



Organization of the Petroleum Exporting Countries



# OPEC Monthly Oil Market Report

11 August 2022

**Feature article:**  
*Crude and product price movements*

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# Oil Market Highlights

## Crude Oil Price Movements

The OPEC Reference Basket fell \$9.17, or 7.8%, m-o-m in July to average \$108.55/b. Oil futures prices remained highly volatile in July, amid a sharp drop in liquidity. The ICE Brent front month declined \$12.38, or 10.5%, in July to average \$105.12/b and NYMEX WTI declined by \$14.96, or 13.1%, to average \$99.38/b. The Brent/WTI futures spread widened further by \$2.58 to average \$5.74/b. The market structure of all three major crude benchmarks – ICE Brent, NYMEX WTI and DME Oman – remained in strong backwardation, particularly Brent. This was despite a sharp decline in front-month prices, as fundamental outlooks remained strong. However, the backwardation structure flattened in the first week of August. Hedge funds and other money managers extended heavy selloffs in July, cutting combined futures and options net long positions in ICE Brent and NYMEX WTI to their lowest level since April 2020.

## World Economy

World economic growth is revised down to stand at 3.1% for 2022 and 2023. This is a result of weaker 2Q22 growth in the major economies and an observed soft trend in some key economies. For the US, GDP growth for 2022 is revised down to 1.8%, and to 1.7% for 2023. Euro-zone economic growth for 2022 is expected at 3.2%, while growth in 2023 is revised down to 1.7%. Japan's economic growth for 2022 is revised down to stand at 1.4%, to be followed by growth of 1.6% in 2023. China's 2022 growth forecast is revised down to 4.5%, while the 2023 forecast remains unchanged at 5.0%. The forecast for India remains unchanged at 7.1% in 2022 and 6.0% in 2023. Brazil's economic growth forecasts remain at 1.2% in 2022 and 1.5% in 2023. The 2022 forecast for Russia is unchanged, showing a contraction of 6.0% followed by growth of 1.2% in 2023. Downside risks remain, stemming from the ongoing geopolitical tensions, the continued pandemic, ongoing supply chain issues, rising inflation, high sovereign debt levels in many regions, and expected monetary tightening by central banks in the US, the UK, Japan and the Euro-zone.

## World Oil Demand

World oil demand growth in 2022 is revised downwards from the previous month's assessment but still shows healthy growth of 3.1 mb/d, including the recently observed trend of burning more crude in power generation. Oil demand in the OECD is estimated to grow by 1.6 mb/d, while the non-OECD is expected to grow by 1.5 mb/d. Total oil demand is expected to average around 100 mb/d in 2022. The first half of this year is revised higher, amid better-than-anticipated oil demand in the main OECD consuming countries. However, oil demand in 2H22 is revised lower, amid expectations of a resurgence of COVID-19 restrictions and ongoing geopolitical uncertainties. For 2023, the forecast for world oil demand growth remains unchanged at 2.7 mb/d, with total oil demand averaging 102.7 mb/d. The OECD is expected to grow by 0.6 mb/d and the non-OECD by 2.1 mb/d. Oil demand in 2023 is expected to be supported by a still-solid economic performance in major consuming countries, as well as improving geopolitical developments and improvement of COVID-19 in all regions.

## World Oil Supply

Non-OPEC liquids supply growth in 2022 is forecast at 2.1 mb/d to average of 65.8 mb/d, broadly unchanged from the previous assessment. An upward revision to Russia is offset by downward revisions to the US, Norway and Kazakhstan. The main drivers of liquids supply growth for 2022 are expected to be the US, Canada, Brazil, China and Guyana, while production is expected to decline mainly in Indonesia and Thailand. In 2023, growth in non-OPEC liquids production remains unchanged at 1.7 mb/d to average 67.5 mb/d. The main drivers for growth in 2023 are expected to be the US, Norway, Brazil, Canada and Guyana. However, uncertainty regarding the operational and financial aspects of US production, as well as the geopolitical situation in Eastern Europe remains high. OPEC NGLs and non-conventional liquids are forecast to grow by 0.1 mb/d in 2022 to average 5.4 mb/d and by 50 tb/d to average 5.4 mb/d in 2023. OPEC-13 crude oil production in July increased by 216 tb/d m-o-m to average 28.90 mb/d, according to available secondary sources.

### Product Markets and Refining Operations

Refinery margins in all main trading hubs reversed trends in July, falling back from the multi-year record highs registered in June. A counter-seasonal downturn in US product demand and rising refinery processing rates in Europe and in Asia led to product stock builds, providing partial relief to the product tightness witnessed over the past months. At the same time, concerns over a weakening global economy and a softer product market outlook likely further contributed to the downturn in refining economics globally. This weakness was manifested across the barrel in all regions as product prices retreated from the record-breaking highs witnessed in June. Going forward, transport fuel requirements should remain supportive in line with seasonal trends. Refinery intakes are expected to remain well-sustained to fulfil seasonal fuel consumption and allow continued restocking of product inventories.

### Tanker Market

Dirty tanker spot freight rates in July have fully recovered from the decline seen earlier in May, as trade dislocations boosted activities in longer haul routes. VLCC rates on the Middle East-to-East route rose by 26%, while flows West were up 30%. The wide Brent/WTI spread also made US crude more competitive in Asia, supporting VLCC demand. Aframax rates on the Mediterranean to North West Europe route increased 38% m-o-m on average, while Suezmax rates from the US Gulf to Europe rose by 23%, amid strengthening demand for longer haul flows to Europe. Clean rates came down after gaining steadily over the past months, with declines particularly strong in the Med, as trade dislocations generated volatility.

### Crude and Refined Products Trade

Preliminary data shows US crude imports reached a three-year high of 6.7 mb/d in July, amid higher flows from OPEC member countries and Brazil. US crude exports jumped to a record high of 3.7 mb/d based on preliminary weekly data, as the wide Brent/WTI spread stimulated a return of Asian buying. China's crude imports fell to an almost four-year low of 8.7 mb/d in June and are expected to remain at low levels, as lockdown measures earlier in the year and a spike in buying triggered by geopolitical developments in February have left inventories at ample levels. India's crude imports edged higher, averaging 4.7 mb/d in June, with Russia flows up 0.9 mb/d y-o-y according to secondary sources. India's crude imports are likely to remain close to current levels in July, with Russian inflows remaining above 1.0 mb/d but with slight lower flows from elsewhere. Japan's crude imports dropped to an 11-month low in June, averaging 2.3 mb/d, although still managed an increase y-o-y. Japan's crude imports are expected to recover with the return of refineries from maintenance in July. Preliminary figures show OECD Europe crude imports remaining at high levels in recent months, while crude exports fell to 7-year lows in April.

### Commercial Stock Movements

Preliminary June data indicates total OECD commercial oil stocks rose 20.9 mb m-o-m. At 2,712 mb, inventories were 163 mb below the same period a year ago, 261 mb lower than the latest five-year average, and 236 mb below the 2015–2019 average. Within components, crude and product stocks increased by 6.4 mb and 14.5 mb, respectively, m-o-m. At 1,330 mb, OECD crude stocks were 54 mb lower y-o-y, 125 mb lower than the latest five-year average, and 135 mb below the 2015–2019 average. OECD product stocks stood at 1,381 mb, representing a deficit of 109 mb compared with the same month last year, 136 mb lower than the latest five-year average and 100 mb below the 2015–2019 average. In terms of days of forward cover, OECD commercial stocks rose m-o-m in June by 0.1 to stand at 58.9 days. This is 3.7 days below June 2021 levels, 5.3 days less than the latest five-year average, and 2.9 days lower than the 2015–2019 average.

### Balance of Supply and Demand

Demand for OPEC crude in 2022 is revised down by 0.3 mb/d from the previous month's assessment to stand at 28.8 mb/d, which is around 0.9 mb/d higher than in 2021. Similarly, demand for OPEC crude in 2023 is revised down by 0.3 mb/d from the previous month's assessment to stand at 29.8 mb/d, around 0.9 mb/d higher than the 2022 level.

## Feature Article

### Crude and product price movements

Global oil market fundamentals continued their strong recovery to pre-COVID-19 levels for most of the first half of 2022, albeit signs of slowing growth in the world economy and oil demand have emerged. Global oil supply has risen steadily this year, including from countries participating in the Declaration of Cooperation (DoC), amid their continuing efforts to stabilize the oil market. However, ongoing low overall investment in the upstream and capital discipline are limiting non-OPEC oil supply growth potential.

The oil market has been dominated by elevated price volatility since March 2022, fuelled by the intensifying geopolitical concerns in Eastern Europe. Sanctions on Russian oil by some major oil-consuming countries have sharply raised the risk premium in oil prices, particularly for Brent. Moreover, this has resulted in major changes in inter-regional trade flows, exacerbating concerns about physical oil supply at the onset of the summer holiday season. Consequently, pressure increased on oil markets in some regions, specifically Europe, resulting in crude differentials soaring to record-high levels in 2Q22, along with steepening backwardation structures. Tight oil product markets, specifically for diesel and gasoline, have also pushed up crude oil prices.

While physical oil market fundamentals remain strong, volatility in futures markets remained fuelled by expectations of lower GDP growth, amid rising global inflation, which prompted key central banks to begin raising interest rates. The US dollar's value strengthened further against a basket of major currencies, which also added concern. Moreover, price volatility contributed to reduced market liquidity, as seen in declining open interest. Combined futures and options open interest in ICE Brent and NYMEX WTI dropped in July 2022 to the lowest since June 2015.

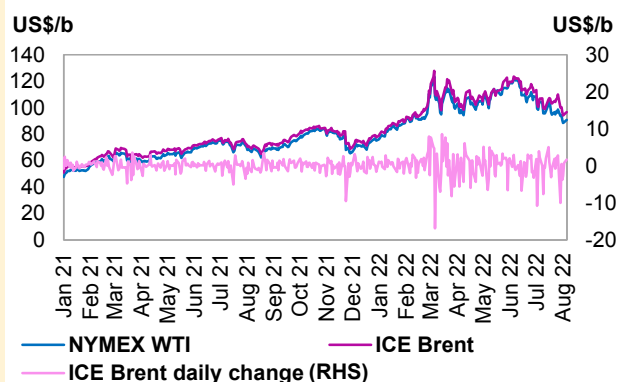
On the product side, fuel prices surged in the first half of the year due to lower supplies amid COVID-19-related refinery closures and a heavy refinery turnaround season. In addition, stronger fuel consumption at the onset of the summer season, as COVID-19-related mobility restrictions were lifted in most regions, and product flow adjustments linked to the geopolitical developments in Eastern Europe further aggravated product tightness, which ultimately pushed product prices to record highs in June. At the same time, jet fuel, the second strongest performer in the US product market, saw its price benefit from improving international air travel activity, leading to notable jet fuel margin gains.

Fuel prices peaked in June with US gasoline prices reaching \$193.06/b, up by \$97.79/b, or 103%, y-o-y. However, rising refinery run rates in July alleviated some of the tightness, mostly in the USGC, where product prices across the barrel declined by \$26.83/b on average. In Europe, average prices declined the least by \$20.24/b, m-o-m.

Looking ahead, refined product markets in 2H22 are likely to continue to see seasonal support from transport fuels in the coming months, while fuel sales could benefit from moderating product prices – if the recent trend continues. At the same time, available refinery capacity will be supported by the ongoing operational ramp-up of at least two large capacity additions last year, mainly in the Middle East.

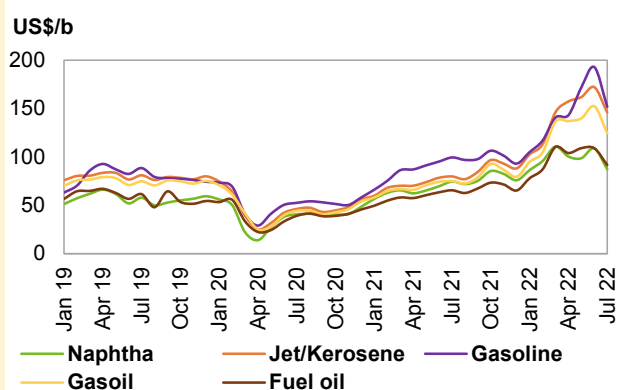
The countries participating in the DoC will continue to closely monitor ongoing market developments and encourage investment in the upstream sector to ensure adequate levels of capacity along the value chain, in their efforts to maintain a stable oil market balance in the interest of producers and consumers alike.

**Graph 1: Crude futures price volatility**



Sources: ICE, CME Group and Thomson Reuters.

**Graph 2: Refined product prices in the USGC**



Sources: Argus Media and OPEC.





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# Crude Oil Price Movements

Crude oil spot prices declined in July following two consecutive months of sharp rises. The drop was mainly driven by selloffs in futures markets amid elevated volatility, which was fuelled by softening global economic and demand outlooks. A decline in refining margins, including gasoline, in major hubs and data indicating three consecutive months of build in commercial OECD oil stocks to June, added downward pressure. However, despite the drop, physical crude market fundamentals remained robust in July, which limited the decline in spot crude prices. This was reflected in steep backwardation and high crude differentials in almost all regions.

The ORB value fell in July, dropping by \$9.17/b, or 7.8%, to stand at \$108.55/b, as all ORB component values declined alongside their perspective crude oil benchmarks. Compared with the previous year, the ORB was up \$40.54, or 62.1%, from \$65.27/b in 2021 to an average of \$105.82/b so far this year.

Oil futures prices averaged sharply lower in July, recording the largest monthly decline since March 2020 amid a decline in major commodity prices and persistently elevated volatility. Futures prices trended lower in the first half of July, extending their decline from late June on growing uncertainty about the global economy and energy demand growth, along with concerns that rising interest rates from central banks would slow economic activity. Subdued performance on equity markets in June and the first half of July, soaring global inflation and a surging US dollar in mid-July weighed heavily on oil prices.

On a monthly average, the ICE Brent first-month contract fell by \$12.38 in July, or 10.5%, to stand at \$105.12/b, while the NYMEX WTI first-month contract declined by \$14.96, or 13.1%, to an average of \$99.38/b. DME Oman crude oil futures prices fell m-o-m in July by \$10.48, or 9.2%, to settle at \$102.90/b.

Hedge funds and other money managers extended selloffs in July, cutting combined futures and options net long positions in ICE Brent and NYMEX WTI to their lowest levels since April 2020, amid a tumbling of open interest volume. A sharp drop in oil prices was associated with elevated volatility and growing worries about a severe economic slowdown compelled speculators to further reduce net-long positions.

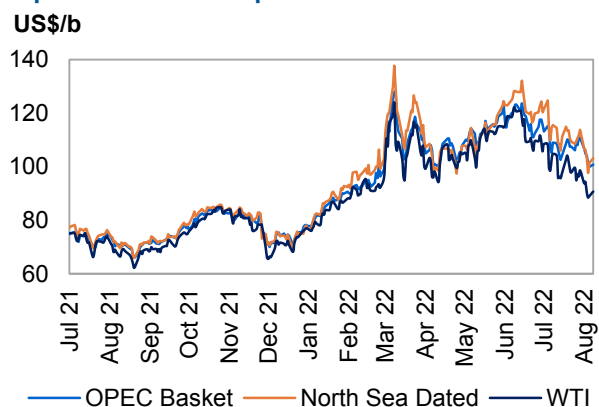
Despite a decline in oil prices and softening economic and oil demand outlook, the market structure of major futures and spot benchmarks stayed in steep backwardation in July, as oil fundamentals outlook remained strong. However, the backwardation structure of all crude references flattened in the first week of August.

Sweet/sour crude differentials remained significantly large in July in all regions, as light sweet crude continued to perform better than sour crude, although the spread narrowed slightly in Europe and the US Gulf Coast. In Asia, sweet/sour crude differentials continued to widen in last month.

## Crude spot prices

**Crude oil spot prices** declined significantly in July following two consecutive months of sharp rises. The international spot benchmark North Sea Dated dropped nearly \$11/b in July m-o-m. The drop was mainly driven by selloffs in futures markets amid elevated volatility, which was fuelled by deteriorating global economic and oil demand outlooks. Oil prices also came under pressure from a sharp downward correction in refining margins, including for gasoline, in major hubs. Worries about the supply outlook eased slightly as data indicated three consecutive months of build in commercial OECD oil stocks to June. Meanwhile, force majeure on Libya's oil fields and loading ports lifted in mid-July, and the National Oil Corporation (NOC) announced in late July that the country's crude production had returned to 1.2 mb/d.

**Graph 1 - 1: Crude oil price movement**



Sources: Argus, OPEC and Platts.

The WTI price fell most compared with other benchmarks due to signs of a weakening US economy and gasoline demand, while oil supply increased in July, reflected in higher US crude oil and gasoline stocks, including crude stocks at Cushing, Oklahoma, which mitigated worries about a stronger market. Supply from US strategic

## Crude Oil Price Movements

petroleum reserves (SPR) continued to hit the market, and an additional 20 mb of crude supply from US SPR is expected to be delivered in September and October.

In July, North Sea Dated and Dubai's first month dropped m-o-m by \$10.93 and \$10.02, respectively, or 8.8% and 8.9%, to settle at \$112.63/b and \$102.87/b. WTI's first month fell the most among other major benchmarks, declining by \$14.11 m-o-m, or 12.3%, to settle at \$100.25/b.

However, despite the price drop, physical crude market fundamentals remained robust in July, which limited the decline in spot crude prices. This was reflected in steep backwardation and high crude differentials in almost all regions. Buying interest from refiners and traders remained firm for the August trading cycle, specifically in Europe and Asia. Several July and August loading programmes cleared more quickly than usual.

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

OPEC Reference Basket (ORB)	Jun 22	Jul 22	Change		Year-to-date	
			Jul 22/Jun 22	%	2021	2022
<b>ORB</b>	<b>117.72</b>	<b>108.55</b>	<b>-9.17</b>	<b>-7.8</b>	<b>65.27</b>	<b>105.82</b>
Arab Light	117.27	108.98	-8.29	-7.1	65.94	106.44
Basrah Medium	115.56	105.36	-10.20	-8.8	64.37	104.02
Bonny Light	125.22	117.58	-7.64	-6.1	66.22	110.46
Djeno	116.11	105.18	-10.93	-9.4	58.95	101.07
Es Sider	124.96	114.03	-10.93	-8.7	64.54	108.75
Girassol	127.03	119.15	-7.88	-6.2	66.79	111.24
Iran Heavy	115.85	107.63	-8.22	-7.1	65.01	105.49
Kuwait Export	117.26	109.19	-8.07	-6.9	65.71	106.62
Merey	92.25	84.72	-7.53	-8.2	47.33	81.86
Murban	117.53	105.97	-11.56	-9.8	65.39	104.55
Rabi Light	123.10	112.17	-10.93	-8.9	65.94	108.06
Sahara Blend	128.31	115.83	-12.48	-9.7	66.30	111.72
Zafiro	127.10	116.60	-10.50	-8.3	66.77	110.67
<b>Other Crudes</b>						
North Sea Dated	123.56	112.63	-10.93	-8.8	66.41	108.52
Dubai	112.89	102.87	-10.02	-8.9	65.00	102.07
Isthmus	113.85	100.47	-13.38	-11.8	62.53	100.27
LLS	115.52	102.53	-12.99	-11.2	65.49	103.62
Mars	108.15	96.89	-11.26	-10.4	63.54	98.90
Minas	115.06	103.01	-12.05	-10.5	64.30	102.85
Urals	91.61	85.32	-6.29	-6.9	65.27	86.47
WTI	114.36	100.25	-14.11	-12.3	63.70	101.68
<b>Differentials</b>						
North Sea Dated/WTI	9.20	12.38	3.18	-	2.71	6.85
North Sea Dated/LLS	8.04	10.10	2.06	-	0.92	4.90
North Sea Dated/Dubai	10.67	9.76	-0.91	-	1.41	6.46

Sources: Argus, Direct Communication, OPEC and Platts.

Crude oil differentials rose further in July and the value of spot differentials of several crudes reached new record highs, specifically in the Atlantic Basin, supported by firm demand from refineries. North Sea crude differentials strengthened further last month after a sharp rise was seen in June, as the supply/demand balance in Europe remained strong amid a lower supply inflow from Russia. Strong demand from European refiners and supportive refining margins added support. Forties and Ekofisk crude differentials increased by 71¢ and 97¢ m-o-m, respectively, on a monthly average in July to settle at premiums of \$4.99/b and \$7.74/b. However, the North Sea crude differential eased slightly later in July on signs of softening oil demand and weakening refining margins in Europe.

West African crude differentials also extended robust gains in July, buoyed by firm demand from European refiners and the return of demand from some Asian refiners, despite unfavourable west-to-east arbitrage, represented in a wide Brent/Dubai spread. On a monthly average, crude differentials to the North Sea Dated benchmark by Bonny Light, Forcados and Qua Iboe rose by \$2.14, \$1.96 and \$2.68, respectively, m-o-m in July to settle at premiums of \$7.42/b, \$9.57/b and \$9.20/b. The crude differential of medium-heavy sweet crude Cabinda strengthened further in July by \$1.24 m-o-m on average to a premium of \$5.00/b. Likewise in the

Mediterranean, Saharan Blend crude differentials also firmed last month, rising by 53¢ m-o-m to stand at a premium of \$3.27/b. The Caspian CPC Blend differential remained priced at a discount in July, although differentials rose m-o-m, increasing by \$1.25 to average a discount of \$3.00/b to North Sea Dated.

In the Middle East, crude differentials to Dubai rose in July on strong demand from Asia Pacific refiners, including China and India, while difficult west-to-east arbitrage added more support to East of Suez grades. The value of the Oman crude differential jumped \$2.68 m-o-m in July to a premium of \$9.20/b.

Similarly, in the USGC, the crude differentials of Light Louisiana Sweet (LLS) and Mars sour strengthened amid a wider Brent/WTI spread and higher US crude oil exports that hit 4.5 mb/d in the week of 22 July 2022. LLS and Mars sour crude differentials against WTI at Cushing rose m-o-m in July, increasing by \$1.12 and \$2.89, respectively, on a monthly average, to a premium of \$2.32/b and a discount of \$3.33/b.

## OPEC Reference Basket (ORB)

The **ORB** value fell sharply in July, dropping by \$9.17/b, or 7.8%, to stand at \$108.55/b, as all ORB component values declined alongside their perspective crude oil benchmarks, even though robust physical market fundamentals continued to underpin the market. However, higher official selling prices of medium/heavy sour and most light sweet crude components limited the ORB decline compared with all other major futures and spot benchmarks. Compared with the previous year, the ORB was up \$40.54, or 62.1%, from \$65.27/b in 2021 to an average of \$105.82/b so far in 2022.

All ORB component values fell last month, alongside their respective crude oil benchmarks. West and North African Basket components – Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend, and Zafiro – declined by \$10.18 m-o-m in July, or 8.2% on average to \$114.36/b. Multiple region destination grades – Arab Light, Basrah Light, Iran Heavy, and Kuwait Export – also decreased by \$8.69 m-o-m, or 7.5% on average, to settle at \$107.79/b. Murban crude declined by \$11.56 m-o-m, or 9.8% on average, to settle at \$105.97/b, while the Meroy crude component fell by \$7.53 m-o-m, or 8.2% on average, to settle at \$84.72/b.

## The oil futures market

**Oil futures prices** averaged sharply lower in July, recording the largest monthly decline since March 2020 amid a decline in major commodity prices and persistently elevated volatility. ICE Brent and NYMEX WTI dropped by \$12.38 and \$14.95, respectively, m-o-m, or by 10.5% and 13.1%. Futures prices trended sharply lower in the first half of July, extending their decline from June in a volatile market that remained dominated by growing uncertainty in the global economy and energy demand growth, along with concerns that rising interest rates from central banks, including the US Federal Reserve (The Fed) and the European Central Bank, would slow economic activity.

The subdued performance of equity markets in June and the first half of July, soaring global inflation and surging US dollar value in mid-July against a basket of other major currencies to its highest point since 2002, weighed heavily on oil prices. Worries about an economic slowdown were fuelled by data showing a new US inflation high in June, when it reached 9.1%, adding to concerns about aggressive interest rate hikes from the Fed. Meanwhile, reports showed manufacturing activity in the US and the Euro-zone slowed in July, while the US GDP contracted for the second consecutive quarter in 2Q22, and the Fed raised interest rates by 75 basis points.

Oil prices also came under further pressure due to rising global COVID-19 cases in July, including in China, and signs of slowing US gasoline consumption in the middle of the summer driving season, along with rising US gasoline stocks. The weekly US supplied finished motor gasoline fell sharply in the weeks of 8 and 15 July. According to Energy Information Administration (EIA) data, US finished motor gasoline supplied fell in the week of 8 July to \$8.06 mb/d. US gasoline stocks rose about 9.3 mb between the week of 1 and 15 July, before falling by 3.3 mb in the week of 22 July. Moreover, expectations of an additional 20 mb of crude supply in the US from SPR for September and October deliveries, as part of a previous plan, mitigated concerns about oil supply in the US market.

The decline in oil price was also exacerbated by selloffs in futures and options bullish positions, while open interest continued to decline significantly in July. Open interest for NYMEX WTI futures dropped in the week of 19 July to its lowest point since January 2015, while that for ICE Brent futures also fell to their lowest point since July 2015, as investors looked to reduce risky positions.

## Crude Oil Price Movements

Despite this, oil prices recouped some losses in late July, following a rebound in equity markets and declining US dollar value from recent highs, which supported market sentiment and overshadowed concerns about slowing activity in major economies. The US dollar index value (DXY) declined by 2.9% in early August from mid-July levels, when it reached its highest point since 2002.

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

Crude oil futures	Jun 22	Jul 22	Change		Year-to-date	
			Jul 22/Jun 22	%	2021	2022
<b>NYMEX WTI</b>	114.34	99.38	-14.96	-13.1	63.70	101.43
<b>ICE Brent</b>	117.50	105.12	-12.38	-10.5	66.57	104.97
<b>DME Oman</b>	113.38	102.90	-10.48	-9.2	65.17	102.14
<b>Spread</b>						
<b>ICE Brent-NYMEX WTI</b>	3.16	5.74	2.58	81.6	2.87	3.54

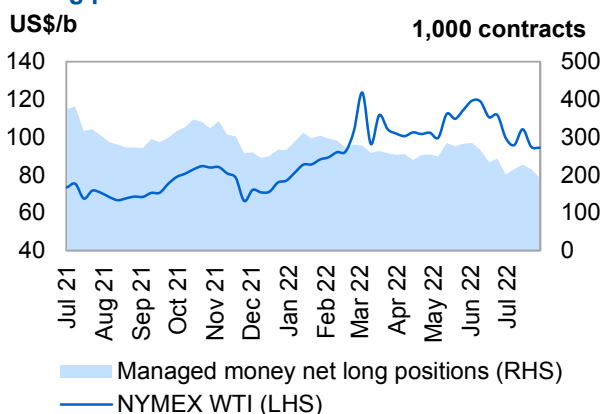
Note: Totals may not add up due to independent rounding. Sources: CME, DME, ICE and OPEC.

On a monthly average, the ICE Brent first-month contract fell by \$12.38 in July, or 10.5%, to stand at \$105.12/b, while the NYMEX WTI first-month contract declined by \$14.96, or 13.1%, to an average of \$99.38/b. Y-t-d, ICE Brent was \$38.40, or 57.7%, higher at \$104.97/b, while NYMEX WTI was higher by \$37.73, or 59.2%, at \$101.43/b, compared with the same period a year earlier. DME Oman crude oil futures prices fell m-o-m in July by \$10.48, or 9.2%, to settle at \$102.90/b. Y-t-d, DME Oman was higher by \$36.97, or 56.7%, at \$102.14/b.

The **spread between the ICE Brent and NYMEX WTI first-month premium** widened significantly in July, hitting \$11/b on a daily basis in late July, as the value of WTI futures weakened more than international benchmark Brent futures. On a monthly basis, the ICE Brent/NYMEX WTI differential widened by \$2.58 to stand at an average of \$5.74/b in July. The spread between North Sea Dated and WTI Houston also widened sharply last month, extending June's large increase. The North Sea Dated premium to WTI Houston widened in July by \$2.25 m-o-m to average \$10.17/b. The value of Brent remained supported by strong market fundamentals in Northwest Europe and robust buying from European refiners that competed for available prompt cargoes to replace lower oil flow from Russia to Europe. At the same time, sustained crude releases from the US SPR kept the US market well supplied, specifically in the USGC, and crude stocks at Cushing rose in July from recent lows. Signs of slowing US gasoline demand and weak economic data added downward pressure to the value of WTI futures.

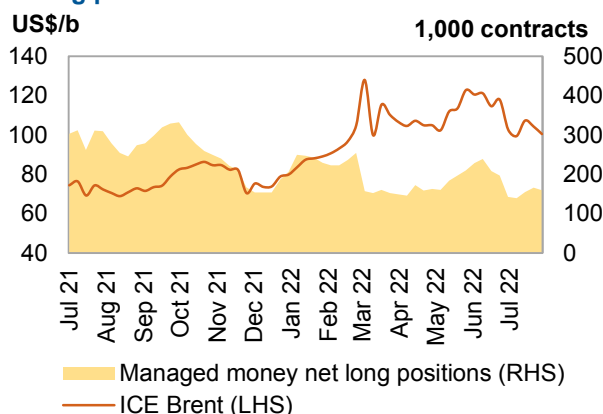
**Hedge funds and other money managers** extended selloffs in July, cutting combined futures and options net long positions in ICE Brent and NYMEX WTI to their lowest level since April 2020, amid tumbling volumes of open interest. A sharp drop in oil prices, associated with elevated market volatility and growing worries about a severe economic slowdown that could negatively affect global oil demand, compelled speculators to further reduce bullish positions. Total futures and options net-long positions in ICE Brent and NYMEX WTI decreased by 13.4% and money managers sold a net equivalent of about 59 mb between the weeks of 28 June and 26 July. This is along with a sharp drop in open interest that declined to its lowest point since 2015.

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



Sources: CFTC, CME and OPEC.

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



Sources: ICE and OPEC.

Money managers heavily cut bullish **NYMEX WTI** positions in the week of 5 July, as net long positions fell to their lowest level since April 2020. NYMEX WTI futures and options net long positions also declined by 28,215 lots, or 11.6%, between the weeks of 28 June and 26 July, to stand at 215,096 contracts, according to the US Commodity Futures Trading Commission (CFTC). During the same period, gross long positions fell by 18,876 lots, or 7.1%, to 248,311 contracts, while gross short positions rose by 9,339 lots, or 39.1%, to 33,215 contracts.

Money managers were sellers of a net of about 31 mb of the **ICE Brent** contract in July, and combined futures and options net long positions related to Brent fell by 30,810 contracts, or 15.6%, to stand at 166,389 lots in the week to 26 July, according to the ICE Exchange. This is a combination of a cut in long positions and an increase in short positions. In the week ending 26 July, gross short positions rose by 5,867 lots, or 13.7%, to stand at 48,697 contracts, while gross long positions declined by 24,943 lots, or 10.4% lower, to 215,086 contracts during the same period.

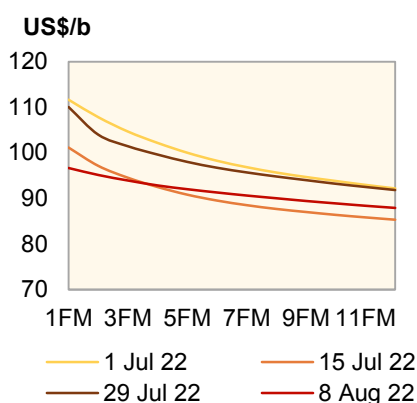
The **long-to-short ratio of speculative positions** in the NYMEX WTI contract declined to 7:1 in the week to 26 July, compared with 11:1 in the week to 28 June and 18:1 in the week to 31 May. The ICE Brent long-to-short ratio also fell to 4:1 in the week to 26 July, compared with 6:1 in the week to 28 June. **Total futures and options open interest volumes** on the two exchanges continued to decline in July, falling by 3.2%, or 158,007 contracts, to stand at 4.7 million contracts in the week ending 26 July.

## The futures market structure

Despite the sharp decline in oil prices and softening economic and oil demand outlook, the market structure of major futures and spot benchmarks stayed in steep backwardation in July, as the oil fundamentals outlook remained strong. However, the backwardation structure of all crude references flattened in the first week of August on growing concerns over a severe economic slowdown in the global economy and its potential negative impact on oil demand. This was fuelled by reports indicating falling manufacturing activity in major economies, including the US, the Euro-zone, and China.

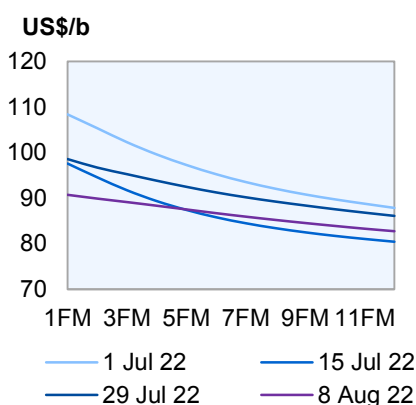
The backwardation structure of **Brent futures** strengthened further in July as the supply risk premium and strong demand in the Atlantic Basin, specifically for North Sea crudes, amid limited supply availability in Europe, kept the value of front-month prices firmly supported compared with forward-month contracts. In early August, when the first-month contract moved to October delivery, the front of the forward curve flattened significantly, mainly due to weakening oil demand outlooks. Refineries are expected to start the autumn refinery maintenance season in September and October. Meanwhile, data showed OECD oil commercial stocks rising for three consecutive months to June. The ICE Brent first-month premium to the third month widened m-o-m by \$1.04 to a backwardation of \$6.96/b. Similarly, ICE Brent's M1/M6 backwardation strengthened last month by 27¢ to settle at \$12.22 on average, compared with a backwardation of \$11.95 in June.

**Graph 1 - 4: ICE Brent forward curves**



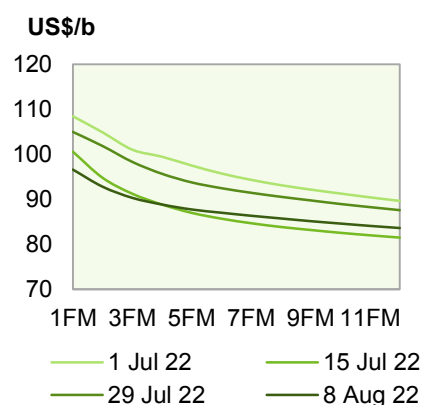
Sources: ICE and OPEC.

**Graph 1 - 5: NYMEX WTI forward curves**



Sources: CME and OPEC.

**Graph 1 - 6: DME Oman forward curves**



Sources: DME and OPEC.

The **NYMEX WTI** forward curve remained in steep backwardation in July and the third-to-third month spread was little changed m-o-m, despite rising US crude and gasoline stocks in July and the ongoing supply of crude from SPR. EIA weekly data showed lower US crude intake in July, along with a lower refinery utilization rate, which contributed to softening of the WTI backwardation structure in late July. In the first week of August, the WTI backwardation structure weakened further. The NYMEX WTI M1/M3-month spread widened 8¢ to a

## Crude Oil Price Movements

backwardation of \$5.21/b on average in July, compared with a backwardation of \$5.14/b in June. Nonetheless, it narrowed to below \$2/b in the first week of August.

**DME Oman** and **Dubai** market structures steepened further last month, moving into deeper backwardation as prompt month prices came under upward pressure from robust Asian refiner demand, including China and India. Limited west-to-east arbitrage opportunities that should limit the supply of crude inflow from the Atlantic Basin added additional support to Dubai-linked grades. On a monthly average, the DME Oman M1/M3 spread widened by \$1.39 m-o-m to a backwardation of \$8.20/b on average in July.

In terms of the **M1/M3 structure**, the North Sea Brent M1/M3 spread widened further in July on a monthly average of \$1.46 to a backwardation of \$8.74/b, compared with \$7.28/b in June. In the US, the WTI M1/M3 backwardation also widened in July by 45¢ to stand at \$5.42/b, compared with a backwardation of \$4.96b in June. The Dubai M1/M3 backwardation widened on average in July by \$1.73 to a backwardation of \$9.01/b.

