4.40 3.56	3.69	4.32 3.45	3.60	4.00	4.50	3.75	3.56	3.75	3.94	3.75
Russia													
Other Eurasia	1.07	1.21	1.15	1.24	1.17	1.02	1.23	1.16	1.27	1.20	1.08	1.28	1.21
Other Europe	0.70	0.75	0.77	0.84	0.76	0.75	0.83	0.80	0.86	0.77	0.77	0.84	0.81
Total Non-OECD	49.16	52.28	53.62	56.12	55.64	55.13	57.06	55.99	57.88	57.56	57.50	58.96	57.97
(a) Total world demand	91.19	97.08	99.57		101.18		103.21	102.01	103.68	103.35			104.25
Y-o-y change	-9.09	5.89	2.49	2.20	2.88	2.47	2.20	2.44	2.03	2.17	2.68	2.10	2.25
Non-OPEC liquids production	04.07	05 40	00.07	07.00	07.07	00.05	00.45	00.4.4	00.00	00.70	00.40	00.47	00.00
Americas	24.87	25.46	26.87	27.90	27.97	28.25	28.45	28.14	28.66	28.70	29.16	29.47	29.00
of which US	17.76	18.06	19.23	20.10	20.56	20.34	20.45	20.36	20.68	20.90	21.17	21.33	21.02
Europe	3.92	3.79	3.57	3.66	3.62	3.80	3.94	3.75	3.94	3.78	3.79	3.89	3.85
Asia Pacific	0.52	0.51	0.48	0.45	0.45	0.48	0.47	0.46	0.47	0.44	0.45	0.44	0.45
Total OECD	29.31	29.77	30.92	32.01	32.04	32.53	32.86	32.36	33.07	32.92	33.40	33.80	33.30
China	4.16	4.32	4.48	4.63	4.63	4.50	4.50	4.56	4.58	4.57	4.54	4.54	4.56
India	0.78	0.78	0.77	0.76	0.78	0.79	0.78	0.78	0.79	0.79	0.79	0.78	0.79
Other Asia	2.53	2.42	2.30	2.31	2.27	2.34	2.36	2.32	2.30	2.27	2.25	2.25	2.27
Latin America	6.02	5.96	6.34	6.69	6.76	6.70	6.79	6.74	6.91	6.98	7.10	7.18	7.04
Middle East	3.15	3.19	3.29	3.27	3.29	3.29	3.30	3.29	3.34	3.33	3.32	3.32	3.33
Africa	1.41	1.34	1.29	1.24	1.28	1.33	1.31	1.29	1.30	1.33	1.36	1.37	1.34
Russia	10.54	10.80	11.03	11.20	10.85	9.93	9.57	10.38	10.20	10.32	10.45	10.56	10.38
Other Eurasia	2.91	2.93	2.83	3.00	2.93	2.98	2.98	2.97	3.03	3.02	3.00	3.04	3.02
Other Europe	0.12	0.11	0.11	0.11	0.11	0.11	0.10	0.11	0.10	0.10	0.10	0.10	0.10
Total Non-OECD	31.64	31.85	32.44	33.22	32.89	31.96	31.70	32.44	32.55	32.72	32.92	33.15	32.84
Total Non-OPEC production	60.95	61.61	63.36	65.23	64.92	64.49	64.56	64.80	65.62	65.64	66.32	66.96	66.14
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	65.76	67.70	67.39	66.96	67.03	67.27	68.14	68.16	68.84	69.48	68.66
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	71.15	73.13	72.87	72.39	72.45	72.71	73.63	73.70	74.34	74.98	74.16
Y-o-y change	-2.55	0.91	1.97	2.23	2.59	1.22	0.21	1.56	0.49	0.83	1.95	2.52	1.45
OPEC crude oil production													
(secondary sources)	25.72	26.35	28.85	28.82	28.25								
Total liquids production	94.00	95.53	100.01	101.96	101.12								
Balance (stock change and													
miscellaneous)	2.81	-1.55	0.44	0.30	-0.06								
OECD closing stock levels,													
mb													
Commercial	3,037	2,649	2,776	2,757	2,828								
SPR	1,541	1,484	1,214										
Total	4,578	4,133	3,990	,	4,023								
Oil-on-water	1,148	1,202	1,399		1,291								
Days of forward consumption in OECD, <i>days</i>		,	·		,								
Commercial onland stocks	68	58	60	61	60								
SPR	34	32	26		26								
Total	102	90	87	87	86								
Memo items			•.	•••									
(a) - (b)	22.92	27.90	28.42	28.52	28.31	29.57	30.76	29.30	30.05	29.65	30.31	30.34	30.09