## Crude spreads

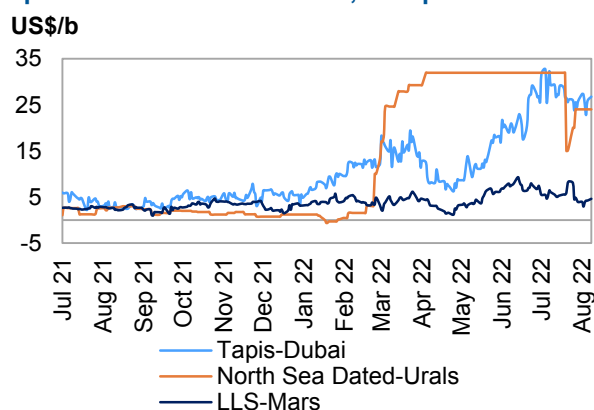
**Sweet/sour crude differentials** remained significantly large in July in all regions, as light sweet crude continued to perform better than sour crude, although the spread narrowed slightly in Europe and the USGC. In Asia, sweet/sour crude differential represented in the Tapis/Dubai spread continued to widen in July. Demand for light sweet crude, supportive refining margins of light distillate products and a high Brent-related risk premium continued to make the sweet crude value higher compared with sour.

In **Europe**, the North Sea Dated-Urals crude spread narrowed in July, as the assessment of Urals value in the Mediterranean and Northwest Europe was seen higher in the second half of July from reporting agencies. However, the North Sea Dated-Urals crude differential remained large, narrowing by \$4.64 on average m-o-m to stand at \$27.31/b in July. The value of the Johan Sverdrup differential to North Sea Dated widened in July m-o-m by \$2.21 to average \$3.67/b. Hefty buying interest for North Sea crudes from European refiners amid a tight Northwest Europe market pushed the value of regional light sweet crudes even higher, although signs of softening demand and weakening refining margins weighed slightly on crude differential values later in the month. Furthermore, persistent supply disruptions in the Mediterranean in July reduced the supply outlook for light sweet crude, which added support.

In the **USGC**, the value of light sweet crude weakened last month against the value of sour crude, as the expected US SPR release in the period between August and October will consist mostly light sweet crude, which contributed to alleviating downward pressure on the value of sour crude. Signs of slowing gasoline demand in the US and a decline in gasoline margins in the USGC also weighed on the value of light sweet crude. However, the sweet-sour crude differential remained wide compared with the previous year. The LLS premium over medium sour Mars narrowed on average in July by \$1.73 to stand at \$5.64/b.

However, in **Asia**, the sweet-sour crude differential represented in the Tapis-Dubai spread widened further in July to historically high levels in difficult west-to-east arbitrage that reduced the flow of light sweet crude from the Atlantic Basin to Asia and contributed to push the value of sweet crudes in Asia Pacific significantly higher. Meanwhile, the supply of sour crude in Asia was boosted by sustained Urals flow. The Tapis/Dubai spread widened by \$4.65 in July to \$27.55/b from \$22.90/b the previous month. The Brent-Dubai spread also remained significantly wide, although the Brent-Dubai exchange of futures for swaps (EFS) narrowed slightly in July by 32¢ to stand at \$11.33/b.

**Graph 1 - 7: Differential in Asia, Europe and USGC**



Sources: Argus, OPEC and Platts.



# Commodity Markets

Both the energy and non-energy price indices declined month on month (m-o-m). Price movements within the indices' components continued to be mixed, most notably within the energy index, but most prices fell overall m-o-m. This represents the third consecutive month in which the non-energy index has fallen, while both base and precious metals fell for the fourth consecutive month.

Despite elevated prices in some commodities, money managers' net length and total open interest declined for the fourth consecutive month. Risk sentiment remains subdued in the paper market amid tighter financial conditions and high volatility exacerbated by increased concerns of an economic slowdown, as confirmed by the most recent downside GDP revisions to the International Monetary Fund (IMF) forecast.

Some commodity producers set record profits in 2Q22, supported by persistently high prices amid ongoing geopolitical developments in Eastern Europe. However, a sluggish economic recovery in China, broad based tighter monetary policies, as well as weak macroeconomic indicators have added more downside risks m-o-m and further clouded the demand outlook for commodities.

## Trends in selected commodity markets

The **energy price index** declined by 1.3% m-o-m. Movement within the index was mixed, with both coal and natural gas prices in Europe rising for the second consecutive month, but this was offset by declines in crude oil and US natural gas prices. Y-o-y, the index is up by 81.1%, but this is a slower rate compared with the previous month.

The **non-energy index** continued its downward trend for the third consecutive month, falling by 8.9% m-o-m. The resumption of Ukraine's agricultural exports from Black Sea ports, in addition to increasing agricultural exports from Indonesia provided further relief to prices. The index is up by 18.7% y-o-y, albeit a lower rate compared with the previous month.

**Table 2 - 1: Commodity prices**

Commodity	Unit	Monthly averages			% Change	Year-to-date	
		May 22	Jun 22	Jul 22	Jul 22/Jun 22	2021	2022
<b>Energy*</b>	Index	<b>160.6</b>	<b>170.7</b>	<b>168.6</b>	<b>-1.3</b>	<b>84.3</b>	<b>152.7</b>
Coal, Australia	US\$/mt	366.8	371.2	383.7	3.4	107.1	307.6
Crude oil, average	US\$/b	110.1	116.8	105.1	-10.0	64.6	103.6
Natural gas, US	US\$/mmbtu	8.1	7.7	7.3	-5.4	3.3	6.2
Natural gas, Europe	US\$/mmbtu	29.2	33.6	51.3	53.0	8.3	34.9
<b>Non-energy*</b>	Index	<b>133.5</b>	<b>128.0</b>	<b>116.6</b>	<b>-8.9</b>	<b>109.5</b>	<b>130.0</b>
<b>Base metal*</b>	Index	<b>130.0</b>	<b>121.8</b>	<b>106.1</b>	<b>-12.8</b>	<b>112.5</b>	<b>132.3</b>
<b>Precious metals*</b>	Index	<b>139.9</b>	<b>138.9</b>	<b>129.8</b>	<b>-6.6</b>	<b>141.9</b>	<b>141.1</b>

Note: \* World Bank commodity price indices (2010 = 100).

Sources: World Bank and OPEC.

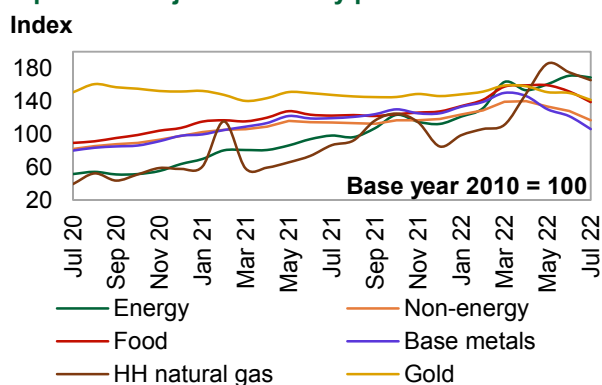
**Average crude oil prices** declined by 10.0% m-o-m. Although market fundamentals remain strong, prices have been under pressure in recent weeks from weak macroeconomic indicators, particularly in the US and the EU. Concerns of a global economic slowdown weighed on crude oil prices, despite ongoing geopolitical developments in Eastern Europe. Y-o-y, prices are up by 60.3%, down from 63.6% in the previous month.

**Henry Hub natural gas prices** fell for the second consecutive month, declining by 5.4% m-o-m. Prices trended downwards as the LNG Freeport terminal in Texas remained closed due to safety concerns. The closure of the terminal has led to a decline in US LNG exports and helped increase US gas inventories, easing pressure on Henry Hub prices. Prices are up by 90.4% y-o-y.

**Natural gas prices in Europe** rose sharply for another month following Gazprom announcing it would reduce capacity via the Nord Stream 1 pipeline later in July. The **average Title Transfer Facility (TTF) price** went from \$33.6/mmbtu in June to \$51.3/mmbtu in July a 53.0% increase m-o-m. The latest data from Gas Infrastructure Europe shows EU gas storage at 70% capacity. However, with a drop in US supplies amid the US Freeport terminal shutdown and Gazprom's announcement, there is growing concern that the EU may not meet its goal to build gas inventories to 80% capacity by November. Both of these factors continued to sustain upward pressure on TTF prices, which are up by 317.9% y-o-y.

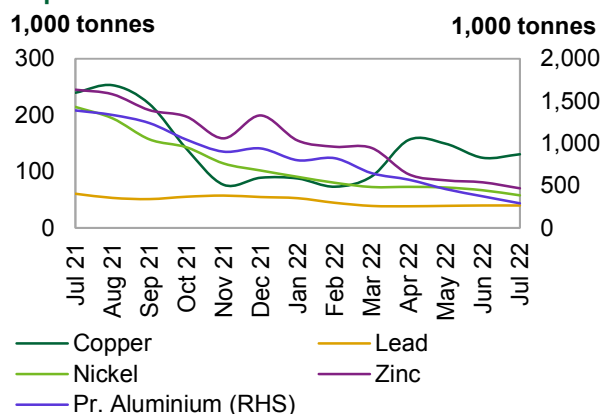
**Australian thermal coal prices** advanced for the third consecutive month, increasing by 3.4%. High natural gas prices continued to lend support to coal as it has incentivised gas-to-coal fuel switching amid rising demand from power generation. The IEA recently called on EU nations to temporarily boost energy supply via coal plants to avoid potential power rationing risks in the coming months, as natural gas supply remains limited. However, the ban on Russian coal has led to increased competition for alternative coal sources, particularly from the Asia-Pacific. This increased competition, exacerbated by rising demand for home cooling amid high temperatures, is adding upward pressure to coal prices. Y-o-y, prices are up by 187.2%.

**Graph 2 - 1: Major commodity price indices**



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

**Graph 2 - 2: Inventories at the LME**



Sources: LME, Thomson Reuters and OPEC.

The **base metal index** receded for the fourth consecutive month, with all index components falling. The index declined by 12.8% m-o-m amid weak industrial activity, with China's and Europe's Purchasing Manager Index (PMI) for manufacturing falling over the month. China's base metal output has risen m-o-m on the back of the recent monetary and fiscal stimulus, but demand remains weak amid ongoing construction and property challenges. Outside of China, high-energy costs continued to weigh on metals production, particularly in Europe, despite low inventories at London Metal Exchange (LME) warehouses. Y-o-y, the index is up 17.6%, below the 22.7% reported last month.

**Aluminium prices** declined for the fourth consecutive month, down by 6.0% m-o-m. Although supplies have increased, demand in China remains subdued amid a slow economic recovery. Outside of China, according to data from the LME, aluminium inventories fell by 22.0% m-o-m. However, high-energy costs have led to the closure of several smelters, leading to a decline in demand, thus easing pressure on prices. Y-o-y, prices are up by 30.2%.

Average monthly **copper prices** continued their downward trend, falling for the fourth consecutive month. Prices fell 16.4% m-o-m amid weak industrial activity in both China and Europe. Inventories rose by 5.1% m-o-m at the LME, but demand remained muted, putting downward pressure on prices. Y-o-y, prices are up by 3.2%.

**Lead prices** trended downwards for the third consecutive month. LME data shows that inventory levels went from 39,525 mt in June to 39,500 mt in July, a marginal 0.1% decrease m-o-m. Despite this marginal decline, prices fell 3.9% m-o-m, underscoring the broader impact of declining industrial activity in both China and Europe. Prices are up by 5.3% y-o-y.

Prices for both **nickel and zinc** declined for the third consecutive month, falling by 16.3%, and 14.4% m-o-m, respectively. The decline in iron ore prices and negative sentiment around China's economy continued to weigh on prices for both metals. Y-o-y, nickel and zinc are up by 52.4% and 30.6%, respectively.

The **precious metals index** receded for the fourth consecutive month, dropping by 6.6% m-o-m. All the index components fell with losses more accentuated for silver and platinum, which fell m-o-m by 11.5% and 9.1%, respectively. Gold prices fell by 5.7% m-o-m, under pressure from a stronger US dollar and broad-based tighter monetary policies. The sharper decline in both **silver and platinum prices** underscores the impact of weak manufacturing activity as both metals also have industrial applications.

Y-o-y, the index reversed course and is now trending downwards by 0.6%. The downward trajectory of the index is driven by silver and platinum, which have been under pressure since the start of 2Q22 and are now down y-o-y by 13.9% and 15.7%, respectively. Gold is up by 2.6% y-o-y.

## Investment flows into commodities

**Total money managers' net length positions** fell for the fourth consecutive month, declining by 48.8% m-o-m. This is its biggest monthly decline y-t-d. Net length decline was driven by gold and crude oil, which was partially offset by net length increases in natural gas and copper. Total open interest declined by 5.6% m-o-m, driven by natural gas, crude oil and copper, which was partially offset by an increase in gold.

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

Selected commodity	Open interest		Net length			
	Jun 22	Jul 22	Jun 22	% OI	Jul 22	% OI
Crude oil	2,464	2,280	257	10	215	9
Natural gas	1,070	988	-29	-3	-57	-6
Gold	632	659	57	9	2	0
Copper	204	197	-10	-5	-20	-10

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

Sources: CFTC and OPEC.

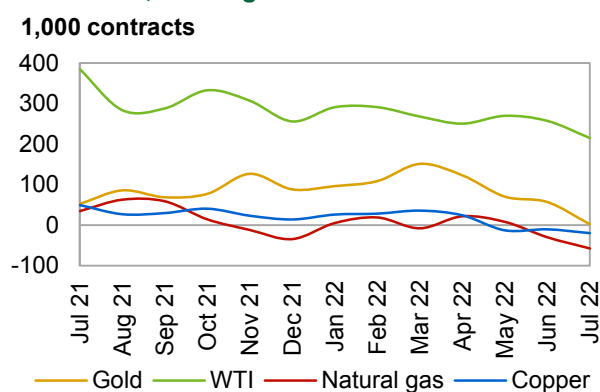
**Total crude oil (WTI) open interest (OI)** fell for the fifth consecutive month, decreasing m-o-m by 7.5%. Money managers' net length declined by 16.5% over the same period. Weak macroeconomic indicators continued to weigh on money managers' sentiment towards crude oil.

The **total Henry Hub natural gas OI** declined for the third consecutive month, falling m-o-m by 7.6%, while money managers' net length declined by 93.7% over the same period. Money managers increased their short positions on expectations of a price decline amid increasing supplies.

**Gold's OI** rose by 4.3% m-o-m after three consecutive months of decline. Meanwhile, money managers' net length declined over the same period by 95.9%. The rise in OIs was mainly on short positions as a stronger US dollar and expectations of rising interest rates continued to weigh on investor sentiment towards gold.

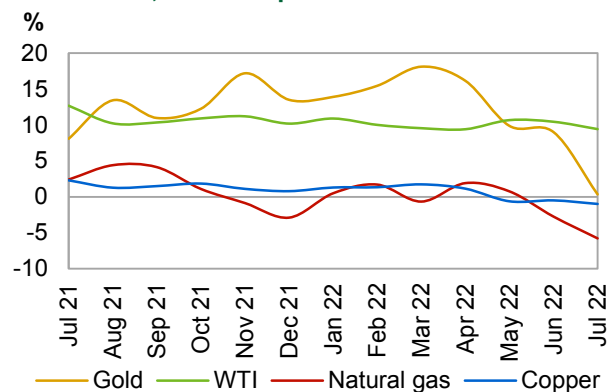
**Copper's OI** declined by 3.4% m-o-m, while money managers' net length rose by 91.0% over the same period. Money managers' sentiment shifted following record profits posted by commodity producers. Meanwhile, producers reduced their long positions amid profit taking.

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



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

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



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

## World Economy

The latest global economic developments, including significantly declining consumer sentiment in major economies and considerably softening 1H22 output numbers released from the US and China, are signposts that global economic growth momentum remains challenged by powerful crosscurrents. Taking into consideration available 1H22 results, the carry-over of trends into 2H22 and the prospect of continuing challenges with reference to the main ongoing topics – inflation and financial tightening, the pandemic and rising geopolitical tensions, and global economic growth – economic growth figures were revised down for both 2022 and 2023. The GDP growth forecast for 2022 now stands at 3.1%. Growth in 2023 is also revised downward slightly reaching 3.1%. This is, however, still solid growth, when compared with pre-pandemic growth levels, which were only slightly higher on average and not burdened by current potentially impactful issues. Therefore, it is obvious that significant downside risk prevails.

Support to global economic growth currently comes from a recovery in the contact-intensive services sector, well visible in the rebound of global tourism activity, strong growth in commodity-exporting economies and a rising dynamic in global trade. These factors have fed into better-than-expected 1H22 growth in the Euro-zone, a momentum that has benefitted the ongoing accommodative monetary policy of the European Central Bank (ECB). The Euro-zone's 1H22 growth dynamic was contrary to softening growth in the US and China. However, with the expectation of an acceleration of the ECB's monetary tightening efforts in 2H22 and the EU's ongoing energy supply and price issues, amid a G7-led embargo on Russian fossil fuel imports, the Euro-zone's growth is expected to slow in 2H22, contrary to expected dynamics in the US and China, which are forecast to rebound.

On a global level, the following base assumptions were taken into consideration for the growth forecast. It is expected that a gradual global economic recovery in 2H22 and beyond will materialise. This is based on the assumption that the situation in Eastern Europe will not worsen and that it will not cause further major spill-over effects on other economies beyond its current negative impact. However, there is still the impact of a shortfall in the supply of agricultural products from Ukraine and Russia. The consequences of a potential further decline in Russian fossil fuel exports to G7 economies for energy supplies, energy prices and, consequently, global economic growth, remains to be seen. These factors will need to be monitored closely, especially in 2H22 and 2023. Furthermore, geopolitical tensions in Asia are seen to only have a temporary and negligible effect.

Moreover, it is assumed that the pandemic will continue to show a rather seasonal pattern, such as that seen in 2021 and 2020. In other words, a COVID-19-related slowdown in 1Q in the northern hemisphere is expected – similar to that seen in 2021 and 2022 – then a pick-up towards the end of 2Q that carries over forcefully into 3Q, with another pandemic-related slowdown in 4Q. Furthermore, monetary tightening is assumed to continue at its current gradual pace, with an ongoing lift in interest rates by the ECB seen towards the end of 2022 and into 2023, but with no major disruptions in economic activity expected beyond the envisaged slowdown in the inflationary dynamic. Finally, inflation – especially in the EU – is unlikely to retract significantly towards the end of the year, impacting business and consumer sentiment and challenging output, especially in 4Q22 and 1Q23.

The upside potential to the current forecast is limited, but may come from a solution to the geopolitical situation in Eastern Europe, further fiscal stimulus where possible, and a fading pandemic, in combination with a strong rise in service-sector activity. These factors could potentially, albeit with limited capacity, lift global economic growth beyond the current base case.

**Table 3 - 1: Economic growth rate and revision, 2022–2023\*, %**

	World	OECD	US	Euro- zone	UK	Japan	China	India	Brazil	Russia
<b>2022</b>	<b>3.1</b>	<b>2.5</b>	<b>1.8</b>	<b>3.2</b>	<b>3.5</b>	<b>1.4</b>	<b>4.5</b>	<b>7.1</b>	<b>1.2</b>	<b>-6.0</b>
<b>Change from previous month</b>	-0.4	-0.4	-1.2	0.2	0.0	-0.2	-0.6	0.0	0.0	0.0
<b>2023</b>	<b>3.1</b>	<b>1.8</b>	<b>1.7</b>	<b>1.7</b>	<b>1.2</b>	<b>1.6</b>	<b>5.0</b>	<b>6.0</b>	<b>1.5</b>	<b>1.2</b>
<b>Change from previous month</b>	-0.1	-0.3	-0.4	-0.3	0.0	-0.1	0.0	0.0	0.0	0.0

Note: \* 2022 and 2023 = Forecast. The GDP numbers have been adjusted to reflect 2017 ppp.

Source: OPEC.

## Update on the latest global developments

The latest release of **2Q22 GDP growth numbers shows the ongoing weakening in global GDP growth**, except for in the Euro-zone, which has counterbalanced this trend to some extent. In particular, a decline in US GDP growth in 2Q22, following the decline seen in 1Q22 and very low growth in China, pointed to ongoing fragility in the global economic dynamic. The labour market showed continued strength in the advanced economies, and while inflation remains high, wages and salaries are bound to rise as well. However, purchasing power is still declining, given the considerable rise in inflation, particularly in the US and the EU economies, among others. This situation that may turn in the coming year, when inflation is expected to slow.

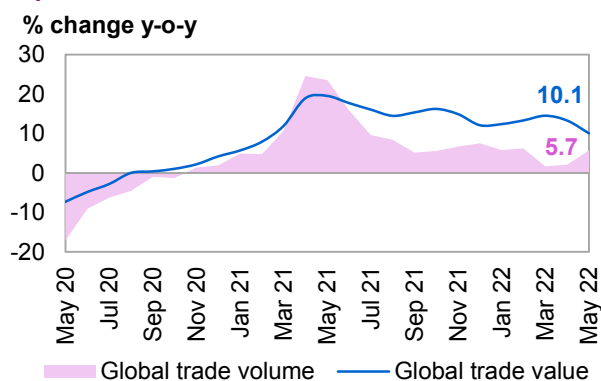
**Inflation** has been a major concern again over the past month, with levels rising across the world. In the Euro-zone, it stood at 8.8% y-o-y in July and 9% in the US in June. Even China and Japan – traditionally low-inflation economies – recorded inflation of 2.4% and 2.3%, respectively, levels above the 2% threshold that is widely considered to be a healthy inflation level. Surging inflation prompted the US Federal Reserve (the Fed) to hike interest rates again by 75 basis points in July, with key policy rates now standing at 2.5%. The ECB has been more reluctant to lift interest rates, but did finally raise them more aggressively than widely expected, by 50 basis points in July, with another potential increase of 50 basis points expected in September. These developments call for careful monitoring, as the current upward spiral of inflation and monetary tightening may become a stress factor for many highly indebted economies, including some vulnerable and important economies in the Euro-zone.

**Some relief to the inflationary trend** may come from declining commodity prices. The Standard & Poor's Goldman Sachs Commodity Index (S&P GSCI) declined by around 20% since its peak at the beginning of June. Additional uncertainties about the global economy continued, especially regarding geopolitical tension in Eastern Europe and its impact on economic activity, but also mounting geopolitical tension in Asia. In light of these situations, supply chain bottlenecks constitute an ongoing concern, considering the importance of Taiwan as a major supplier of semi-conductors and custodian of shipping lanes in the affected area. Though the world has become more accustomed to living with COVID-19, the pandemic may continue to impact lives and consumer spending habits. It has also been an important reason behind growing global labour market tightness, especially in the US and the Euro-zone. COVID-19 infection rates have risen further in some Euro-zone economies, including Germany and selected parts of the US. The pandemic and associated lockdowns in China, amid the country's zero-COVID-19 policy, remain an issue as well.

**World trade** shows a diverging trend between volumes and values. While volume growth has accelerated, the latest global value levels have decelerated, reflecting a wakening price trend in globally traded goods. **Trade in value terms** increased by 10.1% y-o-y in May, compared with 13.3% y-o-y in April and 14.5% y-o-y in March, based on the CPB World Trade Monitor Index provided by the CPB Netherlands Bureau for Economic Policy Analysis.

**Trade in volume terms** rose by 5.7% y-o-y in May, compared with 2.1% y-o-y in April and 1.7% y-o-y in March.

**Graph 3 - 1: Global trade**



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

## Near-term global expectations

Due to an unexpected considerable decline in US 1Q22 GDP growth, along with very low 1H22 GDP growth in China and other economies, global economic growth has been relatively modest since the beginning of the year. However, given the significantly loosening of COVID-19 restrictions in most economies, ongoing pent-up demand that is still well-cushioned by savings from earlier pandemic-related stimulus measures, and a consequent rebound in the contact-intensive services sector, **global economic growth is forecast to pick up in 2H22**. However, the Euro-zone is forecast to show a somewhat contrary growth pattern compared with its major-economy peers, as it experienced resilient growth in 1H22, but this is forecast to decelerate in 2H22, especially considering the likely fallout of the geopolitical situation in Eastern Europe and its potential consequences on energy prices. Downside risks remain, given the ongoing global rise in inflation, associated with possibly further rising energy prices, amid a G7 import embargo on Russian fuels. Moreover, geopolitical situations and the possibility that the pandemic may re-emerge again towards the northern-hemisphere winter season are factors that may dampen growth in 2H22. Momentum in 3Q22 is anticipated to be driven by pent-

up demand, especially in the contact-intensive services sector, in particular the sectors of travel and transportation, leisure and hospitality. Although it remains to be seen to what extent prices will rise, current air-travel issues and the staff shortages in key economies will affect the growth dynamic. In theory, the still-solid disposable income situation, in combination with sufficient savings, should provide a base for robust dynamics. Moreover, fiscal measures in the EU used to compensate for inflationary effects and strengthen household incomes, as well as the latest spending bill that was approved by the US Senate – The Inflation Reduction Act – in combination with governmental-led stimulus measures in China, all support the 2H22 growth dynamic.

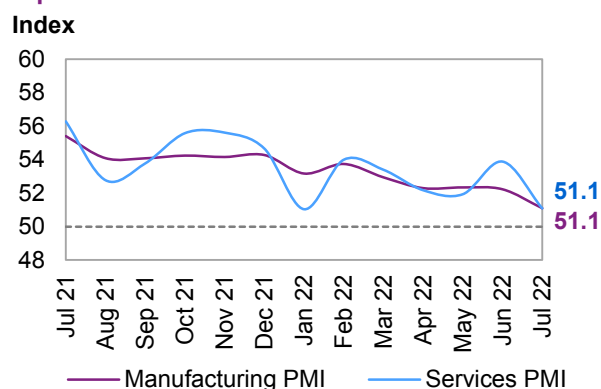
**Quarterly global GDP growth** is estimated at 0.5% q-o-q in 1Q22. Given the lacklustre growth in major economies and the decline in 2022 US global GDP growth, it is estimated to have fallen to -0.3% q-o-q in 2Q22. In 3Q22, growth is forecast to pick up considerably and see its peak for this year at a quarterly level of 1.5% q-o-q. In 4Q22, some slowdown is expected due to the potential seasonal rise in COVID-19 infections, possibly leading to associated social distancing measures and mildly dampening growth activity, as was the case in 2020 and 2021. Moreover, high energy prices – especially in the EU, with major price rises in electricity already announced or implemented in most economies – are forecast to limit growth in 4Q22. The Euro-zone is forecast to show no growth in 4Q22. Hence, the global GDP 4Q22 growth is forecast at 0.5% q-o-q.

Importantly, the **forecast considers** that the geopolitical situation in Eastern Europe will not escalate further in 2H22. Another important assumption is that any changes in fossil fuel exports from Russia to Europe will not cause material energy shortages for the Euro-zone in 2H22, but this remains to be seen. Additionally, Russia is assumed to better manage its decline in exports, drop in domestic demand and rising inflation in 2H22. It is also assumed that price rises for agricultural products will not accelerate further in 2H22 due to reduced exports from Ukraine and Russia, although this situation needs to be watched closely. Moreover, it is now forecast that both Russia and Ukraine will face a severe recession in 2022 and that the rest of the global economy will be thoroughly impacted by the potential outcomes of the situation through a variety of channels. One of the most important outcomes is rising inflation, which is impacting the global economy through strong yearly increases in commodity prices, fuelled by ongoing supply-chain bottlenecks and COVID-19-related logistical logjams in China and elsewhere. Food inflation, in particular, will likely create an existential challenge for low-income and less-developed economies, especially in 2H22. Moreover, increasingly tight labour markets in major advanced economies are expected to further fuel wage and salary increases, feeding into an extended inflationary trend. Price pressures will guide central banks across the world to further rein in inflation, with both the ECB and the Fed to accelerate their monetary-tightening efforts. In 2023, the Fed is currently expected to hold its key-interest rate level steady, while the ECB is forecast to continue appreciating interest rates.

**Global purchasing managers’ indices (PMIs)** reflect the latest slowdown in major economies. The global manufacturing PMI retracted, standing at 51.1 in July, compared with 52.2 in June and 52.3 in both May and April. The global services sector PMI fell to 51.1 in July, compared with 53.9 in June and 51.9 in May.

By taking the actual growth numbers from 1H22 into account and at the same time accommodating the expected global economic growth rebound in 2H22, global growth has been revised down for 2022 and marginally for 2023.

**Graph 3 - 2: Global PMI**



Sources: JP Morgan, IHS Markit, Haver Analytics and OPEC.

**Growth in 2022** is forecast at 3.1%, compared with 3.5% the previous month. Assuming there is no extraordinary dampening effect resulting from financial tightening, the pandemic and the geopolitical situation in Eastern Europe, global growth is also forecast at 3.1% **in the coming year**, compared with 3.2% the previous month. This trend also reflects normalisation in growth levels in economies across the world, after large stimulus packages were rolled out during the pandemic. Hence, global economic growth should again mean-revert towards growth potential, which currently stands at around the current forecast level.

**Table 3 - 2: World economic growth rate and revision, 2022–2023\*, %**

	World
<b>2022</b>	<b>3.1</b>
<b>Change from previous month</b>	-0.4
<b>2023</b>	<b>3.1</b>
<b>Change from previous month</b>	-0.1

Note: \* 2022 and 2023 = Forecast.  
Source: OPEC.

## OECD

### OECD Americas

#### US

#### Update on the latest developments

**The latest preliminary figures on US GDP growth for 2Q22** show a surprising drop, so that now the entire 1H22 is seen experiencing a declining growth pattern. After a reported decline in 1Q22 and growth of 1.6% q-o-q SAAR, 2Q22 GDP growth was reported at -0.9% q-o-q SAAR, based on preliminary data provided by the US Bureau of Economic Analysis (BEA). This comes despite ongoing reported strength in the labour market. A variety of factors may have driven the decline. Data for 1Q22 confirm that growth was likely impacted by the latest Omicron wave and its associated influence on the contact-intensive services sector. Furthermore, dislocations as a result of the geopolitical tension in Eastern Europe that started to unfold at the end of February, such as rising import prices, had a severe negative impact on net trade. Additionally in 2Q22, consumption performed poorly amid a rise in inflation and obviously reduced purchasing power. With rising geopolitical and economic uncertainties, private households seemed less willing to tap into their savings and private household expenditures only rose by 0.8% q-o-q SAAR.

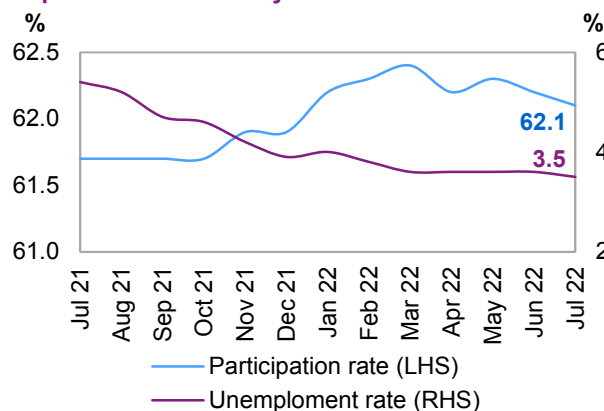
Meanwhile, the Fed continued its monetary tightening efforts and lifted its key policy rate further by 75 basis points in July, pushing it up to around 2.5%. Monetary policy actions were guided by inflation numbers, which rose again in June, reaching 9% y-o-y following 8.5% y-o-y in May.

Consumer confidence dropped further compared with previous months. The index provided by the Conference Board retracted to 95.7 in July, compared with 98.4 in June and 103.2 in May. This reflects the ongoing inflationary trend, despite strength in the labour market.

The **unemployment rate** dropped further to an even lower level to stand at 3.5% in July, compared with an already low level of 3.6% in June. However, the **participation rate** fell slightly to stand at 62.1% in July, compared with 62.2% in June and 62.3% in May — the lowest level this year.

**Non-farm payrolls** continued to rise firmly, with an increase of 528,000 in July, compared with an upwardly revised figure of 398,000 job additions in June. Ongoing labour market tightness and corresponding wage developments need to be closely monitored, as they could materially lift inflation. Hourly wage growth remained strong, up by 5.2% in July, the same level as in June. With this trend, wage growth remains substantially above annual pre-COVID-19 growth of between 2% and 3%.

**Graph 3 - 3: US monthly labour market**



Sources: Bureau of Labor Statistics and Haver Analytics.

#### Near-term expectations

After a **stronger-than-reported decline in 1H22**, the US economy is forecast to regain some momentum towards 3Q22 and 4Q22. It is anticipated that pent-up demand, particularly in the contact-intensive services sector, will support growth, while trade is also forecast to support underlying 2H22 growth. With a lessening of COVID-19-related social-distancing measures, an important factor especially in the 1Q22 decline, the services sector is predicted to recover a bit further in 3Q22 and beyond, particularly with support of the travel and tourism sector and an expected recovery in leisure and hospitality.

However, major **uncertainties remain**. Among the most pressing issues is inflation, in combination with rising interest rates, as an outcome of monetary tightening. Swiftly rising inflation eats into household disposable spending, while monetary tightening is forecast to gradually cool the economy. Rising energy prices pose another risk going forward. The latter may lead to a more significant reduction in consumption than currently anticipated, especially towards the end of the year. This trend seemingly began in 2Q22, with retail sale volumes declining from March to June. Potential inflationary spending reductions may materialize further in 2H22, at a time when the pandemic could result in the resumption of social-distancing measures.

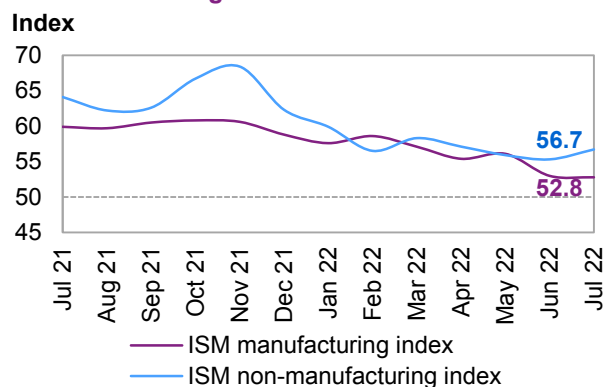
Positively, the latest spending bill – confirmed by the Senate, though still needing the approval of the House of Representatives – could lessen some of the effects of price rises, with a focus on climate change-related and health-care spending.

Moreover, the **Fed’s monetary policy** actions will remain an influential factor for economic growth. The guiding measure for its policymaking will be its inflationary expectations. Some moderation in inflation is forecast towards the end of the year, leading to a full-year inflation level of more than 8%. It is forecast that the Fed will lift interest rates further, by 75 bp in July and another 75 bp towards the end of the year.

In terms of **quarterly growth** developments, a GDP decline of 1.6% q-o-q in 1Q22 is reported to be followed by a decline of 0.9% q-o-q SAAR in 2Q22 in an advanced estimate by the Bureau of Economic Analysis. In 2H22, growth is forecast to rebound, reaching 2.3% q-o-q SAAR in 3Q22 and 2.2% q-o-q SAAR in 4Q22.

July **PMI** levels, as provided by the Institute for Supply Management (ISM), point to an ongoing positive dynamic, albeit at a slowing rate in the manufacturing sector amid the latest inflationary developments, continuing labour market tightness and persistent supply chain bottlenecks. The index level for the services sector, representing around 70% of the US economy, rose slightly to stand at 56.7 in July, compared with 55.3 in June. The manufacturing PMI for July declined slightly to stand at 52.8, after reaching 53.0 in June.

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



Sources: Institute for Supply Management and Haver Analytics.

Taking into consideration the decline in 1H22 growth, along with the solid rebound expected for the remainder of the year, **2022 US GDP growth** was revised down to stand at 1.8%, a significant downward revision from the previous month’s growth forecast of 3%.

This is expected to be followed by **2023 GDP growth** of 1.7%, a downward revision of 0.4 percentage points from last month.

**Table 3 - 3: US economic growth rate and revision, 2022–2023\*, %**

	US
<b>2022</b>	<b>1.8</b>
<b>Change from previous month</b>	-1.2
<b>2023</b>	<b>1.7</b>
<b>Change from previous month</b>	-0.4

Note: \* 2022 and 2023 = Forecast.

Source: OPEC.

## OECD Europe

### Euro-zone

#### Update on the latest developments

The **2Q22 growth dynamic surprised** again to the upside. While the preliminary data suggests 2Q22 growth of 2.8% q-o-q SAAR, no further details were released in this advanced estimate. However, it seems likely that pent-up demand, supported by the COVID-19-related government-led stimulus measures was again fuelling this momentum. This comes after already strong growth in 1Q22, despite the fact that the quarter was, globally, very much impacted by the spread of the infectious COVID-19 Omicron sub-variants. Additionally, the negative effects on sentiment and inflation caused by geopolitical developments in Eastern Europe seems to have been counterbalanced by an ongoing strong underlying dynamic, also supported by the accommodative monetary policies of the European Central Bank (ECB). Details will be released in August and it will be important to see how the elements of GDP have developed, as some areas in the 1Q22 dynamic have been weak. In 1Q22 private consumption fell by an annualized rate of 1.6% q-o-q. This negative spending dynamic was counterbalanced by strong growth in investments, which expanded by 6.4% q-o-q SAAR in 1Q22. Social distancing measures at the beginning of the year had a considerably negative impact on consumer spending. Furthermore, geopolitical developments, together with a substantial rise in inflation, could have further negatively impacted consumption.



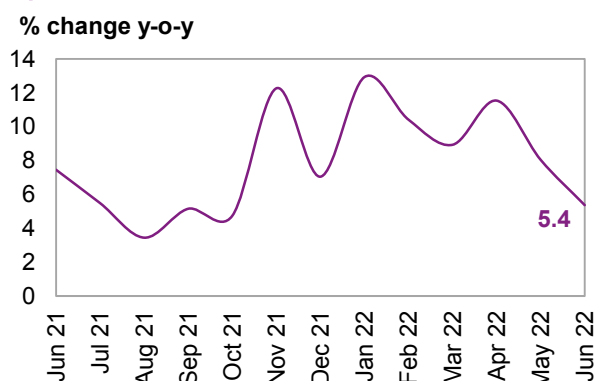
**Inflation** may have been another dampening factor on private household consumption in 1Q22, so it remains to be seen how it will develop. Inflation continued to rise strongly in July on a yearly basis, to stand at 8.9% y-o-y for the month in the Euro-zone, compared with an 8.6% y-o-y rise in June and an 8.1% increase in May. When excluding volatile items such as food and energy, inflation stood at 5% y-o-y in July, compared with 4.6% y-o-y in June and 4.4% y-o-y in May. Supported by the ongoing monetary easing measures, lending to the private sector by financial institutions continued to expand significantly in June. However, the ECB shifted towards monetary tapering and higher interest rates and lifted interest rates by 50 bp in July, more than expected by most market observers. Moreover, the ECB intends to increase the key policy rate by around 50 bp in September. Lending to the private sector rose by a strong 5.8% y-o-y in June, after an already high increase of 5.2% y-o-y in May and a rise of 4.9% y-o-y in April. This strong rise, however, may reverse course significantly in 2H22.

The **labour market** continued its positive trajectory. According to the latest numbers from Eurostat, the unemployment rate stood at 6.6% in May for the third month in a row.

**Retail sales** signalled a weakening in the economy's underlying spending behaviour as retail sales value growth retracted to 5.4% y-o-y in June, after growth of 8% y-o-y in May. Moreover, these levels were also inflated by the already strong price rises, especially in the commodity sector.

**Industrial production** recovered slightly in May, after declining in April and March. May's number rose by 1.2% y-o-y, compared with a decline of 2.2% y-o-y in April and -1% y-o-y in March. This translates into a monthly increase of 0.8% m-o-m in May, after a rise of 0.5% in April and a decline of 1.7% in March.

**Graph 3 - 5: Euro-zone retail sales**



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

## Near-term expectations

After the Euro-zone's better-than-expected GDP growth dynamic in 1H22, growth in **2H22 is likely to slow down materially** with numerous uncertainties prevailing. However, 3Q22 growth should still be relatively well supported by a rebound in the contact-intensive services sector. Travel and transportation, leisure and hospitality, in particular, are forecast to contribute significantly to the European recovery. However, some elements in this recovery may be held back by the ongoing issues related to air travel, including delays, flight cancellations and queues at airports throughout Europe. Moreover, the manufacturing sector is forecast to remain impacted by ongoing supply chain bottlenecks. Ongoing uncertainties for the remainder of the year loom large, and the growth trend will very much depend on the status of geopolitical developments and their potential spill-over effect on the Euro-zone economy. The energy supply issue, as well as the developments of energy prices, will need to be carefully monitored, given the implementation of a partial embargo on Russian oil imports and an associated reduction in gas-imports by the EU, as it plans to phase out a majority of Russian gas imports by the end of the year. In addition, COVID-19 case numbers have risen in some parts of the Euro-zone again. The seasonality of COVID-19 over the past two years suggests a potential return of social distancing measures in the autumn and winter.

The ECB has started to gradually tighten its quantitative easing measures and is forecast to lift its key policy rate by at least a further 50 bp by September. The tightening measures of the ECB are forecast to have a positive impact on the Euro-exchange rate and import prices, hence it may also have a dampening effect on inflation.

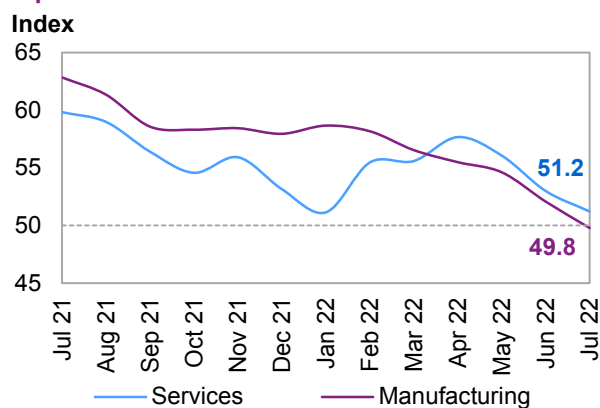
In terms of **quarterly growth** developments, GDP growth was reported at 2% in 1Q22 and at 2.8% in 2Q22. This is forecast to be followed by gradual slow-down in 3Q22, when growth is estimated to reach 1.6% q-o-q SAAR. Growth in 4Q22 will be very likely impacted by energy supply uncertainties, high inflation and rising interest rates. Considering only partial consequent effects on domestic consumption and investments, 4Q22 growth is forecast flat at 0% q-o-q SAAR.

## World Economy

The Euro-zone's July PMI pointed to a continued slowdown in the manufacturing and services sectors. The **PMI for services**, the largest sector in the Euro-zone, fell to 51.2, compared with 53 in June and a considerably higher level of 56.1 in May.

The **manufacturing PMI** retracted as well and moved into contractionary territory to stand at 49.8 in July, after 52.1 in June and 54.6 in May.

**Graph 3 - 6: Euro-zone PMIs**



Sources: IHS Markit and Haver Analytics.

By taking the very strong growth from 1H22 into account and at the same time a material slow-down in 2H22 the **GDP growth forecast for 2022** was revised up to stand at 3.2%, compared with 3% in the previous month. This forecast is followed by an anticipated slowdown into 2023. The **2023** GDP growth forecast was also revised down to stand at 1.7%, compared with 2.0%.

**Table 3 - 4: Euro-zone economic growth rate and revision, 2022–2023\*, %**

	Euro-zone
<b>2022</b>	<b>3.2</b>
<b>Change from previous month</b>	0.2
<b>2023</b>	<b>1.7</b>
<b>Change from previous month</b>	-0.3

Note: \* 2022 and 2023 = Forecast.

Source: OPEC.

## OECD Asia Pacific

### Japan

#### Update on latest developments

Although Japan's economy appears to have recovered somewhat from its 1Q22 decline, it **continues to face several challenges** that seem to dampen growth in the current rebound. First, recently, there was a significant rise in COVID-19 infections, obviously dampening activity in the services sector as can be seen in a decline in mobility as voluntary social distancing measures are being pursued again. The World Health Organization reported that Japan had the highest number of new cases in the Asia-Pacific region at the end of July. While Japan has successfully managed its vaccination roll-out among the elderly, Japan's low vaccination rate among the younger part of the population is currently driving infections. Second, the ongoing weak yen, in combination with rising energy import prices, is another source of concern, dampening domestic consumption. This has led to an open discussion to restart more nuclear power plants. The Prime Minister proposed to restart up to nine nuclear reactors to address an expected shortage of electricity in the winter period. This could supply up to 10 per cent of its electricity needs. Before the nuclear accident in 2011, Japan had 54 nuclear reactors online and sourced around 30% of its electricity from nuclear energy, while currently only four are operating.

The current challenges come after Japan's **1Q22 GDP growth** was reported at -0.5% q-o-q SAAR. The 1Q22 GDP decline was negatively impacted once again by a severe rise in COVID-19 infections, with associated voluntary and governmentally implemented social distancing measures. In addition, a rise in import prices negatively impacted GDP growth in 1Q22. A third impact came from a slowdown in trade with Japan's two major trading partners, the US and China, with both witnessing slowing growth momentum in 1Q22.

Consumer **inflation** stood at 2.3% y-o-y in June, somewhat lower than in May, when inflation stood at 2.4% y-o-y. This remains a low inflation level, albeit much higher than historic levels in Japan. The Bank of Japan (BoJ) has maintained its accommodative **monetary policy** as inflation remains relatively low. This limited monetary policy has led to a continuously weak yen, especially compared to the US dollar. Although the yen has recovered to some extent compared to the US dollar, it continued trading at more than 130 yen compared to the US dollar in recent weeks, reflecting the differences between American and Japanese interest rates and the associated growth differential.

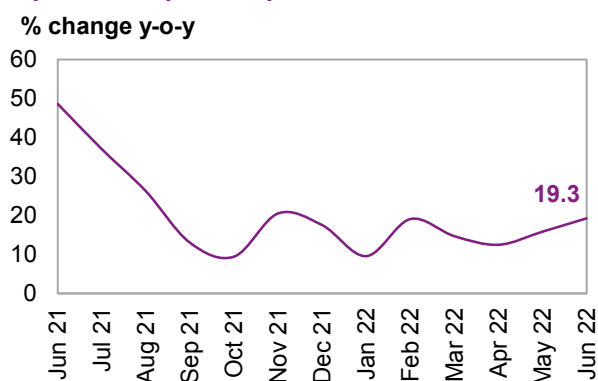
**Industrial production (IP)** declined again in June, falling by 2.5% y-o-y, compared with declines of 4.2% y-o-y in May and 3.1% y-o-y in April, a significant downward trend in contrast to February's growth of 1%.

On a positive note, and after a weak 1Q22 dynamic, **export growth** accelerated again in June, rising by 19.3% y-o-y, compared with 15.8% y-o-y in May and 12.5% y-o-y in April.

**Retail sales** retracted to grow by 1.5% y-o-y in June, compared with 3.7% y-o-y in May and a rise of 3.1% y-o-y in April.

**Consumer confidence** fell further, to stand at an index level of 30 in July, compared with 32.2 in June and 32.9 in May, reflecting the ongoing challenges.

**Graph 3 - 7: Japan's exports**



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

### Near-term expectations

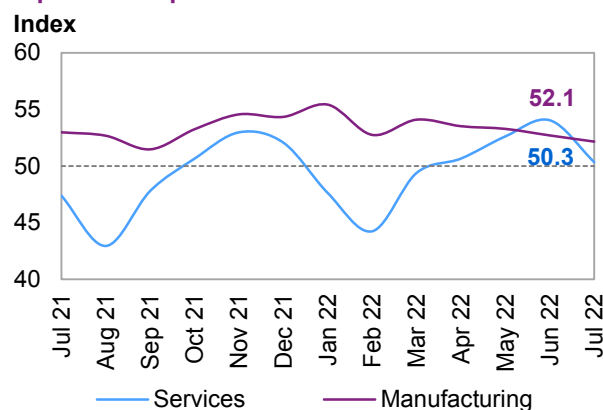
While Japan's economy has declined in 1Q22, it is estimated to have recovered somewhat in 2Q22 and to continue a **GDP growth acceleration in 3Q22**, when economic growth is forecast to peak this year, before again slowing in 4Q22. The growth trend in 2022 is forecast to primarily be supported by domestic demand, while external trade remains an important aspect of the growth dynamic. Exports are forecast to expand further, but as the country's most important trading partners, the US and China, were experiencing slower growth in 2Q22, the strength of Japan's 2Q22 is estimated to have been soft as well, but to some extent compensated by other trading partners. Based on the available monthly data, 2Q22 exports expanded by 5.9% q-o-q seasonally adjusted. That compared with growth of 3.4% q-o-q in 2Q22, based on the monthly aggregated data, as provided by the Japan Tariff Association. Further data details will become available later in August. However, some downside risk of the 2H22 recovery may come from the currently re-emerging COVID-19 infection rates and ongoing rising energy import prices at a time of weakness for the Japanese yen.

Though inflation has risen considerably, it is forecast to remain under control, but further rising wages and salaries may support the trend of rising inflation further. Constituting a forward-looking indicator for inflation, labour earnings have risen by 3% y-o-y in June, compared with 1.6% y-o-y in May. However, for the time being, the BoJ is expected to keep its monetary policies relatively more accommodative compared with other G4 central banks. Therefore, the current weakness in the yen may persist for some time. While this is positive for exports, it may have a net-negative impact on import prices, which have risen significantly.

**On a quarterly basis**, 1Q22 GDP growth was reported to have declined by 0.5% q-o-q SAAR. Growth is forecast to rebound to stand at 2.7% q-o-q SAAR in 2Q22 and move to 3.4% q-o-q SAAR in 3Q22. At the end of the year, growth is then again forecast to slow and is estimated to reach 1.8% q-o-q SAAR in 4Q22.

The **July PMI** numbers point to an ongoing gradual slow-down in both the manufacturing sector and the services sector. Rising infections are dampening the recovery in the contact-intensive services sector. The services sector PMI, which constitutes around two-thirds of the Japanese economy, retracted to an index level of 50.3 in July, after it had risen considerably in June to stand at 54, after 52.6 in May. This could point to a weaker-than-currently expected 3Q22 dynamic. The manufacturing PMI fell slightly to 52.1 in July, compared with 52.7 in June and 53.3 in May.

**Graph 3 - 8: Japan's PMIs**



Sources: IHS Markit, Nikkei and Haver Analytics.

Given the slowing lead-indicators in combination with the challenges of increasing COVID-19 infection rates, rising energy import prices and a continued weak Japanese yen, **GDP growth for 2022** was revised down to stand at 1.4%, compared with 1.6% in the previous month.

GDP growth in **2023** is forecast at 1.6%, compared with 1.7% in the previous month.

**Table 3 - 5: Japan's economic growth rate and revision, 2022–2023\*, %**

	Japan
<b>2022</b>	<b>1.4</b>
<b>Change from previous month</b>	-0.2
<b>2023</b>	<b>1.6</b>
<b>Change from previous month</b>	-0.1

Note: \* 2022 and 2023 = Forecast.

Source: OPEC.

## Non-OECD

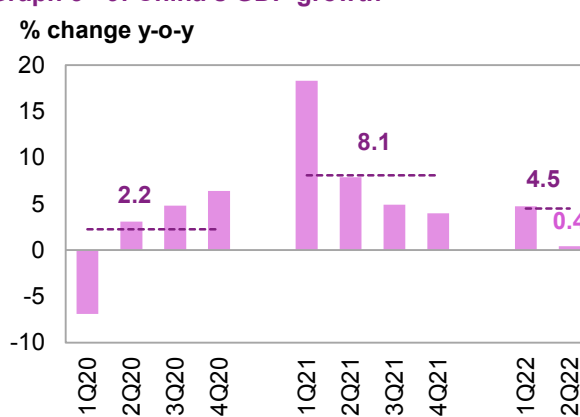
### China

#### Update on the latest developments

**China's real GDP** expanded only by 0.4% y-o-y in 2Q22 following growth of 4.8% y-o-y in 1Q22. The latest growth rate was the softest pace of expansion since a contraction in 1Q20, when the initial COVID-19 outbreak emerged in Wuhan.

For 1H22, the economy grew by 2.5% y-o-y, challenging Beijing's growth target of 5.5% for 2022 as the economy is still recovering from the ramifications of the latest COVID-19 outbreak. The government has rolled out several fiscal and monetary measures such as cutting taxes for businesses and channelling more money into infrastructure projects, which could boost growth in 2H22.

**Graph 3 - 9: China's GDP growth**



Sources: National Bureau of Statistics and Haver Analytics.

Moreover, while reiterating that its "zero-COVID-19" policy is the only option, the government has shortened quarantine requirements for inbound visitors and called for a reduction of inter-provincial travel restrictions.

China had vaccinated nearly 90% of its population by June 2022 but it has struggled to vaccinate the elderly, who are more vulnerable to COVID-19, and the vaccines used have lower efficacy than some of their international counterparts.

The latest available data suggested a rise in industrial production of 3.9% y-o-y in June 2022, which is much faster than the 0.7% y-o-y expansion in May, as the economy emerged further from COVID-19 restrictions.

More optimistically, retail trade jumped 3.1% y-o-y in June 2022 compared with a 6.7% y-o-y drop in the prior month. This was the first increase in retail sales since February 2022, suggesting a considerable recovery in private consumption. For the January to June period, retail sales contracted by 0.7% y-o-y, reflecting the impact of strict mobility measures in several major cities from March to May 2022. Also, June's central bank survey suggested that individuals' confidence in the labour market was at its lowest level since 2009, and a higher percentage of those surveyed said they planned to save rather than spend.

The latest external demand data indicated that the trade surplus surged to a new record of \$101.3 billion in July 2022 compared to \$55.89 billion in July 2021. Exports climbed 18% y-o-y, the highest in six months. While imports expanded by 2.3% y-o-y. In the meantime, the trade surplus with the US was little unchanged at \$41.5 billion compared to June's surplus of \$41.4 billion. For the January to July period, the trade surplus stood at \$482.3 billion.

The annual inflation rate climbed to 2.5% y-o-y in June 2022 from 2.1% y-o-y in the prior month. This was the highest inflation rate since July 2020 due to rising food prices rising as consumption strengthened further following an improvement in the COVID-19 situation. The People's Bank of China (PBoC) has set a CPI target of around 3% for 2022, the same as in 2021.

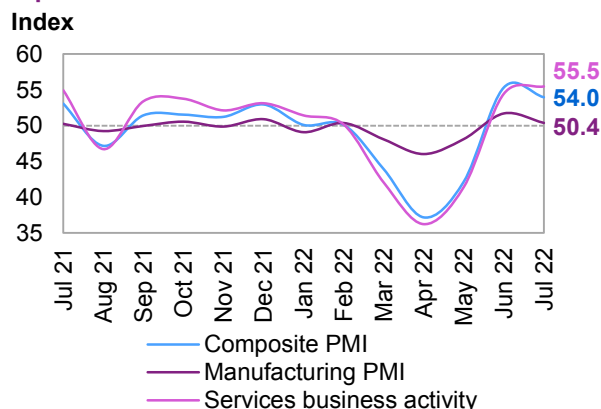
## Near-term expectations

Recent official growth data reflected the impact of 2022 lockdowns but not entirely as the zero-COVID-19 policy and its related restrictions remain active and continue to challenge the short-term economic outlook. Recent support measures and significant growth in external demand might aid the economic recovery. However, this recovery is still restricted by low business and consumer confidence as well as external economic conditions. More downside risks may also emanate from persistent pressure on the property sector, which may lead to financial repercussions as well as concerns about new virus outbreaks and relatively subdued customer demand. An effective COVID-19 control policy associated with fewer restrictions, as well as further stimulus and monetary support, would provide upside growth potential.

Due to electricity shortages at some firms, the **manufacturing PMI** declined to 50.4 in July 2022 from June's 13-month high of 51.7.

By contrast, the **services PMI** rose to 55.5 in July 2022 from 54.5 in June, pointing to the second straight month of growth amid the sharpest pace of expansion in the service sector since April 2021, due to the further improvement in the COVID-19 situation after an easing of lockdown measures. New orders rose the most since October 2021.

**Graph 3 - 10: China's PMI**



Sources: Caixin, IHS Markit and Haver Analytics.

Incorporating 2Q22 official growth data as well as recent developments, China's 2022 **GDP forecast** is revised down to 4.5% from 5.1% in the last MOMR. The current forecast takes into account governmental support as well as the slight easing of COVID-19 policies. Meanwhile, the economic growth forecast for 2023 is unchanged at 5.0%. It is important to note that more downside risks may emerge, including risks of a new COVID-19 variant in the winter that could hinder the economic recovery in 4Q22 and 1Q23.

**Table 3 - 6: China's economic growth rate and revision, 2022–2023\*, %**

	China
<b>2022</b>	<b>4.5</b>
<b>Change from previous month</b>	-0.6
<b>2023</b>	<b>5.0</b>
<b>Change from previous month</b>	0.0

Note: \* 2022 and 2023 = Forecast.

Source: OPEC.

## Other Asia

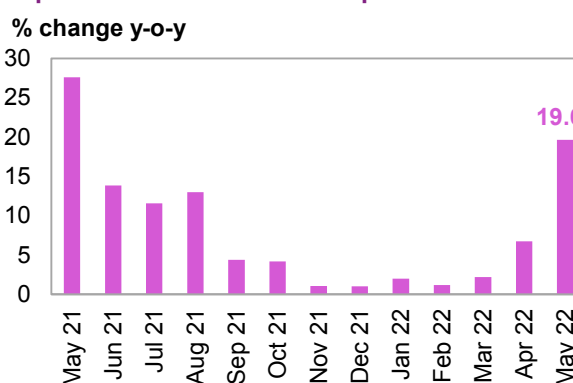
### India

#### Update on the latest developments

Despite rising inflation rates, **India's economy** continued on its recovery path, supported by pent-up demand for services and higher industrial output.

Recent data suggested that **industrial output** expanded almost 20% y-o-y in May 2022, advancing about 7% y-o-y in April as the pickup in capital, infrastructure and consumer durables output continued. However, manufacturing sector growth may remain disturbed amid potential supply-chain disruptions due to China's lockdowns.

**Graph 3 - 11: India's industrial production**



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

**Higher import prices** have affected household spending. Yet due to easing COVID-19 restrictions and the pickup in consumer confidence, total passenger vehicle sales in India, a guideline for consumer spending sentiment, grew by 9.9% to reach 275,788 units in June 2022, reversing sharply from a 0.2% decline in May. It was the first increase in passenger vehicle sales in three months.

June's **annual inflation rate** was broadly unchanged from the previous month at 7.0%. But it remained above the RBI's target range of 2%-6% for the sixth straight month. Moreover, food inflation (particularly vegetables) rose by 7.6%, along with the cost of transportation and communication. On a monthly basis, **consumer prices** went up 0.52%, after a 0.94% gain in May.

In efforts to bring down inflationary pressures, the RBI hiked the repo rate for the third time this year by 50 bps to 5.4% during its August meeting. The decision followed a 50 bps hike in June, bringing the rate to a level not seen since September 2019. In the meantime, the central bank kept its inflation forecast for FY 2023 at 6.7% and its economic growth forecast at 7.2%.

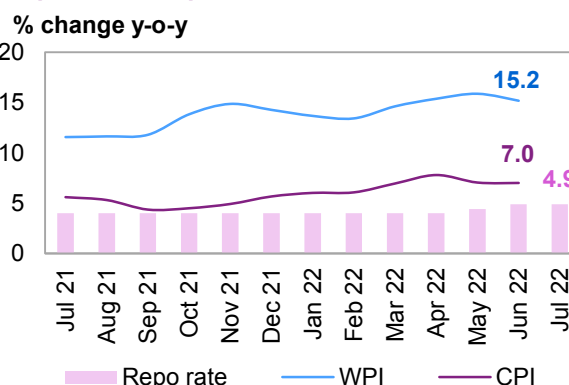
On the fiscal policy front, the government provided further fiscal stimulus in June 2022 to shield the economy from soaring prices. However, the announced measures account for only around 0.7% of GDP. Credit rating agencies Moody's and Fitch raised concerns about a lack of detail on the path to medium-term fiscal consolidation, as general government debt is nearing 90% of GDP.

Impacted by the rising petroleum purchases and rising global commodity prices, India's **trade balance** in July posted an all-time record deficit of more than \$31.0 billion as imports jumped above 42% y-o-y while exports dropped 0.5% y-o-y, affected by the weak global growth prospects which weighed on demand. Indeed, the value of non-petroleum exports in July 2022 was \$29.82 billion, registering positive growth of only 0.48% over non-petroleum exports of \$29.67 billion in July 2021.

### Near-term expectations

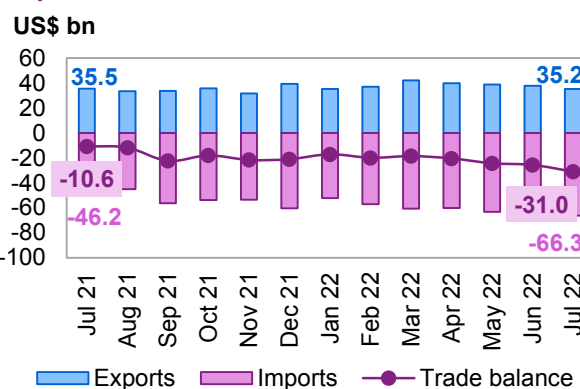
India's economy may maintain its upward recovery momentum, but it would be moderate given several risk factors including high inflation, less accommodative monetary conditions and a deteriorating external environment. Import inflation is expected to continue rising in 2H22, leading to a higher trade deficit considering that India is a major importer of commodities and slowing global demand would weigh on exports. The recent hikes in interest rates may also weaken the country's growth prospects since they prompt the deferral of investment plans in sectors without adequate capacity utilization. However, as the current Repo rate remains low by historical standards, financing conditions might not deter a recovery in private investment from late 2022.

**Graph 3 - 12: Repo rate and inflation in India**



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

**Graph 3 - 13: India's trade balance**



Sources: Ministry of Commerce and Industry and Haver Analytics.

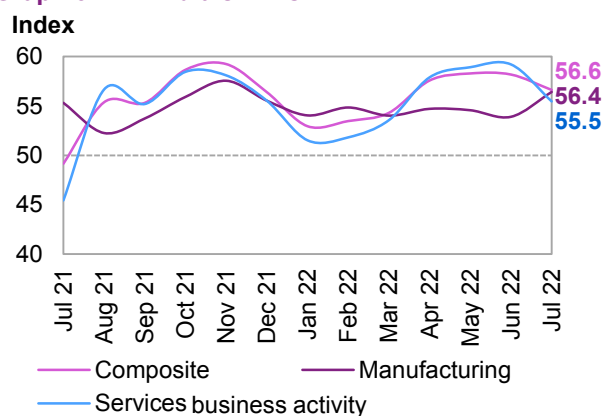
In the meantime, signs of slight growth in manufacturing output have been reflected in the July S&P Global **Manufacturing PMI**, which rose to 56.4 from 53.9 in June. Moreover, manufacturing business sentiment picked up slightly but caution over rising input costs remains.

The **services PMI** dropped to 55.5 in July from 59.2 in June, pointing to the weakest expansion in the sector since March 2022 amid weaker sales growth and inflationary pressures that restricted the upturn in business activity.

All in all, India's **GDP growth** may benefit from the slight improvement in domestic demand due to receding concerns over COVID-19. However, the improvement may slowly dissipate over the year as demand is satiated and prices become an overarching concern.

For this MOMR, India's 2022 and 2023 **GDP growth** forecasts were kept unchanged from the last MOMR at 7.1% and 6.0%, respectively. Indeed, the growth potential for 2023 is likely to be limited, especially with more fiscal support while downward pressures would mainly arise from unprecedented COVID-19 developments or a further elevation in inflation rates.

**Graph 3 - 14: India's PMIs**



Sources: IHS Markit and Haver Analytics.

**Table 3 - 7: India's economic growth rate and revision, 2022–2023\*, %**

	India
<b>2022</b>	<b>7.1</b>
Change from previous month	0.0
<b>2023</b>	<b>6.0</b>
Change from previous month	0.0

Note: \* 2022 and 2023 = Forecast.

Source: OPEC.

## Latin America

### Brazil

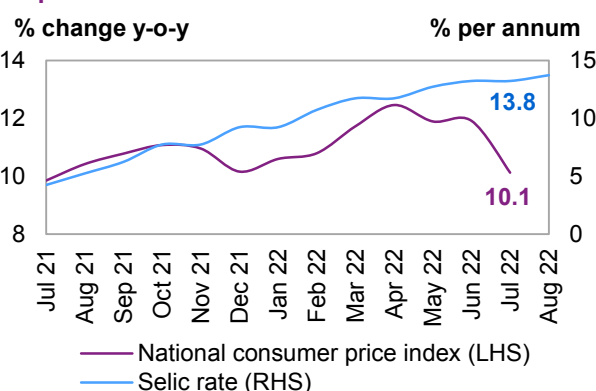
#### Update on latest developments

June and July's **Brazil economic data** suggest that the economic recovery that started in 3Q21 continued, though at a moderate pace amid credit conditions and inflation concerns. Recently, the government launched several policy measures to boost economic growth, including tax cuts and increases in public spending. Indeed, Congress approved the president's ability to spend beyond the fiscal rule.

Recent tax cuts to telecom and electricity prices, coupled with a drop in the average gasoline price to BRL 1.15 per litre, translated into a cool down in consumer inflation, which seems to have peaked at about 12% in June, the same rate as in May. Additionally, y-o-y growth in producer prices inflation eased to 18.8% in June compared with 19.2% y-o-y in May.

The central bank of Brazil (BCB) unanimously hiked the **Selic rate** by 50 bps to 13.75% in August, responding to uncertainty around prospective inflation and its slim convergence to (BCB)'s target. Nevertheless, the recent lift may be the last in the hike circle, considering the slight softening of energy prices, as well as the impact of recent fiscal support. More importantly, a rate increase from 2% to 13.75% risks asphyxiating the economic recovery over the short and medium term, and may slow the inflation rate.

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



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

## Near-term expectations

Weak credit conditions, loose fiscal policy, excessive monetary tightening, as well as political uncertainty may hinder Brazil's short-term growth. Yet recent government measures, high commodity prices and considerable household savings still support a solid recovery in the short term.

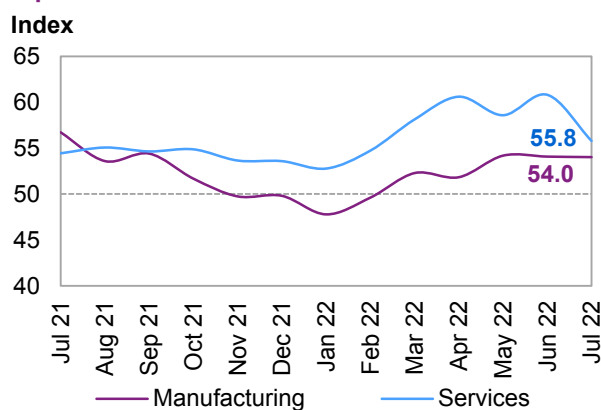
However, activities in the services sector could be hindered by the depreciation of the Brazilian real and an increase in input costs. In fact, the forward-looking July **services PMI** reading dropped to 55.8 from a record high of 60.8 the previous month.

In contrast, Brazilian manufacturers remained strongly confident of a rise in output over the course of the coming months, as reflected by the July **manufacturing PMI**, which remained little changed from last month's reading of 54.

Considering upcoming presidential elections, uncertainty is high in the near term, though confidence regarding the resilience of household demand and hopes of a positive outcome to the election may increase business and investor confidence. Concerns over inflation remain the biggest challenge.

Considering the mix of economic signals, **Brazil's GDP growth for 2022 and 2023** remains unchanged from last month at 1.2% and 1.5%, respectively.

Graph 3 - 16: Brazil's PMIs



Sources: IHS Markit and Haver Analytics.

Table 3 - 8: Brazil's economic growth rate and revision, 2022–2023\*, %

	Brazil
<b>2022</b>	<b>1.2</b>
<b>Change from previous month</b>	<b>0.0</b>
<b>2023</b>	<b>1.5</b>
<b>Change from previous month</b>	<b>0.0</b>

Note: \* 2022 and 2023 = Forecast.

Source: OPEC.

## Africa

### South Africa

#### Update on the latest developments

Recent macroeconomic data points to a slowdown in **economic activity** amid increasing fuel prices, coupled with low-income households. Meanwhile, strong growth in manufacturing activities in 1Q22 may not be repeated in 2Q22 and the rest of the year, due to incessant power outages, as well as pricy inputs and the ramifications of heavy flooding in parts of KwaZulu-Natal (KZN) during April, which led to various businesses being forced to temporarily halt production. Industrial production plunged at a softer rate in May by 2.3% y-o-y, following a downward-revised slump of 7.6% in April. The RMB/BER business confidence index (BCI) fell to 42 in 2Q22 from 46 in 1Q22, reaching its lowest point since 1Q21, due to a string of shocks ranging from labour strikes and massive electricity shortages to war and floods.

**Consumer prices** quickened by 7.4% in June from 6.5% in May, breaking through the upper limit of the South African Reserve Bank's (SARB's) target range of 3-6%. On the policy front, efforts by the SARB to contain surging domestic inflation led to a rise in the repo rate by 75 bps to 5.5%, further signalling that inflationary risks exist to the upside. Meanwhile, the bank's GDP growth projections were raised to 2% in 2022 (vs 1.7%), but fell to 1.3% in 2023 (vs 1.9%) and 1.5% in 2024 (vs 1.9%).

The country's trade kept improving, but higher international energy costs might push up the import bill. The **trade surplus** narrowed to ZAR 24.23 billion in June from an upwardly revised ZAR 30.85 billion the previous month. Compared with 1H22, the trade surplus shrank to ZAR 133.52 billion from ZAR 249.86 billion in 1H21.



## Near-term expectations

Despite a minor pick-up in some economic activities, the near-term economic outlook remains gloomy amid the impact of natural disaster shocks. Meanwhile, the economy faces a tight deadline to rectify serious flaws in its approach to combatting money laundering and forestall being grey-listed by the Financial Action Task Force (FATF). Grey-listing might add another burden, since the economy could lose its investment-grade categorisation by the three main credit-rating agencies. Yet considering the FATF's flexibility and the government's willingness to act, a favourable outcome may be cautiously possible, including extending the deadline. However, a positive outcome is by no means certain, as slow progress would increase the risk of grey-listing.

Reflecting these trends, the seasonally adjusted Absa **Purchasing Managers' Index** fell to 47.6 in July from 52.2 in June, mainly due to electricity supply disruptions. However, the S&P Global South Africa PMI edged higher to 52.7 in July from 52.5 in June, suggesting strong private sector growth since May of last year.

South Africa's real **GDP forecasts** for 2022 and 2023 remain unchanged from the previous month's assessment of 2.2% and 1.5%. Both forecasts are subject to downside risks, stemming from domestic and global economic developments in 2H22.

**Table 3 - 9: South Africa's economic growth rate and revision, 2022–2023\*, %**

	South Africa
<b>2022</b>	<b>2.2</b>
<b>Change from previous month</b>	0.0
<b>2023</b>	<b>1.5</b>
<b>Change from previous month</b>	0.0

Note: \* 2022 and 2023 = Forecast.

Source: OPEC.

## Russia and Central Asia

### Russia

#### Update on the latest developments

According to official monthly tracking, the **GDP** contracted 4.9% y-o-y in June, following a 4.3% contraction in May. Oxford economics' total output indicator (consisting of five basic indicators: agriculture, construction, industrial production, retail trade and transportation) contracted 4.5% y-o-y in June, following a deterioration of 3.4% y-o-y in May, mostly due to a slump in retail sales, industrial production and transportation, while construction and agriculture both posted growth.