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

2000	2004	2000	1000	2000	2000	4000	2002	1001	2024	2004	1001	200
2020	2021	2022	1Q23	2Q23	3Q23	4Q23	2023	1Q24	2Q24	3Q24	4Q24	2024
	-	-										0.05
	-	-										0.04
-	-	-	0.01		-0.09	-		0.01		-0.09	-	-0.04
-	-	-	-		-	-		-		-	-	0.01
-	-	-	0.04	0.02	-0.01	-	0.01	0.04	0.01	-0.01	-	0.01
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-		-	-	-	-		-	-	-
-	-	-	-	-0.08	-	-	-0.02	-	-0.08	-	-	-0.02
-	-	-	-	0.02	0.02	-	0.01	-	0.02	0.02	-	0.01
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	0.01	0.01	0.01	-0.06	0.02	0.01	-0.01	0.01	-0.06	0.02	0.01	-0.01
-	0.01	-	0.05	-0.04	0.01	0.01	-	0.04	-0.05	0.01	0.01	
-	0.01	-	0.04	-0.05	0.01	_	-	_	-	-	_	
-	0.01	0.02	0.02	0,02	0.03	0.03	0.02	0.02	0,02	0.02	0.02	0.02
-					-	-						0.05
-	- 0.01	0.02			_							-0.01
_	_		0.01			0.01	0.01	0.01				0.0
		0.02	0.01			0.02	0.02	0.02				0.02
-	0.01	0.02	0.01	0.01	0.03	0.02	0.02	0.02		0.02	0.02	0.04
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-			-	-	-	-	-	-	0.04
-		-										-0.01
-	-	-					0.01	0.01	0.02	0.01	0.02	0.01
-	-	-					-	-	-	-	-	
-		-					-					-0.01
-		-	-			-	0.10	0.10			0.10	0.10
-	-	-	-		0.03	-	-	-				
-	-	-	-	-		-	-	-				
-	-	-	-0.01	-		-		-			-	0.11
-	0.01	0.02	-	0.01	0.45	0.03	0.12	0.12	0.12	0.12	0.12	0.12
-	-	-	-	-	-	-	-	-	-	-	-	
-	0.01	0.02	-	0.01	0.45	0.03	0.12	0.12	0.12	0.12	0.12	0.12
-	-	-	-	-	-	-	-	-	-	-	-	
									0.40	0.40	0.40	
-												0.12
-	0.01	0.01	-0.05	-0.06	0.47	0.04	0.10	0.12	0.12	-0.33	0.10	
				0.00								
-		-	-									
-	0.01	0.02	-	-0.01								
	0.01	0.02	0.04	0.02								
-	0.01	0.02	-0.04	0.03								
-		-	-									
-		-	-									
-	-	-	-									
-	-	-	-									
-	-	-	-									
-	-	-	-									
		- -	-									
				- - 0.03 - 0.01 - 0.01 - 0.04 - 0.04 - 0.04 - 0.0 - 0.0 - 0.0 - 0.0 - 0.0 - 0.0 - 0.0 - 0.0 - 0.0 - 0.01 - 0.01 - 0.01 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02 - 0.01 - 0.01 - 0.01 - - - - - - - - - -<	Image: second	- - 0.03 0.08 0.08 - - 0.01 -0.09 -0.09 - - 0.01 -0.09 -0.01 - - 0.01 -0.09 -0.01 - - 0.01 0.02 -0.01 - - - - - - - - - - - - - - - - - - - - - -	- - 0.03 0.08 0.08 - - - 0.01 -0.09 0.09 - - - 0.01 -0.09 -0.09 - - - 0.01 -0.09 -0.09 - - - 0.01 0.02 -0.01 - - - - - 0.02 0.02 - - - - 0.02 0.02 0.02 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 0.01 0.02 0.02 0.02 0.03 0.03 0.03 - 0.01 0.02 0.02 0.27 - - - - 0.01	- - 0.03 0.08 0.08 0.08 0.08 0.04 - - 0.01 -0.09 - 0.04 - - 0.01 -0.09 - 0.04 - - 0.03 - - 0.01 - - 0.04 0.02 -0.01 - 0.01 - - - - - - 0.01 - 0.01 - - - - - - - - - 0.01 -	- - 0.03 0.08 0.08 0.04 0.01 - - 0.04 0.09 - 0.04 0.01 - - 0.04 0.02 0.01 - 0.01 - - 0.03 - - 0.01 - - 0.03 - - 0.01 - - 0.04 0.02 0.01 - 0.01 - - - - - - - 0.01 - - - - 0.02 0.02 0.01 - - - 0.01 - - - - 0.01 0.01 0.01 0.01 0.01	- - 0.03 0.08 0.08 0.05 0.03 0.08 - - 0.01 -0.09 0.09 - 0.04 0.01 -0.08 - - 0.01 -0.09 0.09 - 0.04 0.01 -0.03 - - 0.04 0.02 -0.01 - 0.01 0.04 0.01 - - - - - - 0.01 0.01 0.01 0.01 - - - - - - - 0.01	Image: second	- - - 0.03 0.08 0.08 - 0.05 0.04 0.08 0.04 0.08 0.08 0.04 0.01 0.09 0.09 0.09 0.04 0.01 0.09 0.09 0.01 0.04 0.01 0.09 0.09 0.01 0.09 0.09 0.01 0.09 0.09 0.01 0.00 0.01 0.00 0.01 0.00 0.01 0.00 0.01 0.00 0.01 0.00 0.01 0.00 0.01 0.01 0.00 0.01 0.00 0.01