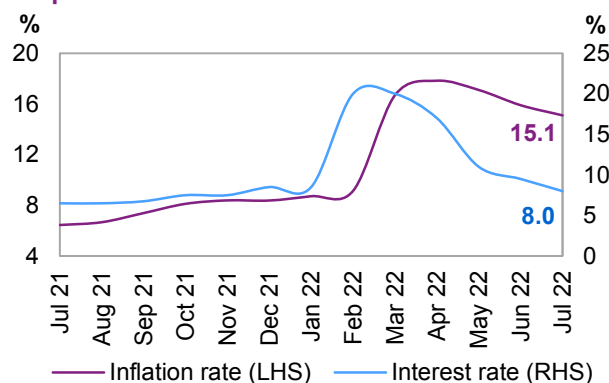
June industrial production contraction was broadly unchanged at 1.8% y-o-y from 1.7% y-o-y in May. Still, this was the third and steepest fall in industrial activity since February 2021, reflecting lower manufacturing output.

June's retail trade data implied that household spending is still fragile following the war's adverse effects, indeed, retail sales fell 9.6% y-o-y in June a slight pickup from the 10% drop in May. On a monthly basis, retail trade rose 1.1% following a 0.5% uptick in May.

Consumer inflationary pressures eased, as the **CPI** fell to Inflation eased to 15.1% y-o-y in July, from its peak of 17.8% in April. A moderation in price pressures partly reflects recent strength in the rouble, which has been supported by central bank FX interventions. Similarly, producer prices growth eased to 11.3% y-o-y in June from 19.3% y-o-y in May.

The slowdown of inflationary pressures supported a cut of **key interest rate** by the central bank in July by 150 bps to 8.0% from 9.5% in June. This policy rate cut indicates that the RCB is considering the need to further loosen monetary normalization, as inflation is slowing faster and the decline in economic activity is of a smaller magnitude than initially expected in April. At the same time, the rouble remains strong, holding close to levels not seen in years.

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



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

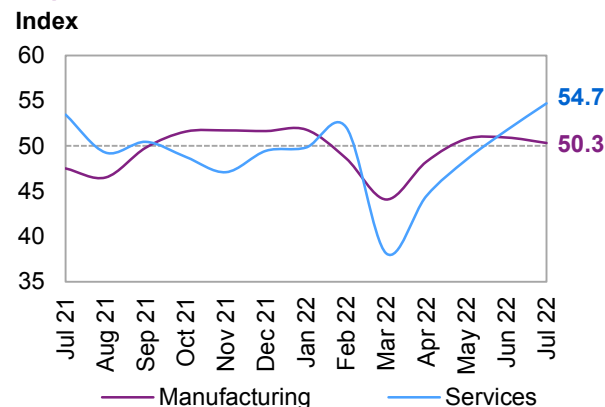
## Near-term expectations

Russia’s economy has so far shown resilience to sanctions, supported by the large domestic market and production as well as high fossil fuel prices. Nevertheless, the shock to the economy might result in a sizeable contraction in real GDP this year but the government measurements along with strong commodity prices might turn the contraction to growth in the coming year assuming the geopolitical tension ramifications would not worsening in 2H22. So far the economy has remarkably diverting its fossil fuel exports and very careful government policies have helped support economic activity in light of the ramifications of imposed external conditions. However, the contraction that started in 2Q22 might carry over to 3Q22, especially in consumption and investment activities.

**PMI indices** reflected the recent trend in both the manufacturing and services sectors. July’s S&P Global Manufacturing PMI went slightly down to 50.3 from 50.9 in June, marking the third straight month of expansion in factory activity, as new orders returned to growth, boosted by greater domestic demand.

Meanwhile, July’s services PMI increased to 54.7 from 51.7 in June pointing to the second straight expansion in the sector and the strongest growth since June 2021. Additionally, business sentiment strengthened for both sectors amid hopes of greater client demand and a stabilisation in economic conditions.

**Graph 3 - 18: Russia’s PMI**



Sources: IHS Markit and Haver Analytics.

Following current developments, **Russia’s real economic growth** for 2022 and 2023 remained unchanged at a contraction of 6.0% in 2022 and growth of 1.2% in 2023. High level of Uncertainties still surrounding these forecasts based on the development of ongoing tension with Ukraine, as well as any COVID-19-related developments as well as global economic recovery path.

**Table 3 - 10: Russia’s economic growth rate and revision, 2022–2023\*, %**

	Russia
<b>2022</b>	<b>-6.0</b>
<b>Change from previous month</b>	0.0
<b>2023</b>	<b>1.2</b>
<b>Change from previous month</b>	0.0

Note: \* 2022 and 2023 = Forecast.

Source: OPEC.

## OPEC Member Countries

### Saudi Arabia

According to preliminary estimates, **Saudi Arabia’s economy** grew 11.8% y-o-y in 2Q22, advancing from a 9.9% y-o-y growth in 1Q22. This was the strongest growth in the GDP since the 3Q11. The non-oil activities expanded by 5.4% y-o-y while government services activities rose by 2.2% y-o-y. On a quarterly seasonally adjusted data, the Saudi GDP expanded by 1.8 % due to the positive growth in oil economic activities of 4.8% and government services growth of 0.2%, while non-oil activities declined by 0.4%.

Recently the non-oil economic activities might have slowed down impacted by the gloomy global economic outlook and inflationary concerns. According to July’s PMI reading the non-oil private economic activities declined to 56.3 from June’s 8-month peak of 57.0. Still, this was the 23rd straight month of growth in the non-oil private sector. The drop is mainly caused by the output cost inflation acceleration as well as slightly weak business confidence. However the kingdom’s economic recovery remained one of the strongest seen since the pandemic began. A trend that is most likely to continue in the short and medium term.

## Nigeria

**Nigeria's** July Stanbic IBTC Bank PMI rose to 53.2 from 50.9 in June, amid stronger inflows of new orders, which helped underpin a further improvement in operating conditions in the Nigerian non-oil private sector. Yet, purchase and output price inflation accelerated for the fifth straight month to 18.6% in June 2022, compared to 17.7% in May, amid unfavourable exchange rate movements and higher fuel costs. Nevertheless, business sentiment improved as firms reported hopes of securing greater business investments.

## The United Arab Emirates (UAE)

**UAE economic activities** have sustained strong growth momentum through the previous months of 2022 amid the postponed Expo 2020 and the easing of pandemic-related restrictions as well as above-average crude oil prices. This trend has been reflected in July's S&P Global United Arab Emirates PMI reading, which increased to 55.4 from 54.8 in the prior month. Similar to the rest of the world, inflationary pressures have increased prices however it would not derail growth as employment and sentiment in non-oil economies have remained very strong.

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

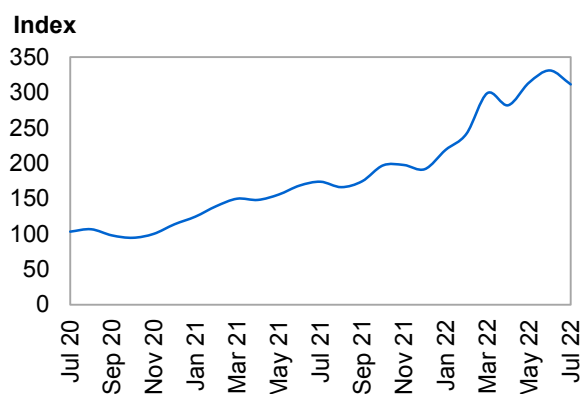
The **US dollar (USD) index** rose for the seventh consecutive month, increasing by 2.9% m-o-m. The USD came under pressure in recent weeks from weak macroeconomic indicators in the US and hawkish monetary policies by other major central banks. Nonetheless, the USD managed to advance m-o-m against both developed market (DM) and emerging market (EM) currencies, supported by the stronger performance from the US economy and the US Fed tightening cycle, both of which have outperformed peers. In the DMs, the USD appreciated m-o-m by 4.0% against the euro, and by 2.2% and 2.7% against the yen and sterling, respectively. In the EMs, the USD rose m-o-m by 2.0% against the rupee, and by 0.6% and 6.7% against the yuan and real, respectively.

The m-o-m decline in crude oil prices, in addition to rising inflation, weighed on real ORB prices. **Inflation** (nominal price minus real price) went from \$1.36/b in June to \$2.58/b in July, an 89.7% increase m-o-m. Nonetheless, the strengthening of the USD continued to lend support to ORB real prices.

In **nominal terms**, accounting for inflation, the price of the ORB went from \$117.72/b in June to \$108.55/b in July, a 7.8% decline m-o-m.

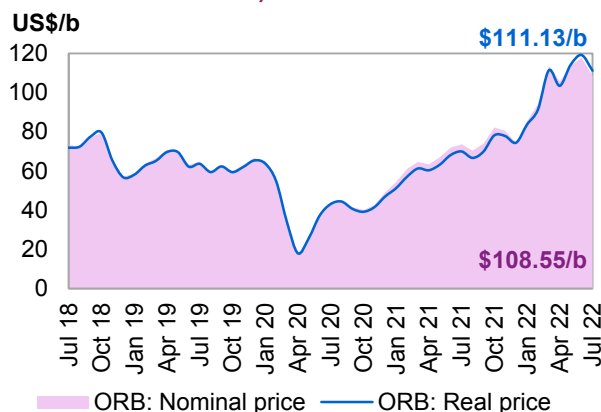
In **real terms** (excluding inflation), the ORB went from \$119.08/b in June to \$111.13/b in July, a 6.7% increase m-o-m.

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



Sources: IMF and OPEC.

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



Source: OPEC.

## World Oil Demand

For 2022, world oil demand is foreseen to rise by 3.1 mb/d, a downward revision of 0.3 mb/d from last month's estimate to account for some regional revisions. This still healthy growth includes the recently observed trend of burning more crude in power generation. Total oil demand is projected to average 100.03 mb/d. In 1Q22, demand was revised up amid strong economic growth in most consuming countries and a lower baseline.

In the OECD region, oil demand is anticipated to rise by 1.6 mb/d to reach 46.4 mb/d. OECD Americas demand is anticipated to rise the most in 2022, led by the US on the back of recovering gasoline and diesel demand. Light distillates are also projected to support demand growth this year. In the non-OECD region, total oil demand is anticipated to rise by 1.5 mb/d to reach 53.6 mb/d in 2022. That is nearly 1.2 mb/d higher than 2019 total demand. A steady increase in industrial and transportation fuel demand, supported by a recovery in economic activity, is projected to boost demand in 2022.

In 2023, expectations for healthy global economic growth, combined with expected improvements in the containment of COVID-19 in China, are expected to boost consumption of oil. The 2023 forecast has remained the same as the last MOMR at 2.7 mb/d. Consequently, the 2023 world oil demand is projected to reach 102.72 mb/d.

In the OECD, oil demand is anticipated to rise by 0.6 mb/d, as OECD Americas is expected to climb firmly, with US oil demand above 2019 levels mainly due to the recovery in transportation fuels and light distillate demand. OECD Europe and the Asia Pacific will grow above 2019 consumption levels. In the non-OECD, oil demand is projected to show an increase of 2.1 mb/d, with the largest growth seen in China and India, supported by a recovery in transportation fuels and firm industrial fuel demand, including petrochemical feedstock. Other regions such as Other Asia, Latin America and the Middle East are also expected to see decent gains, supported by a positive economic outlook. In terms of fuels, gasoline and diesel are assumed to lead oil demand growth next year.

**Table 4 - 1: World oil demand in 2022\*, mb/d**

World oil demand	2021	1Q22	2Q22	3Q22	4Q22	2022	Change 2022/21	
							Growth	%
<b>Americas</b>	24.28	24.88	24.99	25.31	25.45	25.16	0.89	3.65
<i>of which US</i>	19.93	20.38	20.37	20.74	20.91	20.60	0.67	3.39
<b>Europe</b>	13.08	13.09	13.31	14.16	14.18	13.69	0.60	4.62
<b>Asia Pacific</b>	7.41	7.89	7.12	7.23	7.93	7.54	0.13	1.80
<b>Total OECD</b>	<b>44.77</b>	<b>45.86</b>	<b>45.42</b>	<b>46.70</b>	<b>47.57</b>	<b>46.39</b>	<b>1.62</b>	<b>3.63</b>
<b>China</b>	14.94	14.67	14.81	15.25	15.75	15.12	0.18	1.23
<b>India</b>	4.77	5.18	5.16	4.91	5.32	5.14	0.37	7.73
<b>Other Asia</b>	8.63	9.09	9.39	8.73	8.90	9.02	0.40	4.60
<b>Latin America</b>	6.23	6.32	6.31	6.55	6.40	6.40	0.17	2.75
<b>Middle East</b>	7.79	8.06	8.02	8.38	8.17	8.16	0.37	4.69
<b>Africa</b>	4.22	4.51	4.19	4.22	4.53	4.36	0.14	3.32
<b>Russia</b>	3.61	3.67	3.35	3.49	3.59	3.52	-0.09	-2.47
<b>Other Eurasia</b>	1.21	1.22	1.15	0.98	1.21	1.14	-0.07	-5.90
<b>Other Europe</b>	0.75	0.79	0.75	0.73	0.80	0.77	0.01	1.70
<b>Total Non-OECD</b>	<b>52.15</b>	<b>53.50</b>	<b>53.14</b>	<b>53.23</b>	<b>54.66</b>	<b>53.63</b>	<b>1.48</b>	<b>2.84</b>
<b>Total World</b>	<b>96.92</b>	<b>99.36</b>	<b>98.56</b>	<b>99.93</b>	<b>102.22</b>	<b>100.03</b>	<b>3.10</b>	<b>3.20</b>
<b>Previous Estimate</b>	96.92	99.33	98.33	100.65	102.77	100.29	3.36	3.47
<b>Revision</b>	0.00	0.03	0.22	-0.72	-0.55	-0.26	-0.26	-0.27

Note: \* 2022 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

Table 4 - 2: World oil demand in 2023\*, mb/d

World oil demand	2022	1Q23	2Q23	3Q23	4Q23	2023	Change 2023/22	
							Growth	%
<b>Americas</b>	25.16	25.25	25.47	25.86	25.96	25.64	0.48	1.89
<b>of which US</b>	20.60	20.42	20.56	20.99	21.06	20.76	0.16	0.77
<b>Europe</b>	13.69	13.10	13.35	14.33	14.29	13.77	0.08	0.61
<b>Asia Pacific</b>	7.54	7.92	7.18	7.27	7.94	7.58	0.04	0.48
<b>Total OECD</b>	<b>46.39</b>	<b>46.27</b>	<b>46.00</b>	<b>47.46</b>	<b>48.20</b>	<b>46.99</b>	<b>0.60</b>	<b>1.28</b>
<b>China</b>	15.12	15.31	15.83	15.97	16.31	15.86	0.73	4.86
<b>India</b>	5.14	5.38	5.41	5.17	5.56	5.38	0.24	4.67
<b>Other Asia</b>	9.02	9.48	9.72	9.09	9.25	9.38	0.36	3.97
<b>Latin America</b>	6.40	6.48	6.44	6.71	6.54	6.54	0.15	2.30
<b>Middle East</b>	8.16	8.43	8.30	8.71	8.46	8.47	0.32	3.87
<b>Africa</b>	4.36	4.70	4.38	4.41	4.72	4.55	0.19	4.30
<b>Russia</b>	3.52	3.68	3.37	3.66	3.77	3.62	0.10	2.70
<b>Other Eurasia</b>	1.14	1.22	1.15	0.99	1.22	1.15	0.01	0.73
<b>Other Europe</b>	0.77	0.80	0.76	0.75	0.82	0.78	0.02	2.32
<b>Total Non-OECD</b>	<b>53.63</b>	<b>55.48</b>	<b>55.35</b>	<b>55.46</b>	<b>56.65</b>	<b>55.74</b>	<b>2.10</b>	<b>3.92</b>
<b>Total World</b>	<b>100.03</b>	<b>101.75</b>	<b>101.34</b>	<b>102.92</b>	<b>104.85</b>	<b>102.72</b>	<b>2.70</b>	<b>2.70</b>
<b>Previous Estimate</b>	100.29	101.72	101.12	103.64	105.40	102.99	2.70	2.69
<b>Revision</b>	-0.26	0.03	0.22	-0.72	-0.55	-0.26	0.00	0.01

Note: \* 2022 and 2023 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

## OECD

### OECD Americas

#### Update on the latest developments

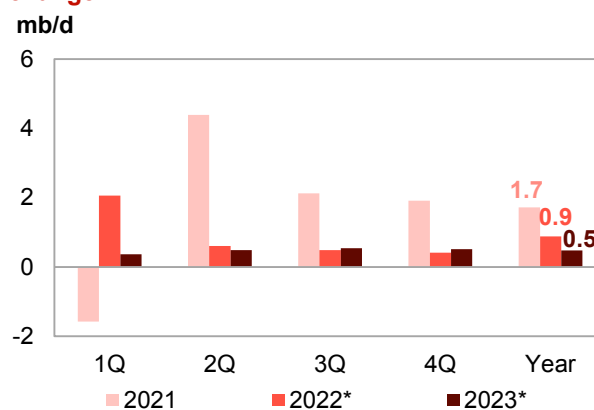
**US oil demand** fell by 20 tb/d, annually in May after annual growth of 0.5 mb/d in April. Consumption of oil in May 2022 has lagged behind 2021 levels. Oil demand in May was driven by strong LPG requirements from three consuming sectors; the industrial, commercial and residential sectors. LPG grew by 0.3 mb/d, equivalent to 15% annual growth. On a monthly basis, demand growth for LPG was 0.1 mb/d below April's 0.4 mb/d consumption. Jet kerosene demand remained at 0.3 mb/d, annually. On a monthly basis, it remained at April's level, according to IATA Air Passenger Market Analysis.

The US domestic traffic increased in the month by 3.1% and remained below 2019 levels. Domestic revenue passenger kilometres (RPKs) are down 4.7% compared to the same month in 2019.

Capacity is down 6.0% y-o-y. Load factors remain high at 88.7% countrywide. Pressure on traffic might increase in this market with high fuel prices and ongoing labour-related issues. In May, US domestic RPK growth decreased to 26.1% y-o-y from 48.1% y-o-y in April. Diesel demand has slightly recovered from April's contraction. In May, diesel remained flat, y-o-y, compared with a 0.2 mb/d decline in April.

However, gasoline is still struggling to overcome the effects of higher retail prices, despite an approaching summer driving season. For two consecutive months, gasoline consumption has recorded negative growth. In May, it is down by 30 tb/d, annually, compared with a 40 tb/d decline in April. However, naphtha has declined further by 70 tb/d, annually, compared with 60 tb/d annually in April. The demand for naphtha is affected by a squeeze in the US petrochemical industry margins as crude oil prices rose, with a cost advantage from its competitor feedstock liquefied petroleum gas. Finally, other products also posted a sharp decline by 0.5 mb/d, y-o-y as residual fuel oil demand grew marginally by 80 tb/d, y-o-y.

Graph 4 - 1: OECD Americas oil demand, y-o-y change



Note: \* 2022-2023 = Forecast. Source: OPEC.

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

By product	May 21	May 22	Change May 22/May 21	
			Growth	%
LPG	3.24	3.52	0.28	8.6
Naphtha	0.21	0.14	-0.07	-32.9
Gasoline	9.14	9.11	-0.03	-0.3
Jet/kerosene	1.32	1.58	0.26	19.4
Diesel	3.87	3.87	0.00	0.0
Fuel oil	0.26	0.34	0.08	32.4
Other products	2.34	1.81	-0.54	-22.9
<b>Total</b>	<b>20.38</b>	<b>20.37</b>	<b>-0.02</b>	<b>-0.1</b>

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

## Near-term expectations

In 2H22, the US oil demand is expected to improve further to reach 0.4 mb/d in 3Q22 and 4Q22. Gasoline demand is due for a rebound following a relative drop in retail prices that should support the summer driving season. While 3Q22 appears to be promising in terms of travel activities; however, the beginning of cold weather in 4Q22 will dampen mobility activity and affect gasoline demand.

In 2023, US oil demand is forecasted to increase by around 0.2 mb/d y-o-y. The 2023 outlook has many uncertainties, subject to developments in the American economy. These include the possibility of less robust economic activity; the US GDP is forecast to grow by 1.8 mb/d y-o-y combined with high inflation and a rise in interest rates affecting consumer confidence. In addition, industrial output is also in decline. These factors are going to affect oil demand growth. Oil demand will be supported by the petrochemical and transportation sectors requirements for oil products during 2023. Gasoline demand will be backed by improved mobility. Expansion in the petrochemical industry and consequently healthy petrochemical margins will provide support to light distillates in 2023. Furthermore, improvements in aviation sector activity will support the demand for jet kerosene.

In 1Q23, oil demand will grow marginally by 40 tb/d, annually. The low growth is because of a high baseline comparison with solid growth of 1.8 mb/d in 1Q21; however, the level of demand is expected to reach 20.42 mb/d. In the first quarter, mobility activity is expected to slow down due to the cold winter. This combined with the forecasted slowing in economic growth will weigh on transportation fuels. However, by 2Q23, economic activity is expected to improve and support the industrial sector and mobility, which will aid oil demand to reach 0.2 mb/d y-o-y

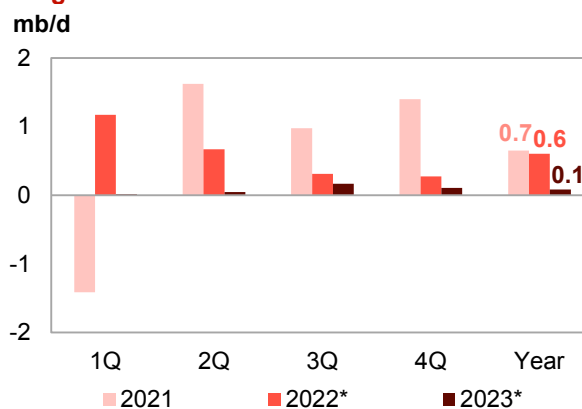
## OECD Europe

### Update on the latest developments

OECD Europe oil demand growth was flat m-o-m in May at a robust 1.0 mb/d y-o-y growth compared with the same growth rate in April. May demand was strongly supported by jet kerosene, as air travel in OECD Europe registered substantial international and regional growth. According to IATA's Air Passenger Market Analysis, airlines based in Europe continued to deliver robust growth in May in y-o-y terms. On the back of this healthy demand; jet kerosene demand grew by 0.6 mb/d, equal to 96% annual growth. Rising pump prices led to weaker m-o-m gasoline demand growth of 0.2 mb/d y-o-y in May compared to 0.3 mb/d in April. As for diesel, the demand in May increased by 0.2 mb/d, annually, showing signs of a slight improvement on a monthly basis, as compared to 0.18 mb/d annual growth in April.

As Europeans are importing naphtha from Russia, which is likely blended with gasoline and resold for a higher margin, naphtha grew by 30 tb/d compared with annual decline of 0.2 mb/d in April. At the same time, residual fuel demand grew by 60 tb/d annually. However, LPG sustained a decline of 90 tb/d annually from a growth of 20 tb/d, y-o-y in April due to a surge in natural gas prices continuing to encourage fuel switching to naphtha in the region's petrochemical sector.

**Graph 4 - 2: OECD Europe's oil demand, y-o-y change**



Note: \* 2022-2023 = Forecast. Source: OPEC.

**Table 4 - 4: Europe's Big 4\* oil demand, mb/d**

By product	May 21	May 22	Change May 22/May 21	
			Growth	%
LPG	0.42	0.40	-0.02	-4.8
Naphtha	0.57	0.48	-0.09	-15.9
Gasoline	1.08	1.18	0.10	8.9
Jet/kerosene	0.37	0.69	0.32	87.7
Diesel	2.92	3.00	0.07	2.5
Fuel oil	0.14	0.17	0.03	21.7
Other products	0.45	0.46	0.01	2.4
<b>Total</b>	<b>5.95</b>	<b>6.37</b>	<b>0.42</b>	<b>7.1</b>

Note: \* Germany, France, Italy and the UK. Totals may not add up due to independent rounding.

Sources: JODI, UK Department for Business, Energy & Industrial Strategy, Unione Petrolifera and OPEC.

## Near-term expectations

Looking forward, in 2H22 weakening European economy is expected to weigh on the oil demand growth prospects in the region. After recording a strong of 1.2 mb/d in 1Q22 and 0.7 mb/d in 2Q22, the growth in 2H22 is expected to be lower, aside from the seasonal swing in gasoline, and jet kerosene demand. The surging oil products prices, manufacturing inflation and geopolitically induced trade-related bottlenecks are expected to weigh heavily on manufacturing sectors, with multiplier effects on oil demand. In both 3Q22 and 4Q22, oil demand is projected to grow by 0.3 mb/d, y-o-y each.

Despite these challenges, by 4Q22, the GDP in the region is expected to improve by 3.2% combined with expected improvements in trade-related supply chain activities, will support manufacturing activity in the region. This will boost the demand for distillates for manufacturing sector requirements. Furthermore, the pent-up travel demand amidst summer driving activity is expected to enhance gasoline and jet kerosene demand.

The outlook for European oil demand in 2023 is rather pessimistic. After average growth of 0.6 mb/d in 2022, the oil demand growth in 2023 is expected to be rather weak, averaging 80 tb/d, annually. From a moderate growth of 3.2% in 4Q22, European GDP is projected to slow down to 1.7% in 2023. Furthermore, high inflation combined with high production cost will dampen consumer confidence in the region. These factors are going to weigh on oil demand. Accordingly, in 1Q23, oil demand is forecast to grow by a mere 10 tb/d, y-o-y. Nevertheless, OECD Europe is expected to consume 13.10 mb/d in 1Q23 and will mostly be supported by jet kerosene and petrochemical feedstock requirements for light distillates.

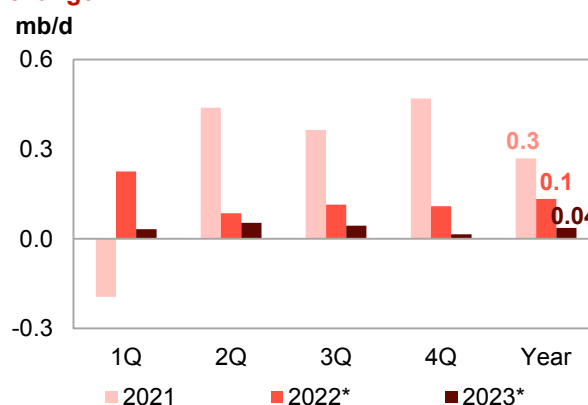
By 2Q23, on the back of resilient aviation industry requirements and improved mobility, oil demand is projected to grow by 50 tb/d, y-o-y. The demand will be supported by transportation fuel requirements for jet kerosene and gasoline. Furthermore, diesel and petrochemical fuels are also expected to aid the demand growth.

## OECD Asia Pacific

### Update on the latest developments

The **Asia Pacific** region has shown signs of resilience, in spite of the prevalence of COVID-19 in some countries of the region and the drag from the trade-related bottlenecks related to the Chinese lockdowns that weighed heavily on the economy of the region. Oil demand in Asia Pacific recovered in May from a contraction in April, y-o-y. Available data imply an annual growth of 0.1 mb/d in May as compared to 0.1 mb/d, y-o-y contraction in April 2022. Japan and South Korea remained the major consumers of oil in the region, constituting over 80% of regional oil demand. In line with eases in relation to the pandemic situation, South Korea relaxed most of its restrictions in April, as COVID 19 waned and the country saw a gradual return to normalcy.

**Graph 4 - 3: OECD Asia Pacific oil demand, y-o-y change**



Note: \* 2022-2023 = Forecast. Source: OPEC.

## World Oil Demand

The lifting of restrictions has helped the reopening of the economy, leading to a rebound of many indicators, including industrial output which recovered by 1% in May (m-o-m) and 7% y-o-y. In addition, facility investment has also rebounded and a pick-up in aggregate demand also lifted service growth in South Korea. To a lesser extent, the Japanese economy has also shown signs of improvements, after lifting of quasi-emergency measures at the end of March. On the back of these developments, transportation fuels; gasoline and diesel recovered from a slump. In May, both gasoline and diesel grew by roughly 70 tb/d y-o-y, as compared to a shrinkage of 0.1 mb/d y-o-y for each in April.

As for jet kerosene, according to a report from the IATA Air Passenger Market Analysis, domestic air traffic volumes are still on a path of recovery in the Asia Pacific as industry-wide domestic RPKs grew 9.3% m-o-m, aided jet/kerosene to recover by 40 tb/d y-o-y from a decline of 10 tb/d in April. LPG also saw an improvement by 10 tb/d, an annual average growth of 2%. However, Asia Pacific naphtha demand has plunged by 0.1 mb/d against annual growth of 45 tb/d in April, affected by low demand for paraxylene in the petrochemical industry of the region.

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

By product	Jun 21	Jun 22	Change Growth	Jun 22/Jun 21 %
LPG	0.41	0.43	0.03	6.4
Naphtha	0.65	0.63	-0.01	-1.9
Gasoline	0.73	0.72	-0.01	-1.5
Jet/kerosene	0.21	0.22	0.01	3.8
Diesel	0.68	0.68	0.00	-0.7
Fuel oil	0.22	0.21	-0.01	-5.5
Other products	0.17	0.19	0.02	9.4
<b>Total</b>	<b>3.07</b>	<b>3.07</b>	<b>0.01</b>	<b>0.3</b>

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

### Near-term expectations

Looking forward, as most of the countries in the region are now learning to exist with COVID-19, albeit at an expected slow economic recovery in the region with annual growth of 2.3%, this will affect both manufacturing activity and mobility. On average, oil demand growth in the region is expected to remain flat at 0.1 mb/d until the end of 2022.

Nevertheless, the gradual reopening of the South Korean economy is expected to support consumer confidence and mobility recovery in the region, combined with improvements in the region's air travel activity, which would boost gasoline and jet kerosene demand and provide additional support for oil demand in 2022.

In 2023, the outlook for the region is still not very bright. Slow economic recovery of 1.8% y-o-y expected GDP growth in the region amidst COVID-19 restrictions is a major challenge and will weigh on oil demand in 2023. On average, oil demand is expected growth to remain below 0.1 mb/d on average.

## Non-OECD

### China

#### Update on the latest developments

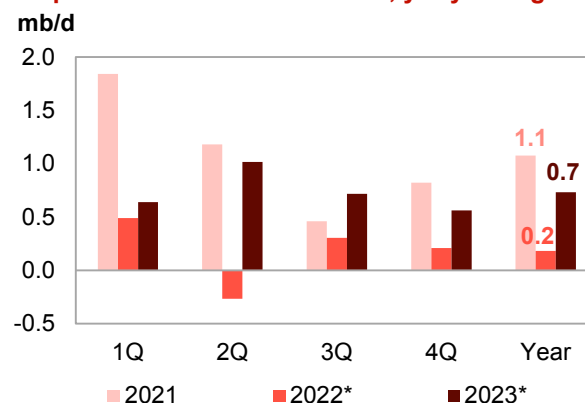
**China's oil demand** continued to recover in June albeit at sluggish growth, as COVID-19 lockdowns were further relaxed. June data shows a lesser contraction of oil demand growth of 30 tb/d, y-o-y, a significant improvement as compared to the 0.3 mb/d annual decline in May. June oil demand recovery is driven by strong petrochemical requirements for light distillates. LPG is the main driver, which recorded a growth of 0.2 mb/d, annually, compared to monthly growth of 80 tb/d in May. China's June LPG consumption rose 10% y-o-y. The LPG demand recovery is mainly attributable to increased buying from propane dehydrogenation and petrochemical plants amid lower propane and butane prices during the month. To a lesser extent, naphtha grew by 90 tb/d annually, slightly lower than 0.1 mb/d annually in May. As for diesel, the demand is still not very strong, on a monthly basis, the June diesel demand growth of 40 tb/d, annually is below 70 tb/d consumed in the month of May.



Gasoline demand is still sluggish amid the extension of zero COVID lockdown policies, which affected mobility in some cities of China. In June, gasoline demand nosedived by 0.3 mb/d, annually, as compared to a 0.2 mb/d contraction in May.

As for residual fuel oil, the demand grew by 80 tb/d in June, a significant recovery as compared to June 2021 negative growth. Air travel is on the path of recovery from the impact of the zero COVID-19 lockdown policy in China. Daily domestic passenger flights averaged over 7,000 in June, up from the average of 6,000 in May. On the back of these developments, the jet kerosene demand, though still negative on monthly bases, significantly improved from a 0.4 mb/d annual contraction in May to a 0.2 mb/d annual decline in June.

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



Note: \* 2022-2023 = Forecast. Source: OPEC.

**Table 4 - 6: China's oil demand\*, mb/d**

By product	Jun 21	Jun 22	Change Jun 22/Jun 21	
			Growth	%
LPG	2.18	2.40	0.22	10.1
Naphtha	1.43	1.52	0.09	6.3
Gasoline	3.60	3.31	-0.29	-7.9
Jet/kerosene	0.64	0.48	-0.16	-24.7
Diesel	3.36	3.40	0.04	1.3
Fuel oil	0.75	0.83	0.08	10.4
Other products	1.54	1.52	-0.02	-1.3
<b>Total</b>	<b>13.49</b>	<b>13.46</b>	<b>-0.03</b>	<b>-0.2</b>

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

Looking forward, despite challenges from the zero-COVID policy restrictions, which affected the oil demand in China during 2Q22, we expect Chinese oil demand to improve in the second half of the year. COVID-19 situation is expected to improve and State-backed infrastructural spending in 2H22 are expected to support industrial and construction sectors. In addition, robust global demand for finished products imports from other countries will support the industrial sector. Accordingly, the industrial demand for distillates will be boosted. Furthermore, Chinese demand is expected to rise despite COVID-19 headwinds, as tightened restrictions are expected to remain localized. Counter-seasonal strength in diesel over the summer is expected, while gasoline should recover as restrictions ease. Finally, as the air travels continue improving, jet fuel will also continue recovering as petrochemical industry demand for light distillates continue to support the demand for LPG and naphtha. In the second half, Chinese oil demand is forecast to grow by 0.3 mb/d annually.

In first half of 2023, Chinese economy is expected to rebound as COVID-19 waned. This will see mobility activity improving to aid the demand for gasoline and transportation diesel. Furthermore, supply chain bottlenecks are expected to ease; construction and industrial activity will pick-up, hence, construction companies and industries will begin to place orders with refiners for fuels and raw materials. These factors will support demand for diesel and bitumen. Finally, air travel, both domestic and international is expected to continue recovering. These factors are expected to support oil demand growth in the 1H23. In the 1Q23, oil demand is forecast to grow by 0.6 mb/d annually. In this quarter, the demand will be driven largely by gasoline and diesel. Furthermore, petrochemical feedstock requirements for LPG and naphtha will boost the demand for oil.

In 2Q23, with expected moderate GDP growth of 5%, oil demand in China is forecast to continue in its growth trajectory, to reach 1.02 mb/d annually, to be led by transportation fuels and supported by petrochemicals feedstock demand. As the aviation sector improves, the jet-kerosene demand will improve farther. However, the prospects for demand largely depend on COVID-19 and the extent of government's zero COVID policy restrictions and the response of the Chinese economy towards the COVID-19 situation.

## India

### Update on the latest developments

**India's oil demand** remained healthy at 0.7 mb/d, about 16% y-o-y growth in June, after an annual growth of 0.8 mb/d in May. Oil demand in India is supported by the rising momentum in economic activities, as the economic reopening continued amid an easing of COVID restrictions in India. Some key indicators such as mobility, the index of industrial output and services PMI remained healthy; for example, June manufacturing PMI in India remain strong at 53.9% and services PMI was at 59.2%, respectively. On the back of these developments, diesel, the most-utilized fuel in the country and in various sectors, grew by 0.4 mb/d, equal to 22% annually.