Note: * This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the July 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

oil on water	ocks and	2020	2021	2022	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23
Closing sto	ck levels, mb											
OECD onlar	nd commercial	3,037	2,649	2,776	2,768	2,649	2,613	2,664	2,745	2,776	2,757	2,828
	Americas	1,613	1,470	1,487	1,523	1,470	1,407	1,436	1,469	1,487	1,486	1,515
	Europe	1,043	856	935	890	856	889	910	917	935	920	942
	Asia Pacific	380	324	353	355	324	317	318	359	353	351	371
OECD SPR		1,541	1,484	1,214	1,513	1,484	1,442	1,343	1,245	1,214	1,217	1,195
	Americas	640	596	374	620	596	568	495	418	374	373	349
	Europe	487	479	461	485	479	468	452	447	461	460	459
	Asia Pacific	414	409	378	408	409	406	395	380	378	383	388
OECD total		4,578	4,133	3,990	4,281	4,133	4,055	4,008	3,991	3,990	3,973	4,023
Oil-on-wate	r	1,148	1,202	1,399	1,169	1,202	1,231	1,304	1,407	1,399	1,413	1,291
Days of forv consumptio												
	on in OECD, days											
	nd commercial	68	58	60	59	58	58	57	60	61	61	60
		68 66	58 59	60 59	59 61	58 59	58 56	57 57	60 59	61 60	61 59	60 59
	nd commercial											
-	nd commercial Americas	66	59	59	61	59	56	57	59	60	59	59
-	nd commercial Americas Europe	66 80	59 63	59 69	61 64	59 65	56 66	57 65	59 69	60 72	59 69	59 67
OECD onlar	nd commercial Americas Europe	66 80 51	59 63 44	59 69 47	61 64 46	59 65 41	56 66 45	57 65 44	59 69 47	60 72 45	59 69 50	59 67 51
OECD onlar	nd commercial Americas Europe Asia Pacific	66 80 51 35	59 63 44 34	59 69 47 34	61 64 46 32	59 65 41 32	56 66 45 32	57 65 44 29	59 69 47 27	60 72 45 27	59 69 50 27	59 67 51 26
OECD onlar	Americas Europe Asia Pacific Americas	66 80 51 35 26	59 63 44 34 24	59 69 47 34 24	61 64 46 32 25	59 65 41 32 24	56 66 45 32 23	57 65 44 29 20	59 69 47 27 17	60 72 45 27 15	59 69 50 27 15	59 67 51 26 14