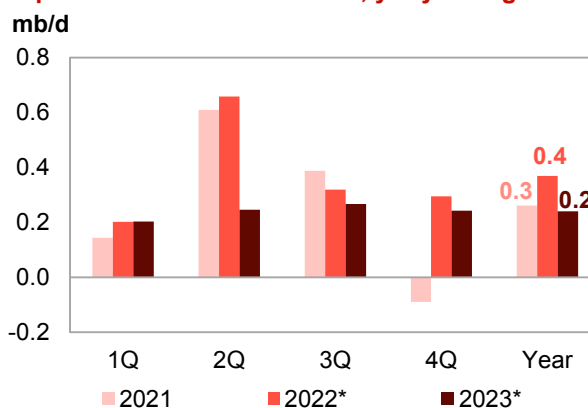
Also aiding the demand for diesel was the start of the harvesting season, which backed oil requirements from the agriculture and transportation sectors. India's gasoline soared in June on the back of summer travels and an overall pick-up in economic activity, on the back of this, gasoline recorded an annual growth of 0.2 mb/d, about 20% annual growth. However, on a monthly basis, India's gasoline and diesel demand were slightly below last month's levels as monsoon rains disrupted transportation, thereby curtailing demand.

As the aviation sector of India opened up after the lockdown, demand for jet kerosene continued to improve. In June, jet kerosene consumption grew by 63 tb/d, about 59% annual growth.

Other products also recorded a strong growth of 0.2 mb/d, an annual growth of 58%. However, over four consecutive months, naphtha continued to decline, in June.

Naphtha demand slumped by 44 tb/d, annually, as LPG recorded a tightening of 8 tb/d, y-o-y. The decline in demand for LPG was affected by a hike in the price of LPG, whose prices were hiked by Rs 103.50 per cylinder. Overall, Indian oil demand in June was supported by the reduction in excise duty on petrol and diesel by the Central Government, coupled with the delayed arrival of the monsoon season and has led to robust demand for fuels.

**Graph 4 - 5: India's oil demand, y-o-y change**



Note: \* 2022-2023 = Forecast. Source: OPEC.

**Table 4 - 7: India's oil demand, mb/d**

By product	Jun 21	Jun 22	Change Jun 22/Jun 21	
			Growth	%
LPG	0.95	0.94	-0.01	-0.8
Naphtha	0.35	0.30	-0.04	-12.5
Gasoline	0.79	0.95	0.16	20.1
Jet/kerosene	0.11	0.17	0.06	58.8
Diesel	1.59	1.94	0.35	21.9
Fuel oil	0.25	0.26	0.01	3.3
Other products	0.26	0.42	0.15	58.5
<b>Total</b>	<b>4.30</b>	<b>4.98</b>	<b>0.68</b>	<b>15.8</b>

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

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

### Near-term expectations

Looking ahead, in 3Q22, oil demand in India will remain at 0.3 mb/d annually, supported by healthy economic growth of 7.1%, continuing economic reopening amid ease of COVID restrictions and easing of trade-related bottlenecks supporting both mobility and industrial sector activity. However, the demand for oil is not expected to exceed the 2Q21 growth levels, partly affected by the late arrival of the ongoing monsoon season. By 4Q22 demand will pick-up during the festival and holiday season in India, and oil demand will continue to grow by 0.3 mb/d, annually, despite the slowdown in driving during the winter. Overall, based on the most recent trends, demand for diesel and jet kerosene would likely account for a bigger part of the growth in demand in H2 as consumption of these two products had fallen sharply due to the pandemic.

In 2023, on average, oil demand is expected to moderately remain at 0.2 mb/d, annually. In 1Q23, demand is forecast to be aided by strong GDP growth of 6% y-o-y, steady manufacturing sector requirements and trucking road transport demand for distillates. Additionally, increasing mobility and air travel improvements will back demand for transportation fuels. In 1Q23, both gasoline and jet fuel demand will immensely be favoured by increase in mobility activity. Finally, petrochemical industry and residential requirements for light distillates will aid the demand for naphtha and LPG in 1Q23. In both 1Q23 and 2Q23, oil demand is expected to grow at an average of 0.2 mb/d, annually.

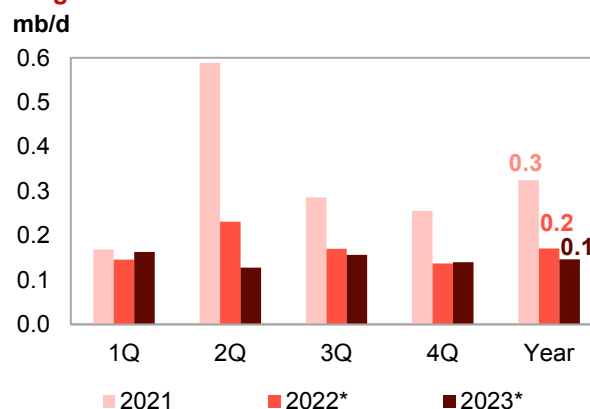
## Latin America

### Update on the latest developments

**Latin America's oil demand** growth remained flat m-o-m at a robust 0.3 mb/d, y-o-y in May as compared to April. Oil demand in May was driven by higher requirements for distillates. Diesel posted a 0.1 mb/d annual growth as compared to monthly growth of 10 tb/d in April. Economic indicators suggest that recovery in the region is still gathering momentum, despite the prevalence of COVID-19. The IMF suggested that after the sharp contraction in the second quarter of last year, the brisk recovery in the third quarter exceeded expectations in some larger economies of the region, like Brazil, Peru and Argentina.

Manufacturing output in Argentina increased from 168.28 in April to 170.80 May. Similarly, Brazil also posted a rise in manufacturing output from 80.89 in April to 88.76 in May. However, on a monthly basis, gasoline demand continued to grow, dropping from annual growth of 0.14 mb/d in April to just 90 tb/d in May. Gasoline demand was largely affected by the resurgence of the pandemic in some parts of the region, which affected the mobility and social activity in many countries of the region. As for jet kerosene, consumption grew by 60 tb/d, annually, slightly below 70 tb/d in the previous month. However, LPG improved from negative growth of 10 tb/d in April to annual growth of 10 tb/d in May. Finally, jet/kerosene is still on a positive trajectory in May, with annual growth of 60 tb/d.

**Graph 4 - 6: Latin America's oil demand, y-o-y change**



Note: \* 2022-2023 = Forecast. Source: OPEC.

### Near-term expectations

Looking ahead, despite the slowing momentum of economic recovery in Latin America, currently the GDP growth in the region is forecast at 2%. The acceleration in vaccination and signs of manufacturing PMI in big consuming countries of the region will support oil demand recovery in the region. Accordingly, oil demand growth in the region is expected to average 0.1 mb/d in 2H22.

In 2023, oil demand growth is forecast to remain at 0.2 mb/d. In 1Q23, oil demand is expected to grow by 0.2 mb/d. However, in 2Q23, oil demand will decline to 0.1 mb/d annually. The prospects of oil demand in the region largely depends on the region's economic recovery and containment of the pandemic; including governments' responses and progress or reintroduction of stricter containment measures in some countries, as well as spillovers from the slowdown in the global economy. Overall, the risk is still skewed downside.

## Middle East

### Update on the latest developments

Oil demand in the Middle East continued in its robust trajectory; with strong demand growth of 0.5 mb/d y-o-y, in May, which marked the second-largest growth in non-OECD. On the back of high power generation and cooling requirements from Saudi Arabia and Iraq, crude direct use recorded growth of 0.3 mb/d, y-o-y. On the back of strong mobility requirements, gasoline recorded the second largest increase in oil demand growth of 0.1 mb/d y-o-y. The demand for gasoline is strongly backed by mobility requirements, particularly during Hajj operation in Saudi Arabia.

Diesel demand grew by 0.1 mb/d y-o-y, largely driven by industrial sector requirements, particularly in Saudi Arabia, the industrial output increased from 130.17 in April to 131.78 in May.

Furthermore, Saudi Arabia's cement production increased 2.9% y-o-y in June. An increase in regional and international air travel due to Hajj and other events hosted in the region aided jet kerosene demand to grow by 60 tb/d y-o-y. However, LPG remained at the same level of 20 tb/d y-o-y as naphtha slightly improved from an annual contraction of 20 tb/d in April to a contraction of 10 tb/d in May.

**Table 4 - 8: Saudi Arabia's oil demand, mb/d**

By product	Jun 21	Jun 22	Change Growth	Jun 22/Jun 21 %
LPG	0.04	0.04	0.00	-3.5
Gasoline	0.48	0.53	0.05	9.9
Jet/kerosene	0.05	0.08	0.03	73.9
Diesel	0.52	0.59	0.07	12.7
Fuel oil	0.55	0.79	0.25	44.8
Other products	0.67	0.76	0.09	13.3
<b>Total</b>	<b>2.32</b>	<b>2.79</b>	<b>0.47</b>	<b>20.2</b>

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

Sources: JODI and OPEC.

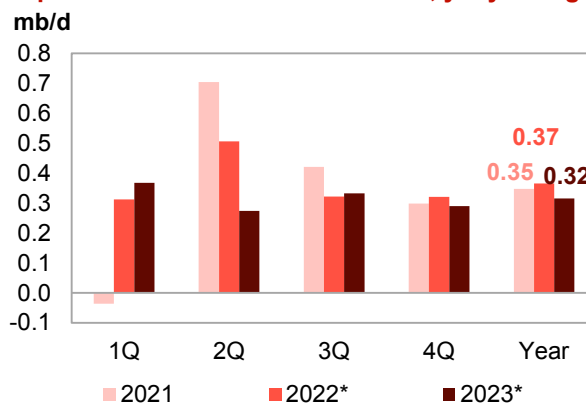
### Near-term expectations

Going forward, strong economic activity in the region will continue to support oil demand in the near future. Saudi Arabia's economy expanded 11.8% in the second quarter, maintaining the fastest pace of growth since 2011. Non-oil gross domestic product gained 5.4% while the oil economy grew 23.1% compared to last year. Similarly, the United Arab Emirates (UAE) is also optimistic its economy will grow robustly this year as it recovers from the pandemic. The expected strong economic growth in the region will aid consumer confidence, accelerate mobility and industrial activity in the region. In addition, the region is hosting the World cup in November and December, and these factors will lead to an inflow of international tourists into the region. Accordingly, demand for services will rise tremendously; mobility requirements and air services will rise accordingly. In 3Q22, the oil demand in the region is expected to rise by 0.3 mb/d y-o-y from 0.5 mb/d in 2Q22. Furthermore, in 4Q22, the oil demand in the region is projected to remain at 0.3 mb/d y-o-y. In 2H22, oil demand growth in the region will be supported mostly by transportation fuels; gasoline, diesel and jet kerosene.

In 2023, fuelled by strong economic growth, the momentum of oil demand will increase from the 2022 pace. In 1Q23, oil demand is projected to grow by 0.4 mb/d y-o-y. Strong economic growth in the region is expected to support consumer confidence, which will raise demand for social services and consumer goods in the region. Gasoline, transportation diesel and jet kerosene are expected to lead in oil demand growth. Gasoil/diesel and fuel oil demand for power generation are also expected to play a significant role in demand growth.

By 2Q23, the oil demand will remain robust, and oil demand growth is expected to settle at 0.3 mb/d in 2Q23. Generally, in near term, the overall prospects of oil demand growth in the region are very high, due to expected strong GDP growth that will boost economic activity and successful COVID-19 management in the region.

**Graph 4 - 7: Middle East's oil demand, y-o-y change**



Note: \* 2022-2023 = Forecast. Source: OPEC.

## World Oil Supply

Non-OPEC liquids supply growth in 2022 (including processing gains) is forecast at 2.1 mb/d for an average of 65.8 mb/d, which is broadly unchanged from the previous assessment. Upward revisions to Russia's oil production were offset by downward revisions to the US, Norway and Kazakhstan. Significant uncertainty regarding Russia's liquids production in the forecast period remains. In the US, solid increases in oil and gas rig counts, as well as high fracking activity, are expected to support production going forward. However, ongoing capital discipline by public operators, who are focussing on paying down debt and increasing returns to shareholders, labour and supply chain issues, as well as cost inflation, are expected to limit growth. Moreover, forecasts for above-normal hurricane season activity, as well as an upward revision to the historical base line, have necessitated a downward revision to the US liquids supply growth forecast for 2022 by 138 tb/d, and output is now forecast to grow by 1.15 mb/d y-o-y. The production forecast for Norway was also revised down due to lower-than-expected output in 2Q22, extended fields' maintenance and gas injection plan changes in 2H22. The main drivers of liquids supply growth for the year are expected to be the US, Canada, Brazil, China and Guyana, while production is expected to decline mainly in Indonesia and Thailand.

Non-OPEC liquids production growth in 2023 also remains unchanged and is expected to grow by 1.7 mb/d to average 67.5 mb/d (including 70 tb/d in processing gains). Liquids supply in the OECD countries is forecast to grow by 1.6 mb/d, while the non-OECD region is forecast to grow by 0.1 mb/d. The main drivers for liquids supply growth are expected to be the US, Norway, Brazil, Canada and Guyana, whereas oil production is forecast to decline mainly in Russia and Azerbaijan. Nevertheless, uncertainty about US production growth and the geopolitical situation in Eastern Europe remains high.

OPEC NGLs and non-conventional liquids production in 2022 is forecast to grow by 0.1 mb/d to average 5.39 mb/d. For 2023, it is forecast to grow by 50 tb/d to average 5.44 mb/d. OPEC-13 crude oil production in July increased by 216 tb/d m-o-m to average 28.90 mb/d, according to available secondary sources.

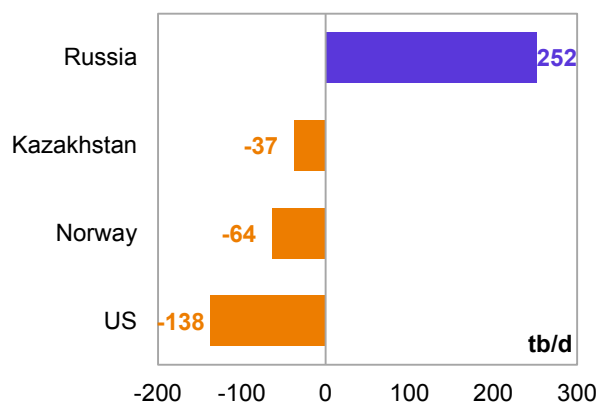
Preliminary non-OPEC liquids production in July, including OPEC NGLs, is estimated to have increased m-o-m by 1.5 mb/d to average 71.7 mb/d, and is up by 2.4 mb/d y-o-y. As a result, preliminary data indicates that global oil supply in July increased by 1.7 mb/d m-o-m to average 100.6 mb/d, up by 4.7 mb/d y-o-y.

The non-OPEC liquids supply forecast for **2022** was revised up by 65 tb/d, to average 65.8 mb/d. Y-o-y growth remains at 2.1 mb/d, which is unchanged from the previous month.

The **OECD** supply growth forecast for 2022 was revised down by 0.2 mb/d. The US and OECD Europe saw downward revisions to their growth forecasts, while the growth forecast for OECD Asia Pacific remained largely unchanged from the previous month's assessment.

The **non-OECD** supply forecast for 2022 was revised up by 0.2 mb/d, mainly due to an upward revision for Russia. On the other hand, Other Eurasia and Other Asia accounted for the major downward revisions in the non-OECD region.

**Graph 5 - 1: Major revisions to annual supply change forecast in 2022\*, MOMR Aug 22/Jul 22**

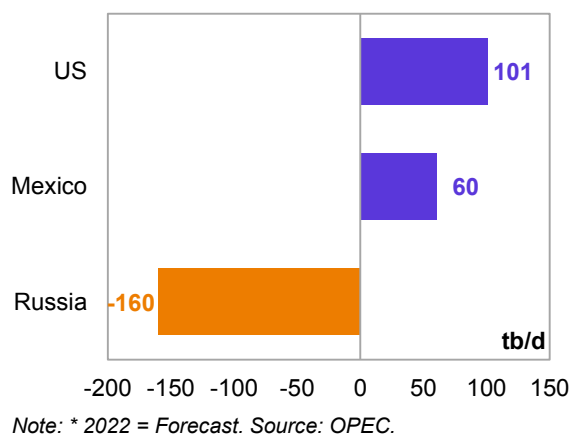


Note: \* 2022 = Forecast. Source: OPEC.

Non-OPEC liquids production growth in **2023** remained broadly unchanged compared to the previous month's assessment.

The upward revision to the supply forecast for the US and Mexico was entirely offset by the downward revision to Russian supply.

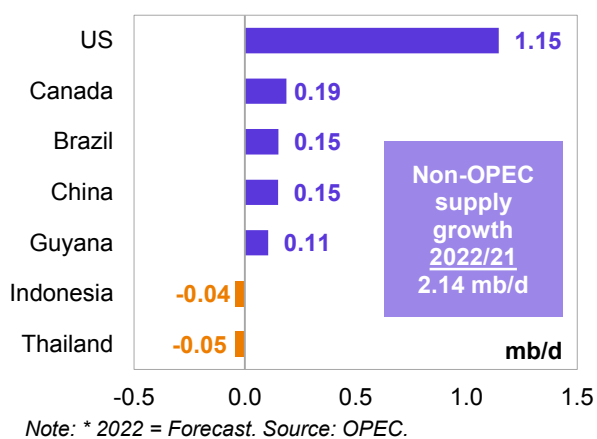
**Graph 5 - 2: Major revisions to annual supply change forecast in 2023\*, MOMR Aug 22/Jul 22**



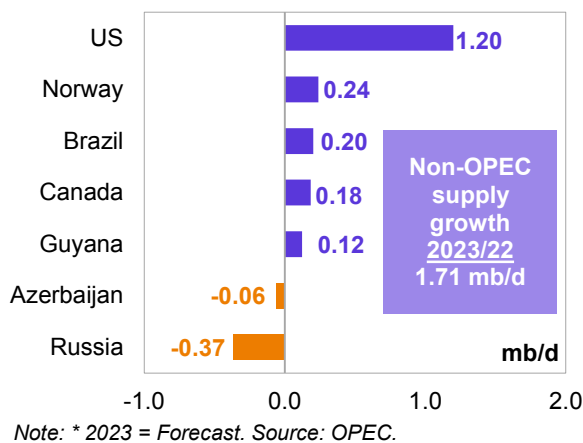
### Key drivers of growth and decline

The **key drivers of non-OPEC liquids supply growth in 2022** are projected to be the US, Canada, Brazil, China and Guyana, while oil production is expected to decline mainly in Thailand and Indonesia.

**Graph 5 - 3: Annual liquids production changes for selected countries in 2022\***



**Graph 5 - 4: Annual liquids production changes for selected countries in 2023\***



For **2023**, the key drivers of non-OPEC supply growth are forecast to be the US, Norway, Brazil, Canada and Guyana, while oil production is projected to decline mainly in Russia and Azerbaijan.

## Non-OPEC liquids production in 2022 and 2023

Table 5 - 1: Non-OPEC liquids production in 2022\*, mb/d

Non-OPEC liquids production	2021	1Q22	2Q22	3Q22	4Q22	2022	Change 2022/21	
							Growth	%
<b>Americas</b>	25.22	25.86	26.30	26.87	27.31	26.59	1.36	5.41
<i>of which US</i>	17.82	18.27	18.88	19.19	19.52	18.97	1.15	6.43
<b>Europe</b>	3.76	3.73	3.44	3.76	4.00	3.73	-0.02	-0.63
<b>Asia Pacific</b>	0.51	0.49	0.52	0.55	0.54	0.53	0.01	2.80
<b>Total OECD</b>	<b>29.49</b>	<b>30.08</b>	<b>30.26</b>	<b>31.18</b>	<b>31.85</b>	<b>30.85</b>	<b>1.35</b>	<b>4.59</b>
<b>China</b>	4.31	4.49	4.49	4.42	4.43	4.46	0.15	3.49
<b>India</b>	0.77	0.77	0.77	0.80	0.82	0.79	0.02	2.20
<b>Other Asia</b>	2.41	2.37	2.32	2.36	2.35	2.35	-0.06	-2.32
<b>Latin America</b>	5.95	6.14	6.13	6.30	6.43	6.25	0.30	5.00
<b>Middle East</b>	3.24	3.29	3.33	3.38	3.38	3.34	0.11	3.26
<b>Africa</b>	1.35	1.33	1.31	1.33	1.32	1.32	-0.03	-1.88
<b>Russia</b>	10.80	11.33	10.62	10.90	10.70	10.88	0.08	0.77
<b>Other Eurasia</b>	2.93	3.06	2.81	3.09	3.22	3.05	0.11	3.83
<b>Other Europe</b>	0.11	0.11	0.11	0.10	0.10	0.11	-0.01	-6.36
<b>Total Non-OECD</b>	<b>31.87</b>	<b>32.89</b>	<b>31.89</b>	<b>32.68</b>	<b>32.75</b>	<b>32.55</b>	<b>0.68</b>	<b>2.13</b>
<b>Total Non-OPEC production</b>	61.37	62.97	62.15	63.86	64.60	63.40	2.03	3.31
<b>Processing gains</b>	2.29	2.40	2.40	2.40	2.40	2.40	0.11	4.90
<b>Total Non-OPEC liquids production</b>	<b>63.65</b>	<b>65.37</b>	<b>64.55</b>	<b>66.26</b>	<b>67.00</b>	<b>65.80</b>	<b>2.14</b>	<b>3.37</b>
<b>Previous estimate</b>	63.59	65.36	64.94	65.74	66.88	65.73	2.15	3.37
<b>Revision</b>	0.07	0.01	-0.40	0.52	0.12	0.06	0.00	-0.01

Note: \* 2022 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

Table 5 - 2: Non-OPEC liquids production in 2023\*, mb/d

Non-OPEC liquids production	2022	1Q23	2Q23	3Q23	4Q23	2023	Change 2023/22	
							Growth	%
<b>Americas</b>	26.59	27.58	27.68	28.05	28.41	27.93	1.34	5.05
<i>of which US</i>	18.97	19.78	20.08	20.28	20.51	20.17	1.20	6.32
<b>Europe</b>	3.73	4.06	3.98	3.89	3.99	3.98	0.25	6.60
<b>Asia Pacific</b>	0.53	0.54	0.50	0.53	0.49	0.51	-0.01	-2.20
<b>Total OECD</b>	<b>30.85</b>	<b>32.18</b>	<b>32.16</b>	<b>32.47</b>	<b>32.89</b>	<b>32.43</b>	<b>1.58</b>	<b>5.11</b>
<b>China</b>	4.46	4.51	4.50	4.47	4.47	4.49	0.03	0.64
<b>India</b>	0.79	0.82	0.80	0.79	0.78	0.80	0.01	1.09
<b>Other Asia</b>	2.35	2.35	2.31	2.28	2.26	2.30	-0.05	-1.97
<b>Latin America</b>	6.25	6.40	6.61	6.69	6.76	6.61	0.36	5.81
<b>Middle East</b>	3.34	3.37	3.40	3.41	3.40	3.39	0.05	1.49
<b>Africa</b>	1.32	1.33	1.35	1.36	1.38	1.36	0.04	2.67
<b>Russia</b>	10.88	10.49	10.48	10.54	10.57	10.52	-0.37	-3.36
<b>Other Eurasia</b>	3.05	3.14	3.01	2.96	3.04	3.04	-0.01	-0.27
<b>Other Europe</b>	0.11	0.10	0.10	0.10	0.10	0.10	0.00	-2.83
<b>Total Non-OECD</b>	<b>32.55</b>	<b>32.51</b>	<b>32.56</b>	<b>32.60</b>	<b>32.77</b>	<b>32.61</b>	<b>0.06</b>	<b>0.19</b>
<b>Total Non-OPEC production</b>	63.40	64.69	64.73	65.07	65.66	65.04	1.64	2.59
<b>Processing gains</b>	2.40	2.47	2.47	2.47	2.47	2.47	0.07	2.96
<b>Total Non-OPEC liquids production</b>	<b>65.80</b>	<b>67.16</b>	<b>67.20</b>	<b>67.54</b>	<b>68.13</b>	<b>67.51</b>	<b>1.71</b>	<b>2.60</b>
<b>Previous estimate</b>	65.73	67.28	67.15	67.37	67.96	67.44	1.71	2.60
<b>Revision</b>	0.06	-0.12	0.04	0.17	0.17	0.07	0.00	0.00

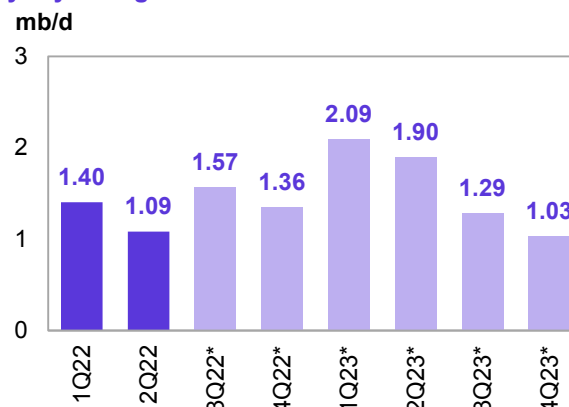
Note: \* 2022-2023 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

## OECD

**OECD liquids production in 2022** is forecast to increase by 1.4 mb/d y-o-y to average 30.9 mb/d. This has been revised down by 0.2 mb/d, compared to a month earlier, on the back of downward revisions for the US and OECD Europe.

OECD Americas was revised down by 0.14 mb/d, compared to last month's assessment. Based on these revisions, OECD Americas is forecast to grow by 1.4 mb/d to average 26.6 mb/d. Oil production in OECD Europe is anticipated to decline slightly y-o-y by 24 tb/d to average 3.7 mb/d, while OECD Asia Pacific is projected to grow y-o-y by 14 tb/d to average 0.5 mb/d.

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



Note: \* 3Q22-4Q23 = Forecast. Source: OPEC.

For **2023**, oil production in the OECD is likely to grow by 1.6 mb/d to average 32.4 mb/d, with growth of 1.3 mb/d from OECD Americas to average 27.9 mb/d. Yearly liquids production in OECD Europe is anticipated to grow by 0.2 mb/d to average 4.0 mb/d, while OECD Asia Pacific is expected to decline by 15 tb/d y-o-y to average 0.5 mb/d.

## OECD Americas

### US

**US liquids production** was broadly flat m-o-m in **May 2022** to average 18.7 mb/d, and was up by 0.7 mb/d compared with May 2021.

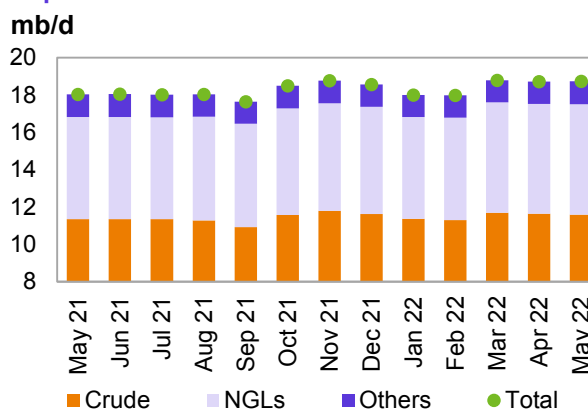
**Crude oil and condensate production** declined in **May 2022** by 57 tb/d m-o-m to average 11.6 mb/d, but was up by 0.2 mb/d y-o-y.

Regarding the **crude and condensate production breakdown by region (PADDs)**, production increased mainly in the US Midwest by 162 tb/d to average 1.7 mb/d, with output partially recovering from weather-related curtailments in April.

On the other hand, the US Gulf Coast (USGC) showed a decline of 220 tb/d, due to substantial maintenance in Gulf of Mexico (GoM) offshore platforms.

A minor increase in the Rocky Mountains and West Coast was offset by lower East Coast production.

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



Source: OPEC.

**NGL production** was up by 36 tb/d m-o-m to average 5.9 mb/d in May, which was higher by 0.4 mb/d y-o-y. Production of **non-conventional liquids** (mainly ethanol) increased by 27 tb/d m-o-m to average 1.2 mb/d in May, according to the US Department of Energy (DoE). Preliminary estimates see non-conventional liquids averaging 1.3 mb/d in June 2022, up by 53 tb/d compared to the previous month.

**Production in the Gulf of Mexico (GoM)** fell m-o-m by 157 tb/d in May to average 1.6 mb/d, due to significant maintenance on platforms in the Mars corridor. In the **onshore lower 48**, May production increased m-o-m by 95 tb/d to average 9.5 mb/d.

Looking at **individual states**, oil production in New Mexico decreased by 11 tb/d m-o-m to average 1.5 mb/d, 282 tb/d higher than a year ago. Production in Texas was down by 52 tb/d to average 5.0 mb/d, 209 tb/d higher than a year ago. Production in North Dakota increased by 154 tb/d m-o-m to average 0.9 mb/d, down by 70 tb/d y-o-y. Production in Oklahoma was up by 9 tb/d to average 0.4 mb/d. Oil output in Alaska was up by a minor 5 tb/d, while Colorado showed a marginal m-o-m decline of 5 tb/d.

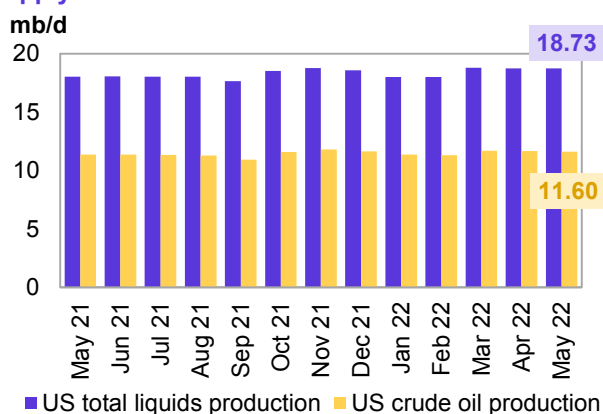


Table 5 - 3: US crude oil production by selected state and region, tb/d

State				Change	
	May 21	Apr 22	May 22	m-o-m	y-o-y
Texas	4,756	5,017	4,965	-52	209
Gulf of Mexico (GOM)	1,816	1,763	1,606	-157	-210
New Mexico	1,215	1,508	1,497	-11	282
North Dakota	1,119	895	1,049	154	-70
Alaska	443	442	447	5	4
Colorado	423	435	430	-5	7
Oklahoma	403	416	425	9	22
<b>Total</b>	<b>11,356</b>	<b>11,652</b>	<b>11,595</b>	<b>-57</b>	<b>239</b>

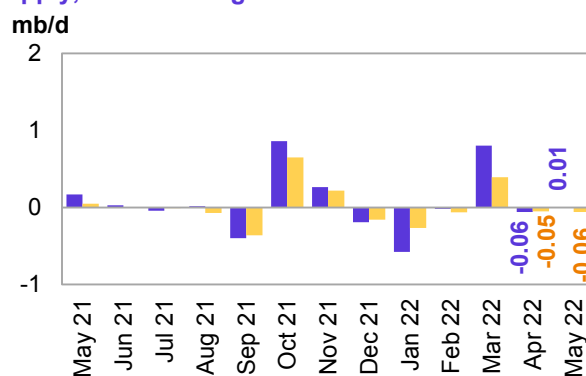
Sources: EIA and OPEC.

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



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

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



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

**US tight crude output in May 2022** increased by 101 tb/d m-o-m to average 7.9 mb/d, which was 0.6 mb/d higher than the same month a year earlier, according to estimates by the US Energy Information Administration (EIA).

The m-o-m increase from shale and tight formations through horizontal wells came mostly from the Permian, which increased by 51 tb/d to average 4.6 mb/d. This was up by 0.5 mb/d, y-o-y.

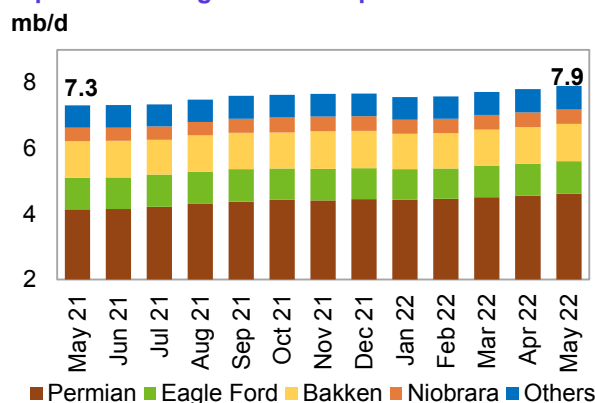
In the Williston Basin, production in the Bakken shale increased marginally by 20 tb/d to average 1.1 mb/d, up by a minor 23 tb/d, y-o-y. Tight crude output at Eagle Ford in Texas rose by 24 tb/d to average 1.0 mb/d down by 32 tb/d y-o-y, while production in Niobrara-Codell in Colorado and Wyoming remained broadly unchanged at an average of 0.4 mb/d.

**US liquids production in 2022**, excluding processing gains, is forecast to grow y-o-y by 1.15 mb/d to average 19.0 mb/d, revised down by 138 tb/d compared to the previous assessment. The downward revision was due to lower-than-projected production in 2Q22 and downward revisions to 2H22.

The 2022 gains are due primarily to expected tight crude production growth of 0.7 mb/d, to average 8.0 mb/d. In addition, NGLs, mainly from unconventional basins, are projected to grow by 0.4 mb/d, to average 5.8 mb/d, and production in the GoM is anticipated to increase by 50 tb/d. Non-conventional liquids are projected to grow by 40 tb/d to average 1.2 mb/d. However, the expected growth will be partially offset by natural declines in onshore conventional fields of 0.1 mb/d y-o-y.

Given the current pace of drilling and well completions in oil fields, **production of crude oil and condensate** is forecast to grow by 0.7 mb/d y-o-y to average 11.9 mb/d in 2022. This forecast assumes continued capital discipline, current inflation rates, continuing supply chain issues and the oil field service section limitations

Graph 5 - 9: US tight crude output breakdown



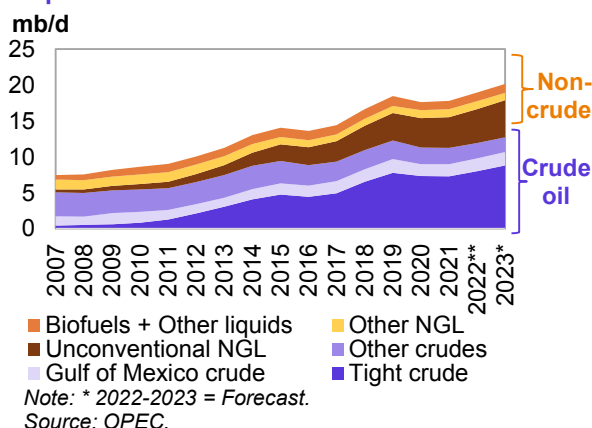
Sources: EIA, Rystad Energy and OPEC.

(labour and equipment). The hurricane season in the US Gulf Coast is also a source of uncertainty to the forecast.

**US liquids production in 2023**, excluding processing gains, is expected to grow by 1.2 mb/d y-o-y to average 20.2 mb/d, revised up by 0.1 mb/d, considering a partial shift in tight oil production growth to the next year. In addition, the current level of drilling activity and fewer supply chain issues in the prolific Permian Basin, Eagle Ford and Bakken shale sites are assumed for 2023. Crude oil output is anticipated to jump by 0.8 mb/d y-o-y to average 12.7 mb/d.

At the same time, NGL production and non-conventional liquids, particularly ethanol, are projected to increase by 0.4 mb/d and 40 tb/d y-o-y to average 6.2 mb/d and 1.3 mb/d, respectively. Average tight crude output in 2023 is expected at 8.8 mb/d, up by 0.8 mb/d.

**Graph 5 - 10: US liquids supply developments by component**



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

US liquids	Change		Change		Change	
	2021	2021/20	2022*	2022/21	2023*	2023/22
<b>Tight crude</b>	7.29	-0.04	8.03	0.74	8.83	0.80
<b>Gulf of Mexico crude</b>	1.71	0.04	1.76	0.05	1.86	0.10
<b>Conventional crude oil</b>	2.25	-0.06	2.15	-0.10	2.05	-0.10
<b>Total crude</b>	<b>11.25</b>	<b>-0.06</b>	<b>11.94</b>	<b>0.68</b>	<b>12.74</b>	<b>0.80</b>
<b>Unconventional NGLs</b>	4.28	0.20	4.73	0.45	5.14	0.41
<b>Conventional NGLs</b>	1.12	0.03	1.10	-0.02	1.04	-0.05
<b>Total NGLs</b>	<b>5.40</b>	<b>0.22</b>	<b>5.83</b>	<b>0.43</b>	<b>6.18</b>	<b>0.35</b>
<b>Biofuels + Other liquids</b>	1.17	0.02	1.21	0.04	1.25	0.04
<b>US total supply</b>	<b>17.82</b>	<b>0.18</b>	<b>18.97</b>	<b>1.15</b>	<b>20.17</b>	<b>1.20</b>

Note: \* 2022-2023 = Forecast. Sources: EIA, OPEC and Rystad Energy.

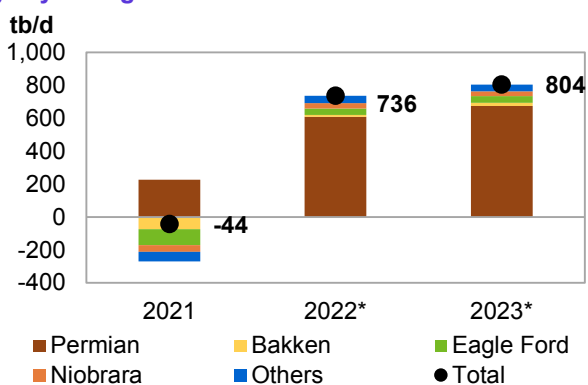
**US tight crude production in the Permian** in 2022 is estimated to have increased by 0.6 mb/d to 4.8 mb/d and is forecast to grow by 0.7 mb/d y-o-y to average 5.4 mb/d in 2023.

The decline in **Bakken** shale production that occurred in 2020 and 2021 is expected to reverse to now grow to average 1.1 mb/d in 2022, which is still lower than the pre-pandemic average output of 1.4 mb/d. Tight crude production in the Bakken is forecast to grow by 11 tb/d in 2022, on the back of increased drilling activity in North Dakota and available DUC wells. In 2023, growth is forecast at 20 tb/d, to average 1.1 mb/d.

The **Eagle Ford** in Texas saw output of 1.2 mb/d in 2019, declined in 2020 and 2021, and is forecast to grow in 2022 by 39 tb/d to average 1.0 mb/d. Growth of 40 tb/d is expected for 2023, to average 1.0 mb/d.

Production in the **Niobrara** is forecast to grow by 33 tb/d in 2022 and 30 tb/d in 2023, y-o-y, to average 446 tb/d and 476 tb/d, respectively. Other shale plays are expected to show marginal increases totalling 45 tb/d and 40 tb/d in 2022 and 2023, given current drilling and completion activities.

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



Note: \* 2022-2023 = Forecast. Sources: EIA, Rystad Energy and OPEC.

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

US tight oil	Change		Change		Change	
	2021	2021/20	2022*	2022/21	2023*	2023/22
Permian tight	4.15	0.23	4.75	0.61	5.43	0.67
Bakken shale	1.11	-0.07	1.12	0.01	1.14	0.02
Eagle Ford shale	0.96	-0.10	1.00	0.04	1.04	0.04
Niobrara shale	0.41	-0.04	0.45	0.03	0.48	0.03
Other tight plays	0.67	-0.06	0.72	0.05	0.76	0.04
<b>Total</b>	<b>7.29</b>	<b>-0.04</b>	<b>8.03</b>	<b>0.74</b>	<b>8.83</b>	<b>0.80</b>

Note: \* 2022-2023 = Forecast. Source: OPEC.

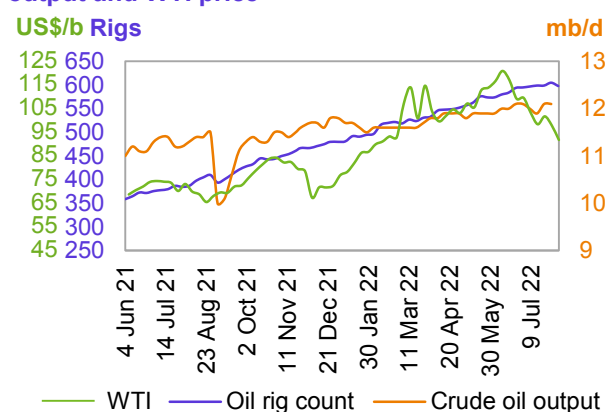
## US rig count, spudded, completed, DUC wells and fracking activity

Total **US active drilling rigs** decreased by three units to 764 rigs in the week ending 5 August, but were up by 273 rigs compared to a year ago. The number of active offshore rigs declined by one w-o-w to 16, two rigs more than the same month in 2021. On the other hand, onshore oil and gas rigs remained unchanged w-o-w to stand at 746 rigs, with two rigs in inland waters.

The **US horizontal rig count** rose by one w-o-w to 698, compared with 449 horizontal rigs a year ago. The number of drilling rigs for oil declined by seven to 598 w-o-w, while gas-drilling rigs increased by four to 161.

The rig count in the Permian declined by four w-o-w to 347 rigs. At the same time, the number of active rigs fell by one in the Cana Woodford to 27. However, the rig count increased by one in the Williston and the DJ-Niobrara basins to 39 and 17, respectively. There were the same number of operating rigs w-o-w in the Eagle Ford and Barnett basins, 72 and 4, respectively.

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



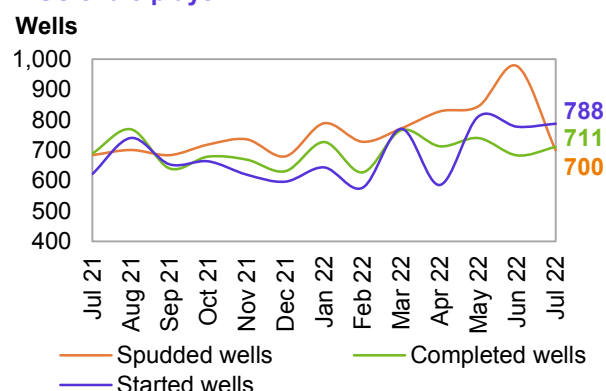
Sources: Baker Hughes, EIA and OPEC.

**Drilling and completion (D&C) activities** for spudded, completed and started wells in all US shale plays, based on the EIA-DPR regions, saw 977 horizontal wells spudded in June 2022 (as per preliminary data), up by 132 m-o-m, and 54% higher than in June 2021.

In June 2022, preliminary data indicates a lower number of completed wells at 683 m-o-m, but up by 16% y-o-y. Moreover, the number of started wells was estimated at 778, which is 32% higher than in June 2021.

Preliminary data for July estimates 700 spudded, 711 completed and 788 started wells, according to Rystad Energy.

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



Note: Jun 22-Jul 22 = Preliminary data.  
Sources: Rystad Energy and OPEC.

In terms of identified **US oil and gas fracking operations by region**, Rystad Energy reported that following a peak in January 2020, 1,161 wells were fracked in May 2022, and 1,034 and 946 wells started to frack in June and July, respectively. These preliminary numbers are based on an analysis of high-frequency satellite data.

Preliminary data on fracking in June shows that 210 and 249 wells were fracked in the Permian Midland Tight and Permian Delaware Tight, respectively. In comparison with May, there was a jump of 41 wells fracked in the Delaware and a decline of 99 wells fracked in the Midland tight, according to preliminary data. Data also indicated that 71 wells were fracked in the DJ Basin, 103 in the Eagle Ford and 89 in the Bakken during June.

## Canada

**Canada's liquids production** in June is estimated to have increased by 75 tb/d m-o-m to average 5.4 mb/d. However, 2Q22 shows a q-o-q decline of 0.16 mb/d, due to seasonal maintenance.

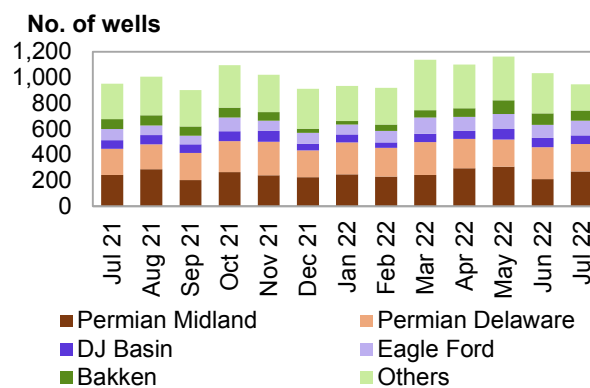
Crude bitumen production and synthetic crude output increased by 9 tb/d and 101 tb/d, m-o-m in June, respectively. Taken together, crude bitumen and synthetic crude production rose by 110 tb/d to 3.3 mb/d. However, production of conventional crude decreased by a slight 15 tb/d m-o-m to average 1.2 mb/d, and NGL output declined by 20 tb/d m-o-m to average 1.1 mb/d.

Seasonal maintenance at several key projects resulted in softer 2Q22 output. Thermal in-situ and upgraded mining projects are likely to see sequential quarterly declines, which were partially offset by an estimated increase in non-upgraded mining output. The main quarterly declines were estimated to be driven by Syncrude, CNRL, Suncor, and MEG Energy, while the return to a two-train operation in Fort Hills is estimated to increase non-upgraded oil. However, the project ramp-ups and optimization in oil sands output are expected to drive production in 4Q22.

Canadian liquids supply in **2022** is forecast to grow by 0.2 mb/d to average 5.6 mb/d, broadly unchanged from the previous assessment. Oil sands project expansion and the return of upgraders from maintenance are expected to increase output up to December.

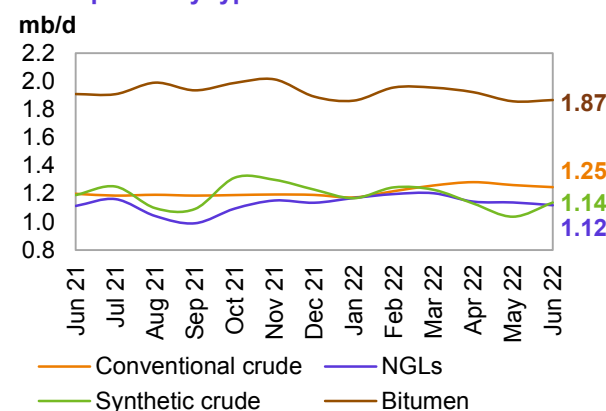
For **2023**, Canada's liquids production is forecast to increase gradually at a pace similar to 2022, rising by 0.2 mb/d to average 5.8 mb/d. Incremental production will come mainly from Alberta's oil sands, which saw average output of 3.1 mb/d in 1H22.

**Graph 5 - 14: Fracked wells count per month**



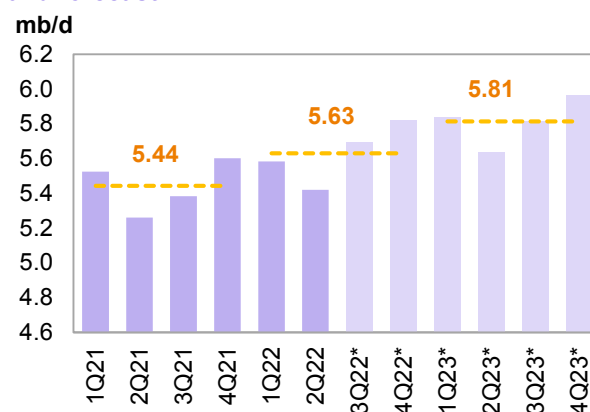
Note: Jun 22-Jul 22 = Preliminary data.  
Sources: Rystad Energy Shale Well Cube and OPEC.

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



Sources: National Energy Board and OPEC.

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



Note: \* 3Q22-4Q23 = Forecast. Source: OPEC.

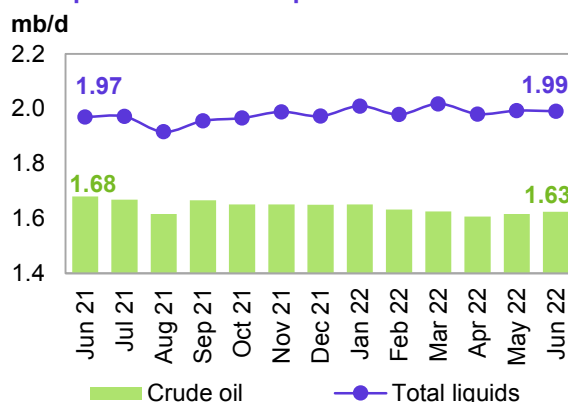
## Mexico

**Mexico's crude output** rose by a slight 8 tb/d in **June** to average 1.6 mb/d, while NGL output decreased by 10 tb/d. Therefore, Mexico's total liquids output in June was broadly unchanged m-o-m to average 1.99 mb/d, according to national oil company Pemex.

For **2022**, liquids production in Mexico is forecast to grow by 30 tb/d to average 2.0 mb/d, unchanged from the previous month. The increase is expected to be driven by foreign-operated fields like the ones managed by Lukoil, ENI and Pan American. Minor growth is also expected in Pemex-operated fields.

For **2023**, liquids production is forecast to decline by 0.04 mb/d to average 1.9 mb/d. Pemex's total crude production decline in mature fields like Ku-Maloob-Zaap, Abkatun-Pol-Chuc, and Integral Yaxche-Xanab is forecast to outweigh production ramp-ups in other fields.

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



Sources: PEMEX and OPEC.

## OECD Europe

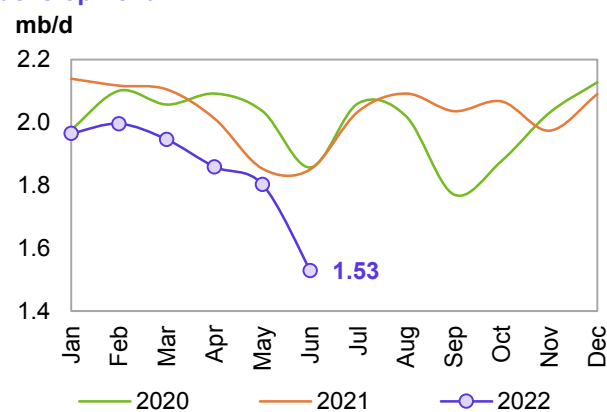
### Norway

**Norwegian liquids production** in **June** declined by 0.27 mb/d m-o-m to average 1.5 mb/d. This was due to continued heavy maintenance in offshore platforms and the prioritization of gas production by some operators.

Norway's crude production decreased by 328 tb/d m-o-m in June to average 1.3 mb/d, down by 322 tb/d y-o-y. Oil production in June was 0.2% lower than the Norwegian Petroleum Directorate's (NPD) forecast.

By contrast, production of NGLs and condensates increased by 54 tb/d m-o-m to average 0.2 mb/d, according to NPD data.

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



Sources: NPD and OPEC.

For **2022**, the growth forecast has been revised down by 64 tb/d m-o-m due to lower-than-expected output for 2Q22 and maintenance at Johan Sverdrup and in the Greater Ekofisk Area. Production is now expected to decrease by 39 tb/d y-o-y and average 2.0 mb/d. In addition to some small start-ups, growth is expected in 4Q22, following the return from maintenance and when the second phase of the Johan Sverdrup field development starts production.

For **2023**, Norwegian liquids production is forecast to grow by 0.24 mb/d to average 2.3 mb/d. Plenty of small-to-large projects are scheduled to ramp up in 2023 in the Njord, Nova, Ringhorne, Alvheim, Oseberg and Snohvit fields. However, the Johan Sverdrup is projected to be the main source of increased output for the year. Neptune has also completed drilling at Fenja with the first oil on track for 1Q23. Fenja is expected to produce about 24 tb/d at peak production.

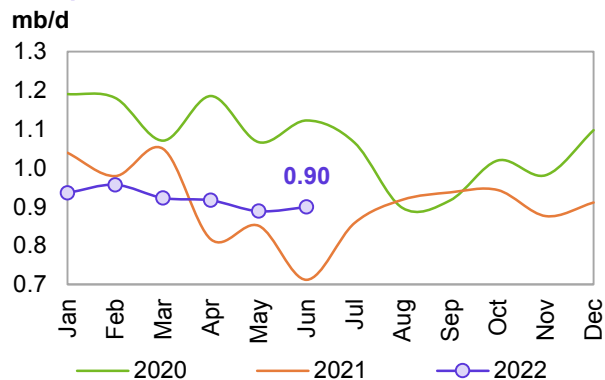
### UK

**UK liquids production** increased in **June** by 11 tb/d m-o-m to average 0.9 mb/d. Crude oil output increased by 18 tb/d m-o-m to average 0.8 mb/d, according to official data, and was up by 140 tb/d y-o-y. NGL output fell slightly, by 7 tb/d, to 86 tb/d.

For **2022**, UK liquids production is forecast to grow by 23 tb/d to average 0.9 mb/d, revised down by a minor 7 tb/d from the previous assessment, due to lower-than-expected production in 2Q22. Low investment levels, COVID-19-related delays and poor mature reservoir performance have impacted the growth forecast.

For **2023**, UK liquids production is forecast to stay steady for an average of 0.9 mb/d. Production ramp-ups will be seen in the Penguins oil field (Redevelop), ETAP, Clair, the Schiehallion quad and at some other small fields. However, project sanctioning is essential for maintaining future oil and gas output at a time when the UK is already facing production declines due to lack of new developments.

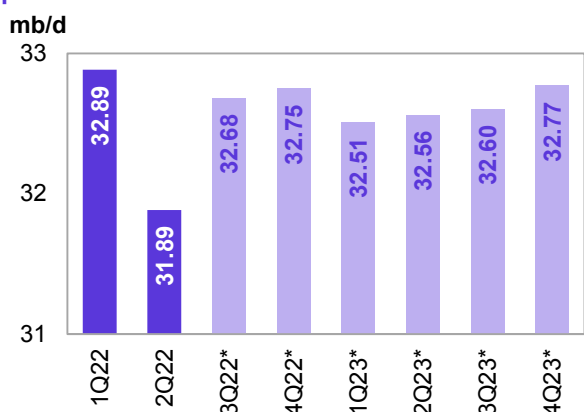
**Graph 5 - 19: UK monthly liquids production development**



Sources: Department of Energy & Climate Change and OPEC.

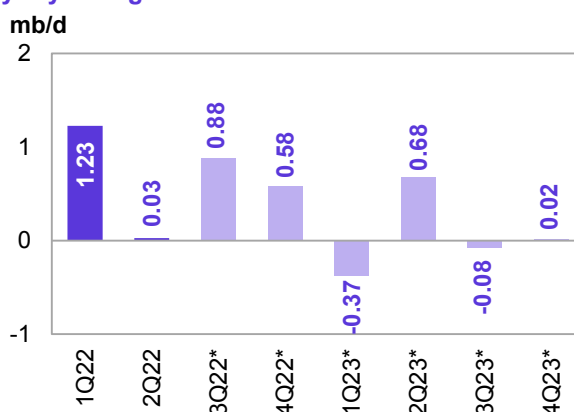
## Non-OECD

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



Note: \* 3Q22-4Q23 = Forecast. Source: OPEC.

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

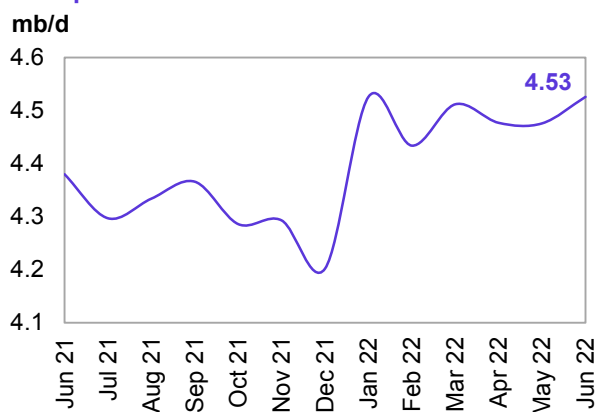


Note: \* 3Q22-4Q23 = Forecast. Source: OPEC.

## China

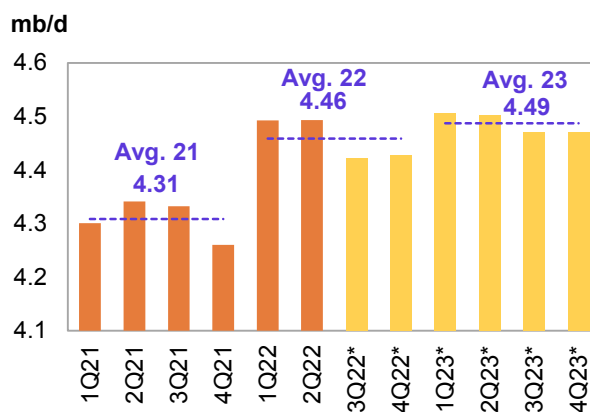
**China's liquids production** increased m-o-m in **June** by 50 tb/d to average 4.5 mb/d, which was up by 146 tb/d y-o-y, according to official data. Crude oil output in June averaged 4.2 mb/d, up by 46 tb/d compared to the previous month, and higher by 127 tb/d y-o-y. Liquids production over the first five months of the year averaged 4.5 mb/d, higher by 4% compared to the same period last year.

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



Sources: CNPC and OPEC.

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



Note: \* 3Q22-4Q23 = Forecast. Sources: CNPC and OPEC.

For **2022**, growth of 150 tb/d is forecast for an average of 4.5 mb/d, broadly unchanged from the previous assessment. Natural decline rates are expected to be offset by Chinese national oil companies' investments. Sinopec, China National Petroleum Corporation and China National Offshore Oil Corporation are expected to drive growth with additional in-fill wells and EOR projects.

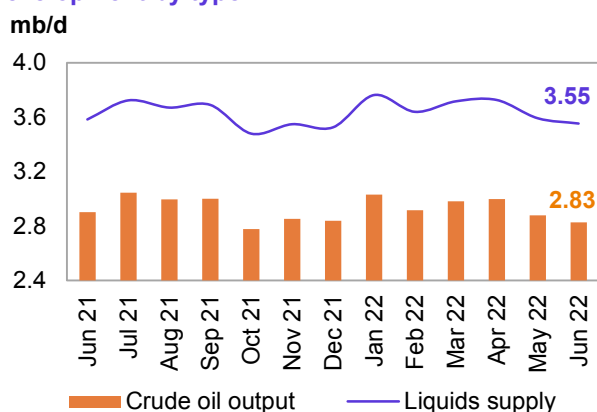
For **2023**, y-o-y growth of 30 tb/d is forecast for an average of 4.5 m/d, with Bozhong 29-6, Wushi 17-2 and Kenli 10-1N planned to come on stream under CNOOC. At the same time, ramp-ups are expected from the Changqing, Jilin and Liaohe projects, which are managed by Petro China.

## Latin America

### Brazil

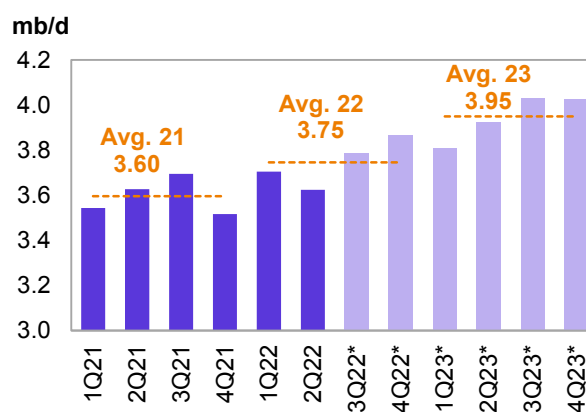
**Brazil's crude output in June** decreased by 50 tb/d m-o-m to average 2.8 mb/d. NGL production was up by 11 tb/d to average 93 tb/d and is expected to remain flat in July. Biofuel output (mainly ethanol) remained unchanged in June to average 632 tb/d, with preliminary data showing a flat trend in July as well. Therefore, in June, total liquids production decreased by 39 tb/d to average 3.6 mb/d, down by 30 tb/d y-o-y. This was primarily due to continued downtime at the Tupi oilfield during the first half of the month.

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



Sources: ANP, Petrobras and OPEC.

**Graph 5 - 25: Brazil's quarterly liquids production**



Note: \* 3Q22-4Q23 = Forecast. Sources: ANP and OPEC.

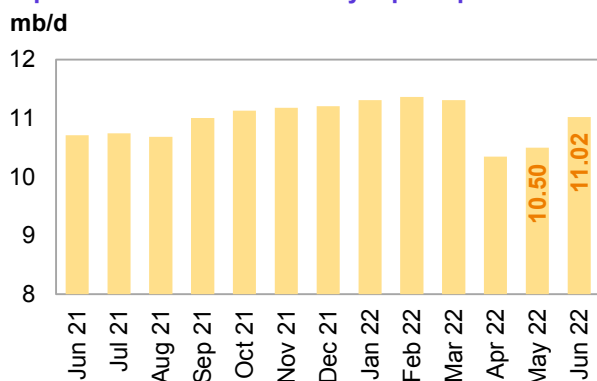
For **2022**, Brazil's liquids supply, including biofuels, is forecast to increase by 0.2 mb/d y-o-y to average 3.8 mb/d, unchanged from the previous month's assessment. Growth in 2022 will be driven by the continued ramp-up of the Sepia field along with the start-up of Mero 1 in the pre-salt Santos basin and Peregrino Phase 2. The Peregrino Field came back on stream in July, with Peregrino Phase 2 on track for start-up in the third quarter, according to the Offshore Magazine. Equinor's Peregrino Phase 1 project (platforms A & B), located in the Campos basin, went offline back in May 2020 due to operational issues with a turbine at the field FPSO. The FPSO is now intended to serve both Phase 1 and Phase 2 of the field's development.

For **2023**, Brazil's liquids supply, including biofuels, is forecast to increase by 0.2 mb/d y-o-y to average 3.9 mb/d. Crude oil output is expected to increase through production ramp-ups in the Mero (Libra NW), Buzios (Franco), Tupi (Lula), Peregrino, Sepia and Itapu (Florim) fields. However, offshore maintenance is expected to cause interruptions in the major fields.

### Russia

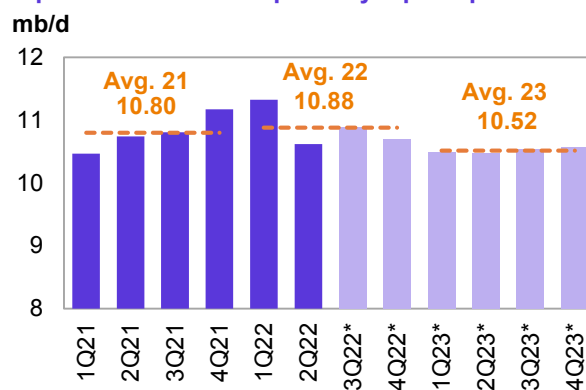
**Russia's liquids production in June** increased m-o-m by 520 tb/d to average 11.0 mb/d. This includes 9.8 mb/d of crude oil and condensate, and 1.2 mb/d of NGLs. A preliminary estimate for Russia's crude and condensate production in July 2022 shows an increase of 58 tb/d m-o-m to average 9.9 mb/d, while around a 32 tb/d decline is expected for NGLs.

**Graph 5 - 26: Russia's monthly liquids production**



Sources: Nefte Compass, The Ministry of Energy of the Russian Federation and OPEC.

**Graph 5 - 27: Russia's quarterly liquids production**



Note: \* 3Q22-4Q23 = Forecast. Sources: Nefte Compass and OPEC.

Russian liquids output in **2022** is forecast to increase by 80 tb/d y-o-y to average 10.9 mb/d, an upward revision of 0.25 mb/d from the previous month's assessment, due to higher-than-expected production in the last two months.

For **2023**, Russian liquids production is forecast to decrease by 0.4 mb/d to average 10.5 mb/d. It should be noted that the Russian oil forecast is subject to high uncertainty.

## Caspian

### Kazakhstan & Azerbaijan

**Liquids output in Kazakhstan** decreased by 386 tb/d to average 1.5 mb/d in **June**. Crude production was down by 341 tb/d m-o-m to average 1.2 mb/d. Production of NGLs also decreased by 45 tb/d m-o-m to average 0.3 mb/d. This was mainly due to extensive maintenance in the Kashagan oil field.

Kazakhstan's liquids supply for **2022** is now forecast to grow by 80 tb/d to average 1.9 mb/d, down by 37 tb/d compared to the previous month's assessment.

For **2023**, liquids supply is forecast to increase by 60 tb/d, due to production ramp-ups in the Kashagan oil field. Oil production in the Tengiz field and gas condensate output in the Karachaganak field are also expected to rise marginally.

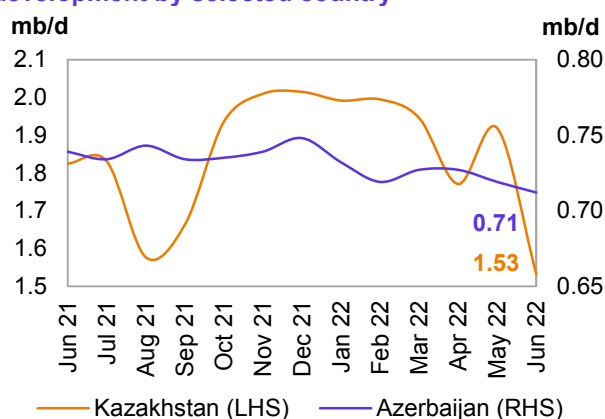
**Azerbaijan's liquids production in June** declined by a minor 7 tb/d m-o-m to average 0.7 mb/d, and was down by 27 tb/d y-o-y. Crude production decreased by 9 tb/d m-o-m to average 562 tb/d, while NGL output averaged at 150 tb/d, according to official sources.

No new projects are expected to come online in the country in 2022, and the main declines in the legacy fields are expected to be offset by ramp-ups in other fields, such as Shah Deniz Phase 2.

For **2022**, liquids supply in Azerbaijan is forecast to grow by 39 tb/d y-o-y to average 0.8 mb/d, down by 8 tb/d, because of lower-than-expected production in the major oil fields in 2Q22.

Azerbaijan's liquids supply for **2023** is forecast to decline by 60 tb/d for an average of 0.7 mb/d. The overall decline rate will be higher than the planned ramp-ups in the three major producing fields.

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



Sources: Nefte Compass and OPEC.



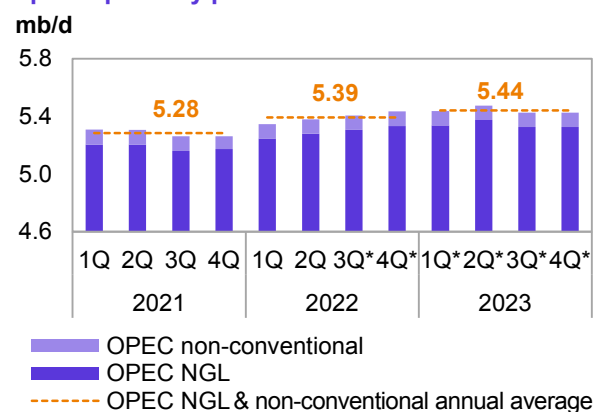
## OPEC NGLs and non-conventional oils

**OPEC NGLs and non-conventional liquids in 2022** are forecast to grow by 0.1 mb/d to average 5.4 mb/d, unchanged from the previous assessment.

Output of NGLs in 1Q22 is estimated to have averaged 5.2 mb/d, while OPEC non-conventionals remained steady at 0.1 mb/d.

The preliminary **2023** forecast indicates growth of 50 tb/d for an average of 5.4 mb/d. NGL production is projected to grow by 50 tb/d to average 5.3 mb/d, while non-conventional liquids are projected to remain unchanged at 0.1 mb/d.

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



Note: \* 3Q22-4Q23 = Forecast. Source: OPEC.

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

OPEC NGL and non-conventional oils	Change		Change		1Q23	2Q23	3Q23	4Q23	2023	Change
	2021	21/20	2022	22/21						
OPEC NGL	5.18	0.12	5.29	0.11	5.34	5.37	5.33	5.33	5.34	0.05
OPEC non-conventional	0.10	0.00	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.00
<b>Total</b>	<b>5.28</b>	<b>0.12</b>	<b>5.39</b>	<b>0.11</b>	<b>5.44</b>	<b>5.47</b>	<b>5.43</b>	<b>5.43</b>	<b>5.44</b>	<b>0.05</b>

Note: 2022-2023 = Forecast. Source: OPEC.

## OPEC crude oil production

According to secondary sources, total **OPEC-13 crude oil production** averaged 28.90 mb/d in July 2022, higher by 216 tb/d m-o-m. Crude oil output increased mainly in Saudi Arabia, the UAE and Kuwait, while production in Venezuela and Angola declined.

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

Secondary sources	2020	2021	4Q21	1Q22	2Q22	May 22	Jun 22	Jul 22	Change Jul/Jun
Algeria	904	913	959	984	1,014	1,014	1,023	1,020	-3
Angola	1,247	1,117	1,124	1,152	1,173	1,164	1,184	1,165	-19
Congo	289	265	266	263	268	270	272	263	-9
Equatorial Guinea	114	98	89	92	90	87	88	101	13
Gabon	191	182	185	199	185	171	188	202	14
IR Iran	1,991	2,392	2,472	2,528	2,559	2,543	2,569	2,558	-11
Iraq	4,076	4,049	4,240	4,286	4,438	4,414	4,466	4,496	30
Kuwait	2,439	2,419	2,532	2,614	2,691	2,689	2,724	2,772	47
Libya	367	1,143	1,111	1,063	752	725	643	632	-11
Nigeria	1,575	1,372	1,321	1,376	1,205	1,153	1,176	1,183	6
Saudi Arabia	9,204	9,111	9,878	10,163	10,450	10,427	10,556	10,714	158
UAE	2,804	2,727	2,861	2,954	3,045	3,038	3,082	3,131	48
Venezuela	512	553	657	678	712	710	710	661	-49
<b>Total OPEC</b>	<b>25,713</b>	<b>26,342</b>	<b>27,694</b>	<b>28,352</b>	<b>28,582</b>	<b>28,406</b>	<b>28,680</b>	<b>28,896</b>	<b>216</b>

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

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

Direct communication	2020	2021	4Q21	1Q22	2Q22	May 22	Jun 22	Jul 22	Change Jul/Jun
Algeria	899	911	958	984	1,016	1,015	1,027	1,040	13
Angola	1,271	1,124	1,123	1,161	1,173	1,162	1,175	1,180	5
Congo	300	267	260	267	258	261	251	250	-1
Equatorial Guinea	114	93	79	95	91	89	91	89	-2
Gabon	207	181	183	197	184	183	194	191	-3
IR Iran	..	..	..	..	..	..	..	..	..
Iraq	3,997	3,971	4,167	4,188	4,472	4,470	4,515	4,584	69
Kuwait	2,438	2,415	2,528	2,612	2,694	2,694	2,724	2,768	44
Libya	389	1,207	1,182	1,151	..	..	..	..	..
Nigeria	1,493	1,323	1,260	1,299	1,133	1,024	1,158	1,084	-74
Saudi Arabia	9,213	9,125	9,905	10,224	10,542	10,538	10,646	10,815	169
UAE	2,779	2,718	2,854	2,949	3,042	3,032	3,083	3,133	50
Venezuela	569	636	817	756	745	735	727	629	-98
<b>Total OPEC</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>

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

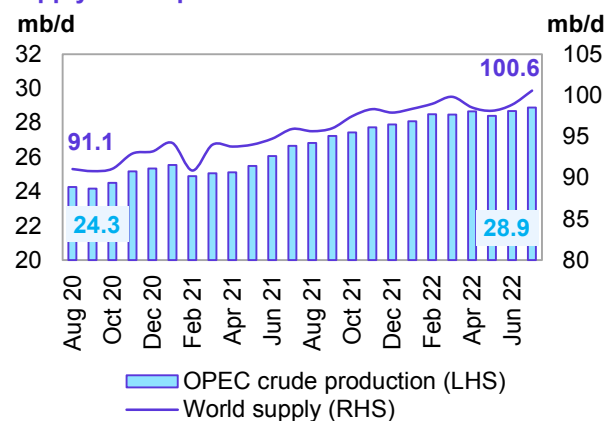
## World oil supply

Preliminary data indicates that **global liquids production in July** increased by 1.7 mb/d to average 100.6 mb/d compared with the previous month.