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		Change						Change						Change
production and OPEC NGLs	2022	2022/21	1Q23	2Q23	3Q23	4Q23	2023	2023/22	1Q24	2Q24	3Q24	4Q24	2024	2024/23
US	19.2	1.2	20.1	20.6	20.3	20.5	20.4	1.1	20.7	20.9	21.2	21.3	21.0	0.7
Canada	5.6	0.2	5.7	5.3	5.8	6.0	5.7	0.1	5.9	5.7	6.0	6.1	5.9	0.2
Mexico	2.0	0.1	2.1	2.1	2.1	2.0	2.1	0.1	2.0	2.0	2.0	2.0	2.0	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	1.4	27.9	28.0	28.2	28.5	28.1	1.3	28.7	28.7	29.2	29.5	29.0	0.9
Norway UK	1.9 0.9	-0.1 0.0	2.0 0.8	2.0 0.8	2.1 0.9	2.2 0.9	2.1 0.9	0.2 0.0	2.2 0.9	2.1 0.9	2.2 0.8	2.2 0.8	2.2 0.9	0.1 0.0
Denmark	0.9	0.0	0.0	0.8	0.9	0.9	0.9	0.0	0.9	0.9	0.0	0.0	0.9	0.0
Other OECD	0.7	0.0	0.7	0.8	0.8	0.8	0.1	0.0	0.1	0.1	0.1	0.1	0.8	0.0
OECD Europe	3.6	-0.2	3.7	3.6	3.8	3.9	3.8	0.2	3.9	3.8	3.8	3.9	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	0.5	0.5	0.5	0.0	0.5	0.4	0.5	0.4	0.5	0.0
Total OECD	30.9	1.2	32.0	32.0	32.5	32.9	32.4	1.4	33.1	32.9	33.4	33.8	33.3	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 Brunoi	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 Indonesia	0.1 0.8	0.0 0.0	0.1 0.9	0.1 0.8	0.1 0.8	0.1 0.8	0.1 0.8	0.0 0.0	0.1 0.8	0.1 0.8	0.1 0.8	0.1 0.8	0.1 0.8	0.0 0.0
Malaysia	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
Thailand	0.4	-0.1	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	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	2.3	2.4	2.3	0.0	2.3	2.3	2.3	2.3	2.3	-0.1
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	4.0	4.0	4.0	0.3	4.1	4.0	4.1	4.2	4.1	0.1
Colombia	0.8	0.0	0.8	0.8	0.7	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Ecuador	0.5	0.0 0.2	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5 0.5	0.5 0.5	0.5 0.6	0.5	0.0
Guyana Latin America	0.3	0.2	0.4	0.4	0.4	0.4 0.3	0.4 0.3	0.1 0.0	0.4	0.5	0.5	0.0	0.5 0.3	0.1 0.0
Latin America	6.3	0.4	6.7	6.8	6.7	6.8	6.7	0.4	6.9	7.0	7.1	7.2	7.0	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	1.1	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	0.1	0.1	0.0	0.0	0.1	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 Chad	0.1 0.1	0.0 0.0	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.0 0.0	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.0 0.0
Egypt	0.6	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.6	0.0
Ghana	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
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	0.2	0.2	0.2	0.2	0.1
Africa	1.3	0.0	1.2	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.4	1.4	1.3	0.0
Russia	11.0	0.2	11.2	10.9	9.9	9.6	10.4	-0.7	10.2	10.3	10.4	10.6	10.4	0.0
Kazakhstan	1.8	0.0	2.0	1.9	1.9	1.9	1.9	0.1	2.0	2.0	2.0	2.0	2.0	0.1
Azerbaijan Eurasia others	0.7 0.3	0.0 0.0	0.7	0.6 0.3	0.8 0.3	0.8 0.3	0.7 0.3	0.0 0.0	0.7 0.3	0.7 0.3	0.7 0.3	0.7 0.3	0.7 0.3	0.0 0.0
Other Eurasia	0.3 2.8	-0.1	3.0	0.3 2.9	3.0	3.0	3.0	0.0 0.1	3.0	3.0	3.0	3.0	3.0	0.0 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	32.0	31.7	32.4	0.0	32.6	32.7	32.9	33.2	32.8	0.4
Non-OPEC	63.4	1.7	65.2	64.9	64.5	64.6	64.8	1.4	65.6	65.6	66.3	67.0	66.1	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	67.4	67.0	67.0	67.3	1.5	68.1	68.2	68.8	69.5	68.7	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	73.1	72.9	72.4	72.5	72.7	1.6	73.6	73.7	74.3	75.0	74.2	1.5