**Non-OPEC liquids production (including OPEC NGLs)** is estimated to have increased in July by 1.5 mb/d m-o-m to average 71.7 mb/d, and was higher by 2.4 mb/d y-o-y. Preliminary estimated increases in production during July were mainly driven by OECD Europe, Other Eurasia and Latin America, by 1.1 mb/d, while there would be small declines in some other regions.

The **share of OPEC crude oil in total global production** decreased by 0.3 pp to 28.7% in July compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

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



## Product Markets and Refinery Operations

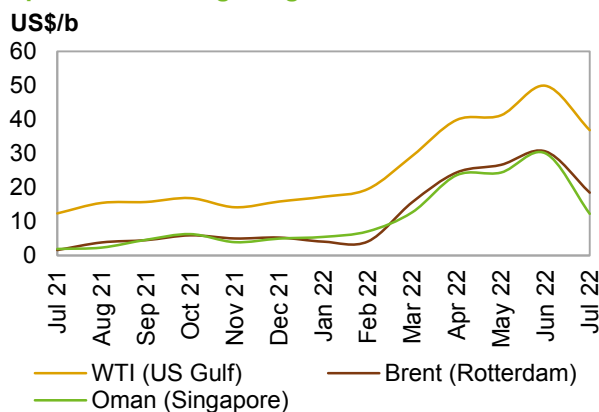
In July, refinery margins in all main trading hubs reversed trends and fell from their multi-year record high levels registered in the previous month. A counter-seasonal downturn in US product demand and rising refinery processing rates in the other regions led to product stock builds. At the same time, concerns over a weakening global economy and a softer product market outlook is likely to have further contributed to the downturn in gasoil markets and refining economics globally. This weakness was manifested all across the barrel in all regions, with the exception of Asian naphtha, as product prices retreated from the record breaking highs witnessed in June.

Going forward, transport fuel requirements should remain supportive in line with seasonal trends and refinery intakes are expected to remain well sustained, accommodate seasonal fuel consumption and allow continued inventory refill.

### Refinery margins

**US Gulf Coast (USGC) refining margins against WTI** fell in July as product stock levels showed recovery, signalling a slow-down in demand. Across the barrel, gasoline showed the largest declines, as their crack spreads fell by \$26.94/b, from the record breaking high registered in June, to average \$45.66/b in July. In addition, jet fuel stocks also ended slightly higher at the end of July compared to the same time in the previous month. Gasoil stock levels have been on a gradually rising trend since May up to Mid-July amid an already well supplied fuel oil market. Consequently, US products, similarly, underwent a trend reversal with prices falling considerably in July, lower on average by \$26.82/b m-o-m. This downward trend in product prices weighed on product crack spreads and on US refining economics.

Graph 6 - 1: Refining margins



Sources: Argus and OPEC.

According to preliminary estimates, refinery intake in the US dropped by around 190 tb/d m-o-m to settle at 16.77 mb/d in July, in a counter-seasonal move, attributable to unplanned refinery outages. Going forward, US refinery intakes are expected to increase further as total product inventories remain low relative to the last 5-year average. This could weigh further on refining economics in the near term. USGC margins against WTI averaged \$36.87/b in July, down by \$13.05 m-o-m but up by \$24.46 y-o-y.

**Refinery margins in Rotterdam against Brent** decreased to show solid losses, pressurised by a rise in refinery product output and a lengthening product balance. Product inventory levels in the Amsterdam-Rotterdam-Antwerp storage hub rose, reflecting strong product supplies. In addition, a slow-down in gasoline trans-Atlantic exports as well as weaker deliveries to West Africa further weighed on the regional product market.

European refinery processing rates in July increased by 180 tb/d m-o-m, according to preliminary data, as refinery maintenance in this region subsided further. Refinery margins against Brent in Europe averaged \$18.44/b in July, down by \$12.12/b compared with a month earlier but was higher by \$29.71 y-o-y.

**Singapore refining margins against Oman** weakened and exhibited the largest monthly loss relative to the other regions, with weakness manifested all across the barrel with the exception of naphtha. Strong refinery run rates in India and China contributed to enhanced product availability in the region. The overall change in Asian refinery intakes was estimated to be 210 tb/d higher in July relative to the previous month, and averaged 26.09 mb/d in July according to preliminary data. Going forward, the implementation of a product export tax reduction in India, should provide support to Indian refinery processing rates, which could exert added downward pressure on the regional product market. Refinery margins against Oman in Asia lost \$17.79 m-o-m to average \$12.30/b in July, higher by \$10.32 y-o-y.

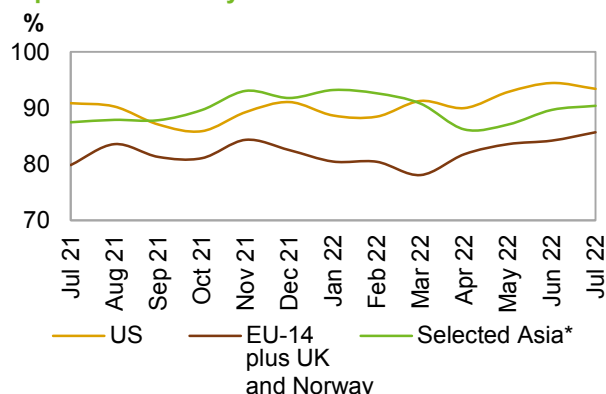
## Refinery operations

**US refinery utilization rates** decreased in July to average 93.46%, which corresponds to a throughput of 16.77 mb/d. This represented a drop of 1.0 pp and 190 tb/d, respectively, compared with the previous month. Y-o-y, the July refinery utilization rate was up by 2.6 pp, with throughput showing a rise of 284 tb/d.

**European** refinery utilization averaged 85.73%, corresponding to a throughput of 10.10 mb/d. This is a m-o-m rise of 1.5 pp or 180 tb/d. On a y-o-y basis, utilization rates increased by 5.8 pp, while throughput was up by 689 tb/d.

In **selected Asia** – comprising Japan, China, India, Singapore and South Korea – refinery utilization rates increased to average 90.43% in July, corresponding to a throughput of 26.09 mb/d. Compared with the previous month, utilization rates were up by 0.7 pp, while throughput was up by 210 tb/d. Meanwhile, utilization rates were higher by 2.9 pp y-o-y, and throughput was up by 991 tb/d.

**Graph 6 - 2: Refinery utilization rates**



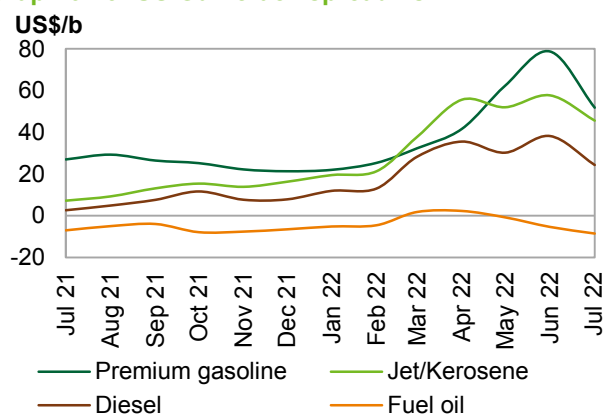
Note: \* China, India, Japan, Singapore and South Korea.  
Sources: Argus, EIA, Euroilstock, PAJ and OPEC.

## Product markets

### US market

**USGC gasoline crack spreads** reversed trends ending a five-month increase, pressured mainly by demand-side dynamics reportedly amid weaker demand. US total gasoline inventory levels increased over the month, which led to a decline in gasoline prices. Nonetheless, the resulting decline in gasoline prices, could in turn trigger a rebound in gasoline sales as the season summer support is expected to persist in the near term. In July, gasoline prices took a dive from the record-high average of \$193.06/b registered in June, to average \$152.01/b in July, which was higher by 21% lower m-o-m, but still 53% higher y-o-y. The USGC gasoline crack spread lost \$26.94 m-o-m to average \$51.76/b in July, and was up by \$24.82 y-o-y.

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



Sources: Argus and OPEC.

**USGC jet/kerosene crack spreads** weakened due to stronger refinery outputs despite strong jet fuel requirements for air passenger travel. Going forward, with the onset of the summer season, jet fuel markets are expected to continue to respond positively to upside potential in air travel activity, which should add support to middle distillate crack spreads in the coming months. The US jet/kerosene crack spread against WTI averaged \$45.66/b, down by \$12.13 m-o-m but was higher by \$38.46 y-o-y.

The USGC **gasoil crack spread** lost ground following the previous month's rebound as gasoil stock levels extended their upward trend up to mid-July. In addition, US gasoil markets came under added pressure as concerns over a weakening global economy exerted downward pressure on gasoil prices, which averaged \$124.54/b in July, which was down by \$27.99 relative to the previous month. The US gasoil crack spread against WTI averaged \$24.29/b, down by \$13.88 m-o-m but up by \$21.69 y-o-y.

**USGC fuel oil crack spreads** against WTI extended their downward trend and dove further into negative territory as fuel oil supplies rose while fuel oil margins came under added pressure affected by weaker demand. In July, the US fuel oil crack spread against WTI averaged minus \$8.56/b, lower by \$3.19/b m-o-m, and by \$1.54 y-o-y.

## European market

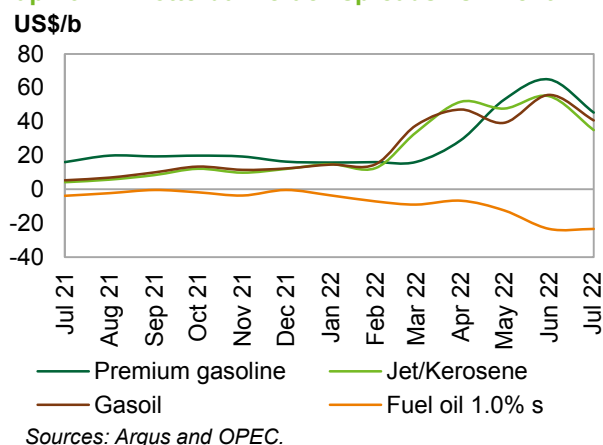
**Gasoline crack spreads** lost notable ground pressured by stronger supplies and a decline in transatlantic exports, as well as exports to West Africa. Expectations of a potential rise in regional refinery processing rates point to downward pressure on gasoline markets in the near term. The gasoline crack spread against Brent averaged \$45.39/b in July, down by \$19.59 m-o-m, but was higher by \$29.29 y-o-y.

In July, **jet/kerosene crack spreads** decreased, shadowing the poor performances in gasoil crack spreads, given less supportive supply-side dynamics despite healthy demand from the aviation sector. The Rotterdam jet/kerosene crack spread against Brent averaged \$45.39/b, down by \$19.59 m-o-m but up by \$29.29 y-o-y.

**Gasoil 10 ppm crack spreads** decreased, as the European gasoil balance showed signs of recovery on strong imports and higher gasoil production rates. Nevertheless, gasoil inventory levels remain a matter of concern, as they remain on the low side compared with historical trends. The gasoil crack spread against Brent averaged \$40.66/b, down by \$15.07 m-o-m but up by \$35.37 y-o-y.

At the bottom of the barrel, **fuel oil 1.0% crack spreads** declined for the third consecutive month and headed deeper into negative territory. Restored operations at secondary and conversion units following the most recent heavy turnaround season likely weighed on fuel oil markets, and led to relatively higher volume availability of the residual fuel. In terms of prices, fuel oil had the second lowest price drop m-o-m, across the barrel as it declined by \$10.97 relative to the previous month. As a result, the price differential between fuel oil and gasoline or gasoil contracted m-o-m, in July, which could turn conversion of the residual fuel less economically attractive. In Europe, fuel oil cracks averaged minus \$23.37/b in July, having lost \$0.4 m-o-m and \$19.48 y-o-y.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



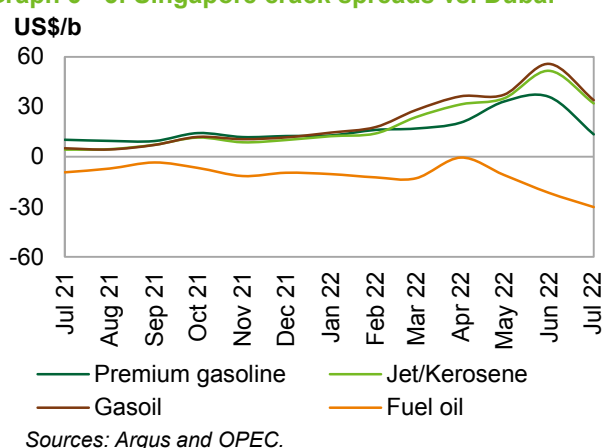
## Asian market

The **Asian gasoline 92 crack spread** decreased mainly impacted by supply-side dynamics and growing gasoline availability in the region.

The Singapore **gasoline crack spread** against Oman in July averaged \$13.48/b, down by \$22.49 m-o-m but up by \$3.23 y-o-y.

Asian **naphtha crack spreads** were the sole positive performer across the Asian barrel in July, backed by stronger petrochemical feedstock requirements amid high natural gas prices. The Singapore naphtha crack spread against Oman averaged minus \$20.17/b, having increased by \$7.00 m-o-m but declined by \$22.91 y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Dubai



In the middle of the barrel, **jet/kerosene crack spreads trended downwards** similarly to other products affected by the rise in refinery output level amid strong runs particularly in India and in China. The Singapore jet/kerosene crack spread against Oman averaged \$32.03/b, down by \$19.48 m-o-m and by \$27.61 y-o-y.

The Singapore **gasoil crack spread** stepped down from the record-breaking high witnessed in the previous month reflective of stronger regional supplies. The Singapore gasoil crack spread against Oman averaged \$18.69/b, down by \$23.52 m-o-m and up by \$6.38 y-o-y.

The Singapore **fuel oil 3.5% crack spread** saw an extension of its downturn trajectory pressured by weaker fundamentals as strong high sulphur fuel oil availability in the region amid seasonally lower demand weighed on HSFO markets. Going forward, an upside potential in fuel oil markets could be expected with a possible revived focus on fuel oil for feedstock blending amid the strong crude oil price environment, as well as in power

generation for cooling requirements. In the near term, Singapore fuel oil cracks against Oman averaged minus \$30.18/b, down by \$8.55 m-o-m and lower by \$20.88 y-o-y.

**Table 6 - 1: Short-term prospects for product markets and refinery operations**

Event	Time frame	Asia	Europe	US	Observations
<b>Shifts in product trade flows in Europe</b>	Aug 22	↑ Impact on product markets	↑ Impact on product markets	↑ Impact on product markets	The loss in product supplies in the immediate near term could support: 1. Refinery intakes within and outside the region 2. Fuel oil requirements for feedstock blending 3. Upward pressure on product prices
<b>Summer season</b>	Aug 22–Sep 22	↑ Positive impact on product markets	↑ Positive impact on product markets	↑ Positive impact on product markets	Mobility is expected to remain supportive.

Source: OPEC.

**Table 6 - 2: Refinery operations in selected OECD countries**

	Refinery throughput, mb/d				Refinery utilization, %			
	May 22	Jun 22	Jul 22	Change Jul/Jun	May 22	Jun 22	Jul 22	Change Jul/Jun
<b>US</b>	<b>16.68</b>	<b>16.95</b>	<b>16.77</b>	<b>-0.19</b>	<b>92.90</b>	<b>94.50</b>	<b>93.46</b>	<b>-1.0 pp</b>
<b>Euro-14, plus UK and Norway</b>	<b>9.85</b>	<b>9.92</b>	<b>10.10</b>	<b>0.18</b>	<b>83.61</b>	<b>84.24</b>	<b>85.73</b>	<b>1.5 pp</b>
<b>France</b>	0.85	0.83	0.85	0.02	73.59	71.86	73.82	2.0 pp
<b>Germany</b>	1.78	1.86	1.89	0.02	86.86	90.76	91.93	1.2 pp
<b>Italy</b>	1.46	1.31	1.35	0.04	77.05	69.16	71.25	2.1 pp
<b>UK</b>	1.08	1.03	1.07	0.03	92.24	88.15	90.95	2.8 pp
<b>Selected Asia*</b>	<b>25.12</b>	<b>25.88</b>	<b>26.09</b>	<b>0.21</b>	<b>87.09</b>	<b>89.70</b>	<b>90.43</b>	<b>0.7 pp</b>

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

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

Table 6 - 3: Refinery crude throughput, mb/d

Refinery crude throughput	2019	2020	2021	3Q21	4Q21	1Q22	2Q22	3Q22
<b>OECD Americas</b>	<b>19.04</b>	<b>16.59</b>	<b>17.79</b>	<b>18.42</b>	<b>18.20</b>	<b>18.37</b>	<b>18.91</b>	<b>18.89</b>
of which US	16.99	14.72	15.65	16.22	16.02	16.06	16.57	16.71
<b>OECD Europe</b>	<b>12.13</b>	<b>10.65</b>	<b>10.91</b>	<b>11.35</b>	<b>11.50</b>	<b>11.07</b>	<b>11.34</b>	<b>11.70</b>
of which:								
France	1.00	0.67	0.69	0.79	0.76	0.79	0.83	0.85
Germany	1.78	1.72	1.72	1.75	1.90	1.75	1.85	1.84
Italy	1.35	1.11	1.23	1.27	1.34	1.16	1.37	1.48
UK	1.08	0.92	0.92	0.99	0.99	1.04	1.07	1.06
<b>OECD Asia Pacific</b>	<b>6.79</b>	<b>5.89</b>	<b>5.78</b>	<b>5.78</b>	<b>6.01</b>	<b>6.22</b>	<b>5.82</b>	<b>6.02</b>
of which Japan	3.02	2.48	2.49	2.51	2.69	2.80	2.69	2.81
<b>Total OECD</b>	<b>37.96</b>	<b>33.14</b>	<b>34.48</b>	<b>35.55</b>	<b>35.72</b>	<b>35.66</b>	<b>36.07</b>	<b>36.61</b>
<b>Latin America</b>	<b>3.83</b>	<b>3.12</b>	<b>3.41</b>	<b>3.44</b>	<b>3.51</b>	<b>3.29</b>	<b>3.31</b>	<b>3.40</b>
<b>Middle East</b>	<b>6.97</b>	<b>6.09</b>	<b>6.78</b>	<b>6.80</b>	<b>7.27</b>	<b>7.23</b>	<b>7.36</b>	<b>7.64</b>
<b>Africa</b>	<b>1.97</b>	<b>1.79</b>	<b>1.97</b>	<b>1.99</b>	<b>1.98</b>	<b>1.98</b>	<b>1.95</b>	<b>2.03</b>
<b>India</b>	<b>5.04</b>	<b>4.42</b>	<b>4.73</b>	<b>4.40</b>	<b>5.02</b>	<b>5.18</b>	<b>5.22</b>	<b>5.26</b>
<b>China</b>	<b>13.02</b>	<b>13.48</b>	<b>14.07</b>	<b>13.76</b>	<b>14.03</b>	<b>13.96</b>	<b>12.89</b>	<b>13.61</b>
<b>Other Asia</b>	<b>5.13</b>	<b>4.74</b>	<b>4.80</b>	<b>4.84</b>	<b>4.90</b>	<b>5.04</b>	<b>5.13</b>	<b>5.23</b>
<b>Russia</b>	<b>5.70</b>	<b>5.39</b>	<b>5.61</b>	<b>5.63</b>	<b>5.75</b>	<b>5.71</b>	<b>4.93</b>	<b>5.06</b>
<b>Other Eurasia</b>	<b>1.21</b>	<b>1.03</b>	<b>1.18</b>	<b>1.28</b>	<b>1.20</b>	<b>1.22</b>	<b>1.09</b>	<b>1.12</b>
<b>Other Europe</b>	<b>0.55</b>	<b>0.43</b>	<b>0.41</b>	<b>0.43</b>	<b>0.33</b>	<b>0.42</b>	<b>0.44</b>	<b>0.52</b>
<b>Total Non-OECD</b>	<b>43.40</b>	<b>40.49</b>	<b>42.96</b>	<b>42.57</b>	<b>44.01</b>	<b>44.04</b>	<b>42.33</b>	<b>43.86</b>
<b>Total world</b>	<b>81.36</b>	<b>73.63</b>	<b>77.43</b>	<b>78.12</b>	<b>79.72</b>	<b>79.70</b>	<b>78.39</b>	<b>80.47</b>

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.



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

	Jun 22	Jul 22	Change Jul/Jun	Annual avg. 2021	Year-to-date 2022-to-date
<b>US Gulf (Cargoes FOB)</b>					
<b>Naphtha*</b>	108.85	87.30	-21.55	70.70	98.30
<b>Premium gasoline</b> (unleaded 93)	193.06	152.01	-41.05	91.41	146.19
<b>Regular gasoline</b> (unleaded 87)	170.93	135.30	-35.63	86.72	135.18
<b>Jet/Kerosene</b>	172.15	145.91	-26.24	78.32	142.76
<b>Gasoil</b> (0.2% S)	152.53	124.54	-27.99	73.94	127.26
<b>Fuel oil</b> (3.0% S)	94.67	84.87	-9.80	59.84	87.45
<b>Rotterdam (Barges FoB)</b>					
<b>Naphtha</b>	88.76	84.65	-4.11	70.15	95.03
<b>Premium gasoline</b> (unleaded 98)	188.54	158.02	-30.52	85.89	142.53
<b>Jet/Kerosene</b>	178.57	147.64	-30.93	77.17	143.93
<b>Gasoil/Diesel</b> (10 ppm)	179.29	153.29	-26.00	78.31	143.83
<b>Fuel oil</b> (1.0% S)	100.23	89.26	-10.97	69.12	95.89
<b>Fuel oil</b> (3.5% S)	94.88	74.93	-19.95	61.38	88.89
<b>Mediterranean (Cargoes FOB)</b>					
<b>Naphtha</b>	83.67	82.14	-1.53	69.40	92.50
<b>Premium gasoline**</b>	169.74	139.48	-30.26	80.46	131.04
<b>Jet/Kerosene</b>	171.55	143.72	-27.83	75.06	139.71
<b>Diesel</b>	173.09	142.46	-30.63	77.73	139.29
<b>Fuel oil</b> (1.0% S)	107.04	95.58	-11.46	70.51	100.90
<b>Fuel oil</b> (3.5% S)	85.70	70.58	-15.12	58.98	82.58
<b>Singapore (Cargoes FOB)</b>					
<b>Naphtha</b>	85.72	82.70	-3.02	70.83	93.38
<b>Premium gasoline</b> (unleaded 95)	155.10	121.56	-33.54	80.28	127.16
<b>Regular gasoline</b> (unleaded 92)	148.86	116.35	-32.51	78.28	123.08
<b>Jet/Kerosene</b>	164.40	134.90	-29.50	75.10	130.40
<b>Gasoil/Diesel</b> (50 ppm)	176.61	144.76	-31.85	77.36	139.15
<b>Fuel oil</b> (180 cst)	168.56	136.22	-32.34	75.71	132.70
<b>Fuel oil</b> (380 cst 3.5% S)	91.26	72.69	-18.57	62.07	87.67

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

Sources: Argus and OPEC.

## Tanker Market

Dirty tanker spot freight rates in July fully recovered from the decline seen earlier in May, as trade dislocations boosted tanker tonnage demand.

VLCC rates on the Middle East-to-East route rose 26%, while flows West were up 30%. The wide Brent/WTI spread also made US crude more competitive in Asia, supporting VLCC demand.

Aframax rates on the Mediterranean-to-North West Europe route increased 38% m-o-m, while Suezmax rates from the US Gulf-to-Europe rose 23%, amid strengthening demand for longer haul flows to Europe.

Clean rates came down after gaining steadily over the past months, with declines particularly strong in the Med, as trade dislocations generated volatility.

## Spot fixtures

The latest estimates show **global spot fixtures** increased in July to average 14.9 mb/d. Fixtures rose 1.7 mb/d, or almost 13% m-o-m. Compared with the previous year, spot fixtures increased 0.2 mb/d, or about 1%.

Table 7 - 1: Spot fixtures, mb/d

Spot fixtures	May 22	Jun 22	Jul 22	Change Jul 22/Jul 21
All areas	14.76	13.20	14.89	1.69
OPEC	10.38	9.10	10.94	1.84
Middle East/East	6.08	5.01	6.60	1.59
Middle East/West	1.54	1.43	2.16	0.73
Outside Middle East	2.76	2.66	2.18	-0.48

Sources: Oil Movements and OPEC.

**OPEC spot fixtures** rose in July, averaging 10.9 mb/d. This represents an increase of 20%, or 1.8 mb/d. In comparison with the same month in 2021, they were about 0.5 mb/d, or 5%, higher.

**Middle East-to-East** fixtures rose 1.6 mb/d, or 32%, to average 6.6 mb/d. Compared with the same month last year, eastward flows were 0.4 mb/d, or 7%, higher.

Spot fixtures from the **Middle East-to-West** increased in July by around 0.7 mb/d, or 51%, over the previous month, to average 2.2 mb/d. Y-o-y, rates were 1.3 mb/d, or about two-and-a-half times higher.

In contrast, **outside the Middle East**, fixtures declined in July to average 2.2 mb/d. This represents declines of 18%, or 0.5 mb/d, m-o-m and 1.2 mb/d, or 35%, y-o-y.

## Sailings and arrivals

**OPEC sailings** jumped m-o-m by 2.7 mb/d, or over 12%, in July to average 24.9 mb/d, and were 4.1 mb/d, or about 20%, higher compared with the same month a year ago.

**Middle East sailings** increased by about 2.2 mb/d in July to average 19.3 mb/d. Y-o-y, sailings from the region rose by 3.6 mb/d, or around 23%, compared with July 2021.

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

Sailings	May 22	Jun 22	Jul 22	Change Jul 22/Jul 21
OPEC	22.65	22.21	24.94	2.73
Middle East	17.11	17.11	19.30	2.19
Arrivals				
North America	8.70	9.02	9.00	-0.02
Europe	13.48	13.71	13.85	0.14
Far East	13.88	14.00	13.93	-0.07
West Asia	8.29	8.21	7.77	-0.44

Sources: Oil Movements and OPEC.

**Crude arrivals** in July saw m-o-m declines across all regions except Europe. West Asia led losses, falling by 0.4 mb/d, or over 5%, to average 7.8 mb/d. Y-o-y, arrivals in the region were 1.3 mb/d, or about 20%, higher. Arrivals in the Far East were marginally lower m-o-m at 13.9 mb/d, while y-o-y, they were 0.4 mb/d, or 3%, higher.

In North America, arrivals were negligibly lower m-o-m, averaging 9.0 mb/d, but saw a y-o-y gain of 0.3 mb/d, or about 4%. Europe was the only region showing gains, with arrivals increasing by 140 tb/d, or 1%, to average 13.9 mb/d. This was 1.2 mb/d, or about 10%, higher than in the same month last year.

## Dirty tanker freight rates

### Very large crude carriers (VLCCs)

**VLCC** spot rates increased for the second-consecutive month in July, rising 28% on average m-o-m. The sector saw support from the wide Brent/WTI spread, which made US crude flows to Asia more competitive. Easing bunker prices also improved earnings. Y-o-y, VLCC rates were up 76% on average.

On the **Middle East-to-East** route, rates gained 26% m-o-m to average WS58 points and were 87% higher y-o-y. Rates on the **Middle East-to-West** route rose 30% m-o-m to average WS35 points. Y-o-y, rates on the route increased 59%.

**West Africa-to-East** spot rates gained 25% m-o-m to average WS60 points in July. Compared with the same month last year, rates were 76% higher.

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

VLCC	Size				Change
	1,000 DWT	May 22	Jun 22	Jul 22	Jul 22/Jun 22
Middle East/East	230-280	42	46	58	12
Middle East/West	270-285	25	27	35	8
West Africa/East	260	44	48	60	12

Sources: Argus and OPEC.

### Suezmax

**Suezmax** rates in July fully recovered from the sharp drop earlier in May, increasing 23% m-o-m. Rates were supported by ongoing trade dislocations, which boosted demand for longer-haul voyages. These include higher Russian flows to Asia and increased European imports from the Middle East and the Americas. Rates were almost three times higher than in the same month last year.

Rates on the **West Africa-to-US Gulf Coast (USGC)** route increased by 22% m-o-m in July to average WS124 points. Compared with the same month last year, rates were 170% higher.

Spot freight rates on the **USGC-to-Europe** route rose 23% over the previous month to average WS112 points. Y-o-y, rates were 203% higher.

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

Suezmax	Size				Change
	1,000 DWT	May 22	Jun 22	Jul 22	Jul 22/Jun 22
West Africa/US Gulf Coast	130-135	83	102	124	22
US Gulf Coast/ Europe	150	78	91	112	21

Sources: Argus and OPEC.

### Aframax

**Aframax** spot freight rates also recovered from earlier losses, lifted by strength in the Atlantic Basin and Mediterranean. On average, spot Aframax rates rose 27% m-o-m. Compared with the same month last year, rates were 161% higher.

Rates on the **Indonesia-to-East** route edged up 6% m-o-m to average WS183 points. Y-o-y, rates on the route were up 126%.

## Tanker Market

Spot rates on the **Caribbean-to-US East Coast (USEC)** route increased 44% m-o-m to average WS248 points. Y-o-y, rates were 214% higher.

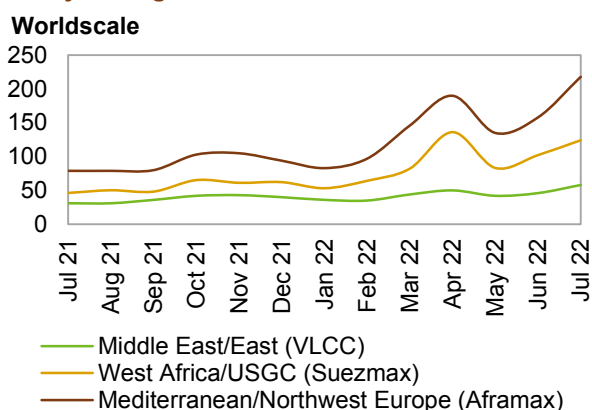
**Table 7 - 5: Dirty Aframax spot tanker freight rates, WS**

Aframax	Size 1,000 DWT				Change
		May 22	Jun 22	Jul 22	Jul 22/Jun 22
<b>Indonesia/East</b>	80-85	172	173	183	10
<b>Caribbean/US East Coast</b>	80-85	163	172	248	76
<b>Mediterranean/Mediterranean</b>	80-85	139	169	209	40
<b>Mediterranean/Northwest Europe</b>	80-85	135	158	218	60

Sources: Argus and OPEC.

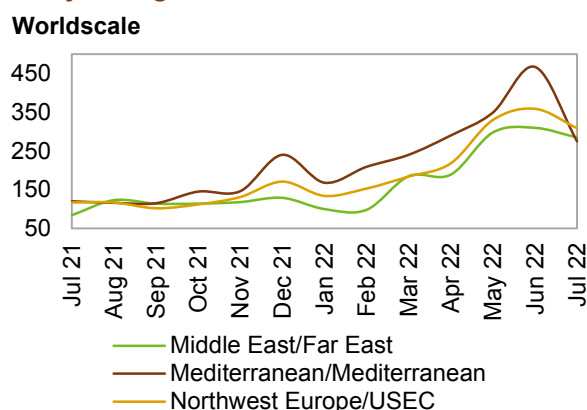
**Cross-Med** spot freight rates saw an increase in July, up 24% m-o-m, to average WS209 points. Y-o-y, rates were 135% higher. On the **Mediterranean-to-NWE** route, rates rose 38% m-o-m to average WS218 points. Compared with the same month last year, rates were around 176% higher.

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



Sources: Argus and OPEC.

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



Sources: Argus and OPEC.

## Clean tanker freight rates

**Clean spot freight rates** declined for the first time since roughly the start of this year, clipped by ample tonnage availability. On average, rates declined 23% m-o-m in July but were up 179% compared with the levels seen in the same month last year. Losses were seen on both sides of the Suez, but primarily in the Mediterranean.

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

East of Suez	Size 1,000 DWT				Change
		May 22	Jun 22	Jul 22	Jul 22/Jun 22
<b>Middle East/East</b>	30-35	298	310	285	-25
<b>Singapore/East</b>	30-35	336	414	396	-18
<b>West of Suez</b>					
<b>Northwest Europe/US East Coast</b>	33-37	330	359	309	-50
<b>Mediterranean/Mediterranean</b>	30-35	349	467	275	-192
<b>Mediterranean/Northwest Europe</b>	30-35	359	477	285	-192

Sources: Argus and OPEC.

Rates on the **Middle East-to-East** route declined 8% m-o-m in July to average WS285. Y-o-y, rates were up 239%. Freight rates on the **Singapore-to-East** route dropped by 4% m-o-m to average WS396 and were 277% higher compared with the same month last year.

In the West of Suez market, rates on the **Northwest Europe (NWE)-to-USEC** route decreased 14% m-o-m to average WS309 points. They were 164% higher y-o-y. Rates in the **Cross-Med** and **Med-to-NWE** saw declines of around 40% each to average WS275 and WS285 points, respectively. Compared with the same month last year, rates were 129% higher in the Cross-Med and up 119% on the Med-to-NWE route.

## Crude and Refined Products Trade

Preliminary data shows US crude imports reached a three-year high of 6.7 mb/d in July, amid higher flows from OPEC Member Countries and Brazil. US crude exports jumped to a record high of 3.7 mb/d based on preliminary weekly data, as the wide Brent/WTI spread stimulated a return of Asian buying. Product imports increased despite lower inflows of gasoline, while exports fell back from the high levels seen in the previous two months.

China's crude imports fell to an almost four-year low of 8.7 mb/d in June and are expected to remain at low levels as lockdown measures earlier in the year, and a spike in buying triggered by geopolitical developments in February, has left inventories at ample levels. Preliminary customs data for July shows crude imports averaging 8.8 mb/d, representing a marginal 0.9% increase over the previous month. Product imports increased amid a jump in LPG inflows, while exports were lower despite increased outflows of gasoil.

India's crude imports edged higher, averaging 4.7 mb/d in June, with Russian flows up 0.9 mb/d y-o-y according to secondary sources. India's crude imports are likely to remain close to current levels in July, with Russian inflows remaining above 1.0 mb/d and with expectations for slightly lower flows from elsewhere. Product exports remained close to the levels seen in the previous two months, with higher jet and naphtha outflows offsetting lower gasoil exports.

Japan's crude imports dropped to an 11-month low in June, averaging 2.3 mb/d, although this was still an increase y-o-y. Japan's crude imports are expected to recover with the return of refineries from maintenance in July. Product exports were supported by higher outflows of gasoil.

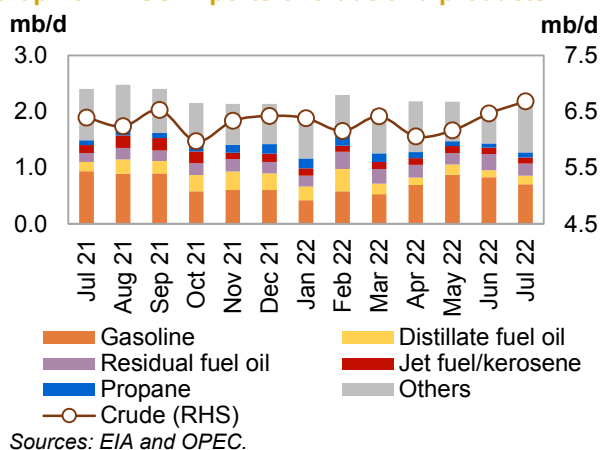
Preliminary figures show OECD Europe crude imports remaining at high levels at near or above 10 mb/d since May. Crude exports have fallen sharply, reaching 7-year lows in April, as locally produced grades remain in the region.