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

Table 11 - 5: World rig count, units

				Change						Change
World rig count	2020	2021	2022	2022/21	4Q22	1Q23	2Q23	Jun 23	Jul 23	Jul/Jun
US	436	475	722	247	775	761	719	685	670	-15
Canada	90	133	174	41	186	221	119	158	186	28
Mexico	41	45	47	2	50	48	60	67	56	-11
OECD Americas	567	654	945	291	1,014	1,033	900	912	914	2
Norway	16	17	17	0	17	16	13	15	18	3
UK	6	8	10	2	10	11	13	12	11	-1
OECD Europe	59	58	65	7	67	67	67	68	68	0
OECD Asia Pacific	22	23	24	1	25	23	27	29	29	0
Total OECD	648	735	1,034	299	1,106	1,123	994	1,009	1,011	2
Other Asia*	187	174	186	12	188	193	210	209	207	-2
Latin America	58	91	119	28	130	127	122	118	117	-1
Middle East	57	57	62	5	65	62	61	59	60	1
Africa	43	42	57	15	60	60	56	55	57	2
Other Europe	12	9	10	1	13	11	11	11	11	0
Total Non-OECD	357	373	434	61	456	453	460	452	452	0
Non-OPEC rig count	1,005	1,108	1,468	360	1,562	1,576	1,454	1,461	1,463	2
Algeria	31	26	32	6	33	32	33	36	35	-1
Angola	3	4	7	3	9	9	9	9	10	1
Congo	1	0	1	1	1	1	2	2	2	0
Equatorial Guinea**	0	0	0	0	0	0	0	0	0	0
Gabon	3	2	3	1	3	3	3	3	3	0
Iran**	117	117	117	0	117	117	117	117	117	0
Iraq	47	39	51	12	55	60	62	62	62	0
Kuwait	45	25	27	2	28	24	25	24	27	3
Libya	12	13 7	7	-6	8	11 14	15	16	15 14	-1 0
Nigeria Saudi Arabia	11 93	7 62	10 73	3 11	10 80	78	13 83	14 81	86	-
Saudi Arabia UAE	93 54	62 42	47	5	80 52	53	83 57	56	52	5 -4
Venezuela	54 15	42	47	-3	3	3	37	3	3	-4 0
		-			-	-		-		
OPEC rig count	432	343	377	34	398	405	422	423	426	3
World rig count*** of which:	1,437	1,451	1,845	394	1,959	1,980	1,877	1,884	1,889	5
Oil	1,116	1,143	1,462	319	1,552	1,567	1,484	1,505	1,489	-16
Gas	275	275	352	319	374	376	1,484 347	329	353	-16 24
Others	275 46	33	352	-2	374	376	347 46	329 50	353 47	-3
Others	40	33	31	-2	33	3/	40	50	47	-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 b/d bp bb bcf	barrels barrels per day basis points billion barrels billion cubic feet
cu m	cubic metres
mb mb/d mmbtu	million barrels million barrels per day million British thermal units
mn	million
m-o-m mt	month-on-month metric tonnes
q-o-q	quarter-on-quarter
рр	percentage points
tb/d tcf	thousand barrels per day trillion cubic feet
y-o-y y-t-d	year-on-year 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				

Glossary of Terms

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
FX	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										
🗼 up t	5.87 in July			July 2023 June 2023 Year-to-date	7	31.06 75.19 79.56				
July OPEC cr	ude pro	duction		mb/d,	according to	secondary	sources			
Image: down 0.84 in July July 2023 27.31 June 2023 28.15							MA .			
Economic gro	owth rate	9					per cent			
	World	OECD	US	Euro-zone	Japan	China	India			
2023	2.7	1.2	1.8	0.6	1.1	5.2	5.6			
2024	2.6	0.9	0.7	0.8	1.0	4.8	5.9			
Supply and d	emand						mb/d			
2023			23/22	2024			24/23			
World demand		102.0	2.4	World demand		104.3	2.2			
Non-OPEC liquids	production	67.3	1.5	Non-OPEC liquid	s production	68.7	1.4			
OPEC NGLs		5.4	0.0	OPEC NGLs		5.5	0.1			
Difference		29.3	0.9	Difference		30.1	0.8			
OECD commercial stocks mb										
		А	pr 23	May 23	Jun 23	Jun 23/I	May 23			
Crude oil			1,407	1,400	1,395	-5	.1			
Products			1,411	1,424	1,433	9	.3			
Total			2,819	2,824	2,828	4	.2			
Days of forward c	over		61.1	60.5	60.4	-0	.1			

Next report to be issued on 12 September 2023.