## US

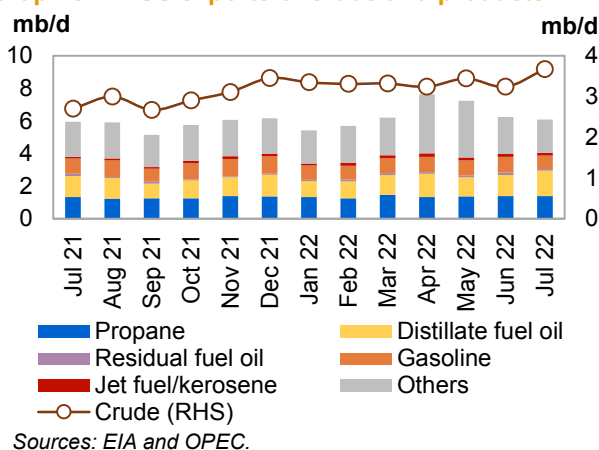
Preliminary data shows **US crude imports** reached a three-year high of 6.7 mb/d in July, amid higher flows from OPEC Member Countries and Brazil. Crude imports rose 0.2 mb/d or over 3% m-o-m. Compared with the same month in 2021, inflows rose 0.3 mb/d, or almost 5%.

**US crude exports** jumped to a record high of 3.7 mb/d based on preliminary weekly data, as the wide Brent/WTI spread stimulated Asian buying. Outflows were up 0.4 mb/d or almost 14% m-o-m. Compared to the same month last year, crude imports were almost 1 mb/d, or 36% higher.

**Graph 8 - 1: US imports of crude and products**



**Graph 8 - 2: US exports of crude and products**



The **top three suppliers of crude** to the US remained unchanged in **May**, according to the latest monthly EIA data. Canada held the top spot with a share of just under 60%, followed by Mexico with almost 13%. Saudi Arabia was third with a share of close to 7%.

The UK was the top **destination for US crude exports** in May, with a share of 13%, followed closely by the Netherlands and South Korea with 10% each.

## Crude and Refined Products Trade

Based on weekly data, **US net crude imports** averaged just under 3.0 mb/d in **July**, compared with 3.2 mb/d in June and 3.7 mb/d in the same month last year.

On the **product** side, **imports** rose 5% to average 2.1 mb/d. Distillates, propane and other products contributed to the gains. Compared with the same month last year, product imports fell 0.3 mb/d, or almost 11%.

**Product exports** fell from the high levels seen the month before, averaging 6.1 mb/d in July. Declines were seen in gasoline, residual fuel and other products, offsetting gains in distillates. Compared with July 2021, product exports were 0.1 mb/d, or about 2%, higher.

As a result, preliminary data shows **US net product exports** averaged 3.9 mb/d in July, compared with 4.2 mb/d in June and 3.5 mb/d in the same month of 2021.

Preliminary data indicates that **US net crude and product exports** averaged 0.9 mb/d in July, compared with close to 1.0 mb/d the month before and net imports of 149 tb/d in July 2021.

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

US	May 22	Jun 22	Jul 22	Change Jul 22/Jun 22
Crude oil	2.72	3.23	3.01	-0.22
Total products	-3.70	-4.20	-3.94	0.26
<b>Total crude and products</b>	<b>-0.98</b>	<b>-0.97</b>	<b>-0.93</b>	<b>0.04</b>

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

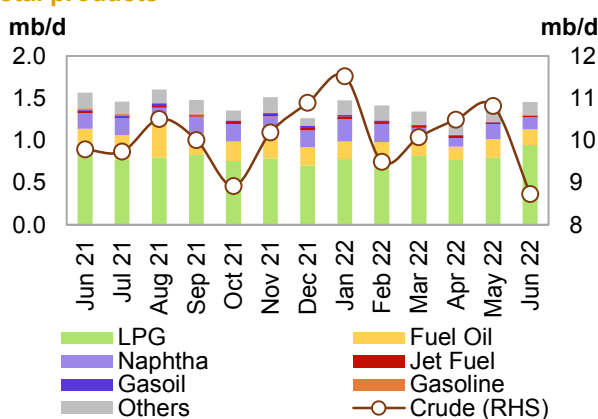
Sources: EIA and OPEC.

**Looking ahead**, US crude imports should remain supported by resilient demand for US product exports in Latin America and increasingly Europe. US crude exports are expected to remain on the upward trend, supported by trade dislocations and the wide Brent/WTI spread.

## China

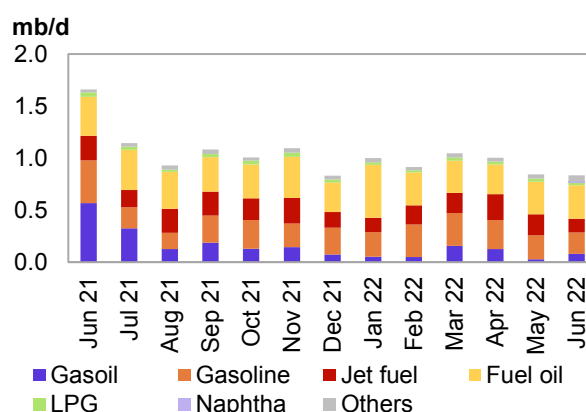
**China's crude imports** fell to an almost four-year low of 8.7 mb/d in **June**, as lockdown measures earlier in the year and a spike in buying following the outbreak in geopolitical tensions in Eastern Europe left inventories at ample levels. Compared with the same month last year, crude imports in June declined almost 11%, or by 1.1 mb/d. Preliminary customs data for July shows crude imports averaging 8.8 mb/d, representing a marginal 0.9% increase over the previous month, as stock draws continued to weigh on import demand.

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



Sources: China, Oil and Gas Petrochemicals and OPEC.

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



Sources: China, Oil and Gas Petrochemicals and OPEC.

In terms of **crude imports by source**, Russia remained the top supplier of crude to China in June, with an increased share of 20%, despite lower volumes. Saudi Arabia held second place with 14%, after registering an even sharper decline in volumes m-o-m. Iraq came in third with 9%.

**Product imports** rose by a further 8%, averaging 1.5 mb/d, amid a jump in LPG inflows that more than offset declines in other major products. Compared with the same month last year, product imports decreased by 7%, or around 0.1 mb/d.

**Product exports** slipped 8% in June to average 0.8 mb/d, amid declines in gasoline and jet fuel exports, which offset higher outflows of gasoil. Y-o-y, product outflows fell by almost 50%, or 0.8 mb/d, amid a government policy of more closely tailoring refinery output to domestic needs.

As a result, China's **net product imports** averaged 620 tb/d in June, compared with net imports of 504 tb/d the month before and net exports of 94 tb/d in the same month of 2021.

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

China	Apr 22	May 22	Jun 22	Change Jun 22/May 22
<b>Crude oil</b>	10.46	10.82	8.69	-2.13
<b>Total products</b>	0.22	0.50	0.62	0.12
<b>Total crude and products</b>	<b>10.68</b>	<b>11.32</b>	<b>9.31</b>	<b>-2.02</b>

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

Sources: China, Oil and Gas Petrochemicals and OPEC.

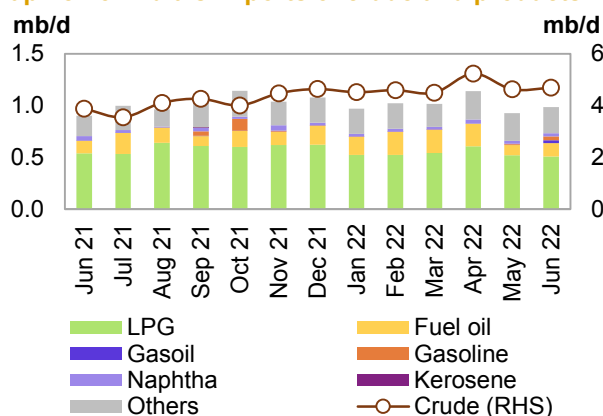
**Looking ahead**, the unwinding of high crude inventories are likely to continue to weigh on imports. Product exports could pick up in July as refiners increase gasoil exports amid high domestic inventories and a tight international market, although limited product exports quotas will likely continue to cap flows.

## India

**India's crude imports** edged higher averaging 4.7 mb/d in **June**, official data showed, with Russia flows up 0.9 mb/d y-o-y, according to secondary sources. Crude inflows were marginally higher m-o-m, but showed a stronger gain y-o-y of 21%, or 0.8 mb/d.

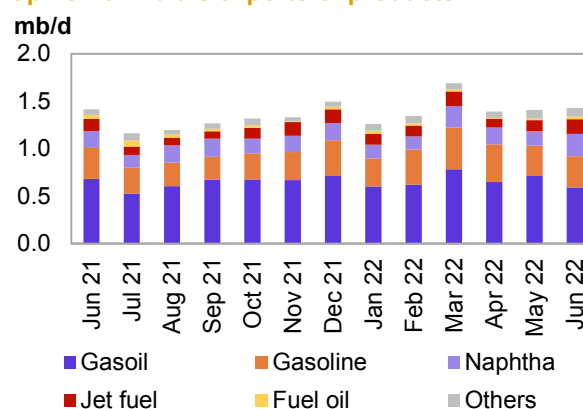
In terms of **crude imports by source**, Kpler data shows Russia moving up to be the top supplier of crude to India in June, securing a 24% share. Iraq fell to second with a share of 21%, followed by Saudi Arabia which was stable at 15%.

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



Sources: PPAC and OPEC.

**Graph 8 - 6: India's exports of products**



Sources: PPAC and OPEC.

In terms of **products, imports** in June averaged 1.0 mb/d, representing an increase of 6%, with all major categories contributing. Compared with the same month in 2021, inflows edged up 9%, or less than 0.1 mb/d.

**Product exports** edged up around 1% to remain close to 1.4 mb/d on average in June. Compared with the same month last year, product exports were negligibly higher.

As a result, **net product exports** averaged 442 tb/d in June, compared with 480 tb/d in May and 512 tb/d in the same month of 2021.

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

India	Apr 22	May 22	Jun 22	Change Jun 22/May 22
<b>Crude oil</b>	5.24	4.63	4.69	0.06
<b>Total products</b>	-0.25	-0.48	-0.44	0.04
<b>Total crude and products</b>	<b>4.99</b>	<b>4.15</b>	<b>4.24</b>	<b>0.10</b>

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.

## Crude and Refined Products Trade

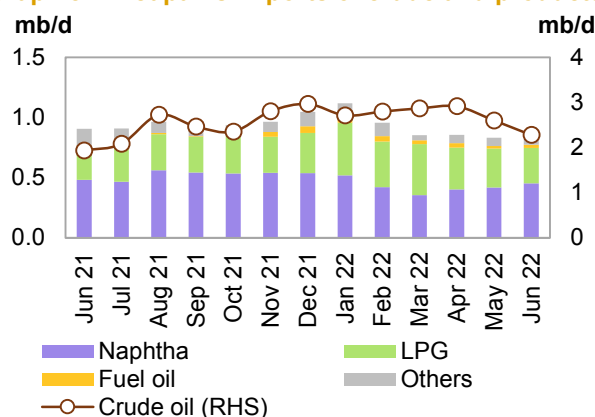
**Looking ahead**, Crude imports are likely to remain close to current levels in July, with Russian inflows remaining above 1.0 mb/d and with expectations for slightly lower flows from elsewhere. Product imports are seen moving higher in July, amid increased flows from the Middle East and Asia. Product exports are seen declining on lower flows to Asia and Africa.

## Japan

**Japan's crude imports** fell to an 11-month low, averaging 2.3 mb/d in **June**, although they still managed a y-o-y increase for the twelfth month in a row. Inflows declined by 0.3 mb/d or 13%. Compared with the same month last year, imports were almost 18%, or 0.3 mb/d, higher.

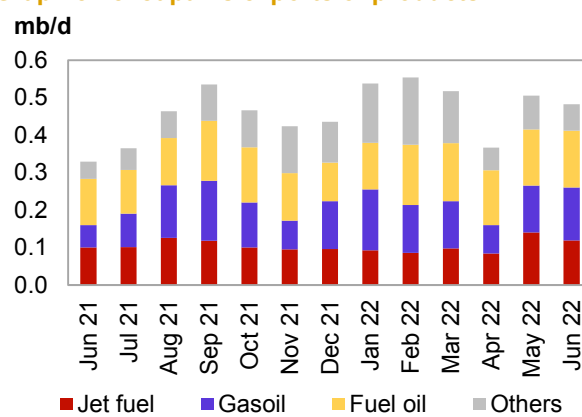
In terms of **crude imports by source**, Saudi Arabia claimed the top spot with a share of 40%. The United Arab Emirates (UAE) was second with just under 40%, followed by Kuwait with just over 8%. Flows from Russia fell to zero in June, compared with a share of almost 4% in the same month last year.

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



Sources: METI and OPEC.

**Graph 8 - 8: Japan's exports of products**



Sources: METI and OPEC.

**Product imports** slipped 1% to average 820 tb/d in June. Declines were primarily driven by LPG and gasoline, which offset gains in naphtha. Y-o-y, imports declined by almost 10%, or 87 tb/d.

**Product exports** declined by about 5% in June, averaging 482 tb/d, with jet fuel, gasoline and kerosene showing losses that outweighed outflows of gasoil and fuel oil. Product outflows were 153 tb/d, or around 46%, higher than in the same month of 2021.

As a consequence, Japan's **net product imports** averaged 337 tb/d in June. This compares to 326 tb/d the month before and 577 tb/d in June 2021.

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

Japan	Apr 22	May 22	Jun 22	Change Jun 22/May 22
Crude oil	2.91	2.60	2.28	-0.32
Total products	0.49	0.33	0.34	0.01
<b>Total crude and products</b>	<b>3.40</b>	<b>2.93</b>	<b>2.62</b>	<b>-0.31</b>

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

Sources: METI and OPEC.

**Looking ahead**, crude imports are expected to recover with the return of refineries from maintenance. Product imports are seen declining on decreased inflows of LPG, while product exports are seen higher in July, amid a tight product market in Asia.

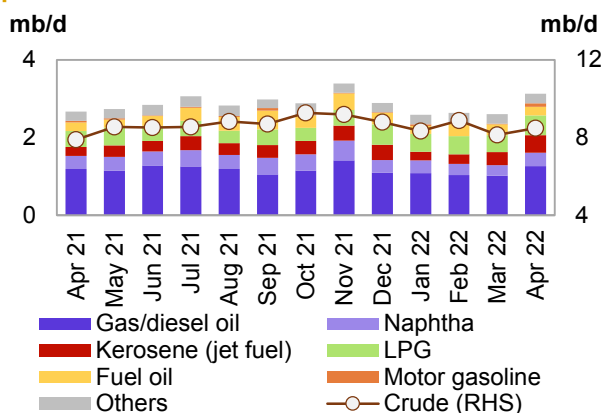


## OECD Europe

The latest official regional data shows **OECD Europe** crude imports averaged 8.4 mb/d in **April**, increasing 4% or 0.3 mb/d from the previous month. Y-o-y, crude imports rose by 0.6 mb/d, or almost 8%.

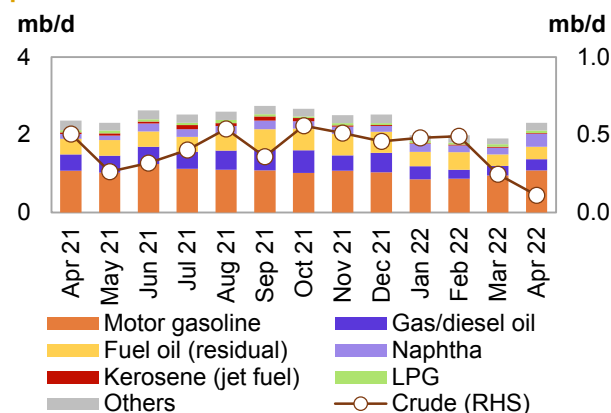
In terms of **import sources** from outside the region, Russia retained the top spot in April with around 2.4 mb/d, followed by the US, which supplied close to 1.2 mb/d, followed by Saudi Arabia with 0.8 mb/d. Crude imports from Russia rose 0.2 mb/d m-o-m, while flows from Kazakhstan were down close to 0.2 mb/d.

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



Sources: IEA and OPEC.

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



Sources: IEA and OPEC.

**Crude exports** continued to decline, averaging 111 tb/d, the lowest in over seven years, as more crude was kept in the region. Y-o-y, outflows were 0.4 mb/d, or 78% lower.

In terms of **destination**, China remained the top buyer of OECD Europe crude exports outside the region in April, representing more than half of the total outflows.

**Net crude imports** averaged 8.4 mb/d in April, compared with 7.9 mb/d in March and 7.4 mb/d in the same month last year.

On the **product** side, **imports** jumped 20% in April, averaging 3.1 mb/d, as diesel and jet fuel inflows jumped and most other major products increased too. Y-o-y, product imports were 0.5 mb/d, or 17% higher.

**Product exports** were also 20% higher, averaging 2.3 mb/d, with stronger outflows of naphtha, gasoline and diesel. Y-o-y, exports were 2%, or just 57 tb/d, lower than in the same month of 2021.

**Net product imports** averaged 818 tb/d in April, compared with net imports of 691 tb/d in March 2022 and 307 tb/d in March 2021.

Combined, **net crude and product imports** averaged 9.2 mb/d in April. This compares with 8.6 mb/d the month before, and 7.7 mb/d in April 2021.

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

OECD Europe	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
Crude oil	8.38	7.89	8.37	0.48
Total products	0.65	0.69	0.82	0.13
<b>Total crude and products</b>	<b>9.03</b>	<b>8.58</b>	<b>9.19</b>	<b>0.61</b>

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

Sources: IEA and OPEC.

**Looking ahead**, preliminary estimates based on tanker tracking data show crude imports remaining at high levels in May, while crude exports are set to remain muted. Product imports are seen falling back in May and June before picking up again in July. Product exports are anticipated to strengthen in May before trending somewhat lower.

### Eurasia

**Total crude oil exports from Russia and Central Asia** declined 0.7 mb/d, or about 10% m-o-m in **June**, to average 6.5 mb/d. The drop was driven primarily by lower flows from the CPC terminal, as well as declines at Primorsk and on the Druzhba pipeline. Compared with the same month in 2021, total crude exports from the region were 5%, or 0.3 mb/d, higher.

Crude exports through the **Transneft system** declined m-o-m in June. Outflows fell 153 tb/d, or 3%, to stand at 4.4 mb/d. Compared with the same month last year, exports were 0.6 mb/d, or 17%, higher. From the **Baltic Sea**, exports slipped 73 tb/d m-o-m, or about 5%, to average 1.5 mb/d. Exports from Ust-Luga rose 60 tb/d m-o-m, or almost 10%, to average 690 tb/d, while flows from Primorsk declined by close to 14%, or 134 tb/d, to average 854 tb/d. Shipments from the **Black Sea** port of Novorossiysk were marginally lower averaging 695 tb/d.

Shipments via the **Druzhba** pipeline declined 128 tb/d, or about 15% m-o-m, to average 704 tb/d. Pacific flows increased, with **Kozmino** shipments up 6% m-o-m, to average 863 tb/d. Exports to China via the **ESPO pipeline** were unchanged m-o-m averaging 619 tb/d in June.

In the **Lukoil system**, exports via the Varandey offshore platform in the Barents Sea averaged 136 tb/d in June, down 23% m-o-m, to average 105 tb/d. Exports from the Kaliningrad terminal rose 21%, although flows only average 4 tb/d.

On other routes, **Russia's Far East** exports declined by 41 tb/d m-o-m, or 35%, to average 76 tb/d in June. This was 73%, or 0.2 mb/d, lower than the volumes shipped in June 2021.

**Central Asian** exports averaged 209 tb/d in June, representing around a 13% decline compared with the month before, but a drop of just 1%, y-o-y.

**Black Sea** total exports from the CPC terminal have been volatile in recent months, declining 0.4 mb/d m-o-m, or almost 26%, to average 1.1 mb/d in June. This was down 21%, or 293 tb/d, compared to the same month of 2021. There were no exports via the Supsa in June. Exports via the **Baku-Tbilisi-Ceyhan (BTC) pipeline** declined 41 tb/d in June, or about 6%, to average 617 tb/d, which represents a y-o-y increase of 37%.

**Total product exports from Russia and Central Asia** rose 190 tb/d, or 8% m-o-m, to average 2.5 mb/d in June. M-o-m gains were led by naphtha, with gasoil and fuel oil also providing some support, while declines were seen in jet and VGO. Y-o-y, total product exports were 13%, or 359 tb/d, lower in June, with all categories except gasoil showing a decline.

## Commercial Stock Movements

Preliminary June data sees total OECD commercial oil stocks up m-o-m by 20.9 mb. At 2,712 mb, they were 163 mb less than the same time one year ago, 261 mb lower than the latest five-year average and 236 mb below the 2015-2019 average. Within the components, crude and product stocks rose m-o-m by 6.4 mb and 14.5 mb, respectively.

At 1,330 mb, OECD crude stocks were 54 mb lower than the same time one year ago, 125 mb lower than the latest five-year average and 135 mb below the 2015-2019 average. OECD product stocks stood at 1,381 mb, representing a deficit of 109 mb with the same time one year ago, 136 mb lower than the latest five-year average and 100 mb below the 2015-2019 average.

In terms of days of forward cover, OECD commercial stocks rose m-o-m by 0.1 days in June to stand at 58.9 days. This is 3.7 days below June 2021 levels, 5.3 days less than the latest five-year average and 2.9 days lower than the 2015-2019 average.

Preliminary data for July show that total US commercial oil stocks rose by 23.2 mb m-o-m to stand at 1,209 mb. This is 60.0 mb lower than the same month in 2021 and 103.3 mb below the latest five-year average. Crude and product stocks rose by 2.8 mb and 20.4 mb m-o-m, respectively.

### OECD

Preliminary June data sees **total OECD commercial oil stocks** up m-o-m by 20.9 mb. At 2,712 mb, they were 163 mb less than the same time one year ago, 261 mb lower than the latest five-year average and 236 mb below the 2015-2019 average.

**Within the components**, crude and product stocks rose m-o-m by 6.4 mb and 14.5 mb, respectively. Total commercial oil stocks in June rose in OECD Americas, while they declined in OECD Europe, and OECD Asia-Pacific

OECD commercial **crude stocks** stood at 1,330 mb in June. This is 54 mb lower than the same time a year ago and 125 mb below the latest five-year average. Compared with the previous month, OECD Asia Pacific saw a stock draw of 4.1 mb, OECD Americas stocks rose by 9.5 mb and stocks in OECD Europe increased by 0.9 mb.

**Total product inventories** stood at 1,381 mb in June. This is 109 mb less than the same time a year ago, and 136 mb lower than the latest five-year average. Product stocks in OECD Americas rose by 17.3 mb, while they fell m-o-m by 0.7 mb and 2.1 mb in OECD Asia Pacific and OECD Europe, respectively.

**Table 9 - 1: OECD's commercial stocks, mb**

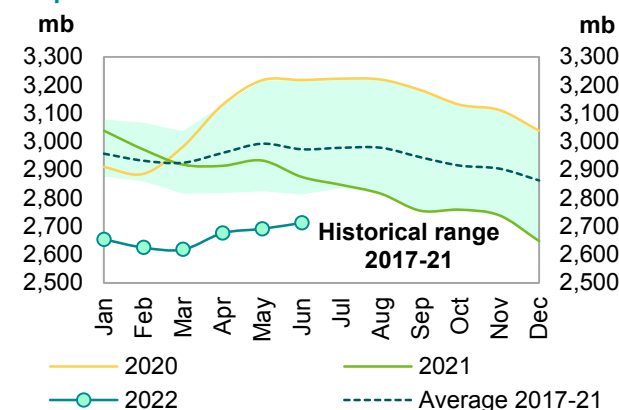
OECD stocks	Jun 21	Apr 22	May 22	Jun 22	Change Jun 22/May 22
Crude oil	1,384	1,316	1,324	1,330	6.4
Products	1,491	1,360	1,367	1,381	14.5
<b>Total</b>	<b>2,875</b>	<b>2,676</b>	<b>2,691</b>	<b>2,712</b>	<b>20.9</b>
<b>Days of forward cover</b>	<b>62.7</b>	<b>59.1</b>	<b>58.8</b>	<b>58.9</b>	<b>0.1</b>

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

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

In terms of **days of forward cover**, OECD commercial stocks rose by 0.1 days m-o-m in June to stand at 58.9 days. This is 3.7 days below June 2021 levels, 5.3 days less than the latest five-year average and 2.9 days lower than the 2015-2019 average. All three OECD regions were below the latest five-year average: the Americas by 5.1 days at 58.6 days; Asia Pacific by 6.4 days at 46.5 days; and Europe by 5.4 days at 65.6 days.

**Graph 9 - 1: OECD commercial oil stocks**



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

## OECD Americas

**OECD Americas total commercial stocks** rose by 26.8 mb m-o-m in June to settle at 1,460 mb. This is 83 mb less than the same month in 2021 and 118 mb lower than the latest five-year average.

Commercial **crude oil stocks** in OECD Americas rose m-o-m by 9.5 mb in June to stand at 745 mb, which is 33 mb lower than in June 2021 and 48 mb less than the latest five-year average. The monthly build in crude oil stocks can be attributed to additional oil released from the strategic petroleum reserves (SPR).

**Total product stocks** in OECD Americas also rose m-o-m by 17.3 mb in June to stand at 715 mb. This was 50 mb lower than in the same month in 2021 and 70 mb below the latest five-year average. Lower total consumption in the region was behind the stock build.

## OECD Europe

**OECD Europe total commercial stocks** fell m-o-m by 1.2 mb in June to settle at 926 mb. This is 48 mb less than the same month in 2021 and 77 mb below the latest five-year average.

OECD Europe's **commercial crude stocks** rose in June by 0.9 mb m-o-m to end the month at 418 mb, which is 1.4 mb lower than one year ago and 24 mb below the latest five-year average. The build in crude oil inventories came despite slightly higher m-o-m refinery throughputs in the EU-14, plus the UK and Norway, which increased by 70 tb/d to stand at 9.9 mb/d.

In contrast, Europe's **product stocks** fell m-o-m by 2.1 mb to end June at 508 mb. This is 47 mb lower than a year ago and 52 mb below the latest five-year average.

## OECD Asia Pacific

**OECD Asia Pacific's total commercial oil stocks** fell m-o-m by 4.8 mb in June to stand at 326 mb. This is 31 mb lower than a year ago and 67 mb below the latest five-year average.

OECD Asia Pacific's **crude inventories** fell by 4.1 mb m-o-m to end June at 168 mb, which is 19 mb lower than one year ago and 53 mb below the latest five-year average.

OECD Asia Pacific's **total product inventories** also fell m-o-m by 0.7 mb to end June at 158 mb. This is 12 mb lower than the same time a year ago and 14 mb below the latest five-year average.

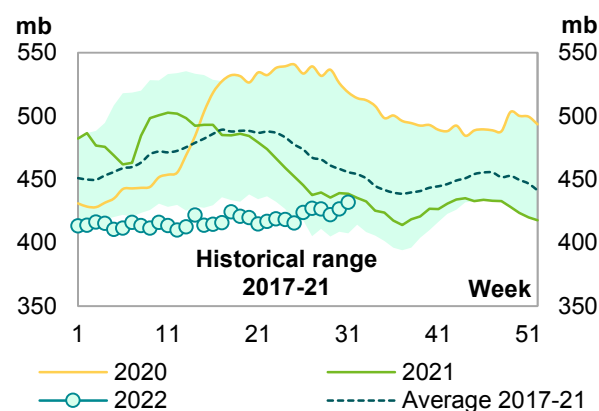
## US

Preliminary data for July showed that **total US commercial oil stocks** rose by 23.2 mb m-o-m to stand at 1,209 mb. This is 60.0 mb, or 4.7%, lower than the same month in 2021 and 103.3 mb, or 7.9%, below the latest five-year average. Crude and product stocks rose by 2.8 mb and 20.4 mb, m-o-m, respectively.

US **commercial crude stocks** in July stood at 427 mb. This is 12.4 mb, or 2.8%, lower than the same month of the previous year, and 32.2 mb, or 7.0%, below the latest five-year average. The monthly build in crude oil stocks can be attributed to lower crude runs, as well as additional barrels released from SPR.

**Total product stocks** also rose in July to stand at 782.4 mb. This is 47.6 mb, or 5.7%, below July 2021 levels, and 71.2 mb, or 8.3%, lower than the latest five-year average. The stock build was mainly driven by lower product consumption.

**Graph 9 - 2: US weekly commercial crude oil inventories**



Sources: EIA and OPEC.

**Gasoline stocks** in July rose m-o-m by 6.2 mb to settle at 225.3 mb. This is 5.5 mb, or 2.4% lower than in the same month of 2021, and 11.4 mb, or 4.8%, lower than the latest five-year average. The monthly stock build came mainly on the back of lower gasoline consumption.

**Jet fuel stocks** also rose m-o-m by 1.7 mb, ending July at 41.6 mb. This is 2.2 mb, or 5.0%, lower than the same month of 2021, and 0.4 mb, or 0.8%, below the latest five-year average.

In contrast, **distillate stocks** fell m-o-m in July by 1.8 mb to stand at 109.3 mb. This is 32.7 mb, or 23.0%, lower than the same month of the previous year, and 38.1 mb, or 25.9%, below the latest five-year average.

**Residual fuel oil stocks** also fell by 0.3 mb m-o-m in July. At 28.2 mb, this was 0.9 mb, or 3.2%, lower than a year earlier, and 3.1 mb, or 9.8%, below the latest five-year average.

**Table 9 - 2: US commercial petroleum stocks, mb**

US stocks					Change
	Jul 21	May 22	Jun 22	Jul 22	Jul 22/Jul 21
Crude oil	438.9	414.3	423.8	426.6	2.8
Gasoline	230.8	220.7	219.1	225.3	6.2
Distillate fuel	142.0	109.5	111.1	109.3	-1.8
Residual fuel oil	29.1	29.2	28.4	28.2	-0.3
Jet fuel	43.8	41.4	39.9	41.6	1.7
Total products	830.0	758.2	762.0	782.4	20.4
Total	1,268.9	1,172.5	1,185.8	1,208.9	23.2
SPR	621.3	523.1	492.0	469.9	-22.2

Sources: EIA and OPEC.

## Japan

In Japan, **total commercial oil stocks** in June fell m-o-m by 4.8 mb to settle at 113.1 mb. This is 20.1 mb, or 15.1%, lower than the same month in 2021 and 24.7 mb, or 17.9%, below the latest five-year average. Crude and product stocks fell by 4.1 mb and 0.7 mb, respectively.

Japanese **commercial crude oil stocks** declined in June to stand at 59.8 mb. This is 10.8 mb, or 15.3% lower than the same month of the previous year, and 19.1 mb, or 24.2%, lower than the latest five-year average. The drop came on the back of lower crude imports, along with higher crude runs.

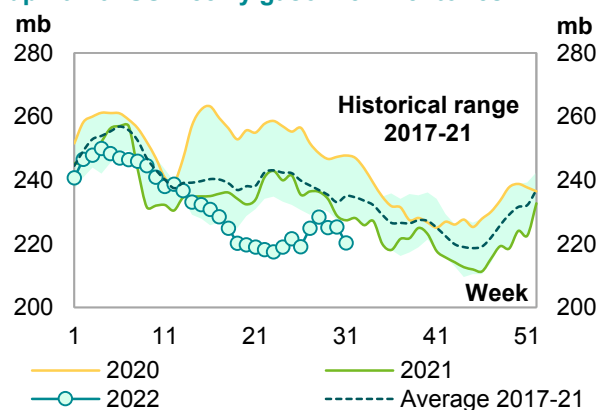
Japan's **total product inventories** also fell m-o-m by 0.7 mb to end June at 53.3 mb. This is 9.3 mb, or 14.9%, lower than the same month in 2021 and 5.6 mb, or 9.5%, below the latest five-year average.

**Gasoline stocks** fell by 0.4 mb m-o-m to stand at 10.0 mb in June. This was 4.4 mb, or 30.8% lower than a year earlier, and 1.4 mb, or 12.3%, lower than the latest five-year average. Lower gasoline production, along with lower gasoline imports, contributed to the decline in gasoline stocks.

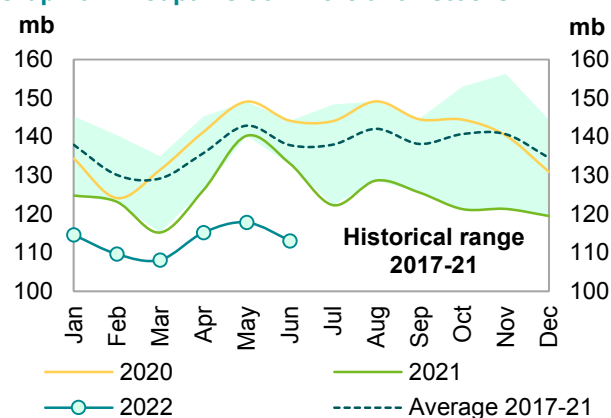
**Total residual fuel oil stocks** also fell m-o-m by 0.4 mb to end June at 11.3 mb. This is 0.4 mb, or 3.7%, lower than in the same month of the previous year, and 1.3 mb, or 10.4%, below the latest five-year average. Within the components, fuel oil A and fuel oil B.C stocks fell by 6.0% and 1.4%, m-o-m, respectively.

In contrast, **distillate stocks** rose m-o-m by 0.3 mb to end June at 22.3 mb. This is 4.8 mb, or 17.6%, lower than the same month in 2021, and 3.2 mb, or 12.5%, below the latest five-year average. Within distillate

**Graph 9 - 3: US weekly gasoline inventories**



**Graph 9 - 4: Japan's commercial oil stocks**



## Commercial Stock Movements

components, jet fuel and kerosene stocks went up by 1.4% and 5.7%, respectively, while gasoil stocks fell by 2.8%.

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

Japan's stocks	Jun 21	Apr 22	May 22	Jun 22	Change Jun 22/May 22
<b>Crude oil</b>	<b>70.6</b>	<b>64.8</b>	<b>63.9</b>	<b>59.8</b>	<b>-4.1</b>
Gasoline	14.4	10.4	10.4	10.0	-0.4
Naphtha	9.3	8.8	9.8	9.6	-0.2
Middle distillates	27.1	20.3	22.0	22.3	0.3
Residual fuel oil	11.8	11.0	11.7	11.3	-0.4
<b>Total products</b>	<b>62.6</b>	<b>50.4</b>	<b>54.0</b>	<b>53.3</b>	<b>-0.7</b>
<b>Total**</b>	<b>133.2</b>	<b>115.2</b>	<b>117.9</b>	<b>113.1</b>	<b>-4.8</b>

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 European commercial oil stocks** fell m-o-m by 1.2 mb to stand at 1,003.5 mb. At this level, they were 101.7 mb, or 9.2%, below the same month a year earlier, and 124.3 mb, or 11.0%, lower than the latest five-year average. Crude stocks rose by 0.9 mb, while product stocks fell by 2.1 mb.

European **crude inventories** rose in June to stand at 429.5 mb. This is 36.3 mb, or 7.8%, lower than the same month in 2021, and 61.6 mb, or 12.5%, below the latest five-year average. The build in crude oil inventories came despite slightly higher m-o-m refinery throughput in the EU-14, plus the UK and Norway, which increased by 70 tb/d to stand at 9.9 mb/d.

In contrast, **total European product stocks** fell m-o-m by 2.1 mb to end June at 574.1 mb. This is 65.4 mb, or 10.2%, lower than the same month of the previous year, and 62.7 mb, or 9.8%, below the latest five-year average.

**Gasoline stocks** fell m-o-m by 0.6 mb in June to stand at 110.2 mb. At this level, they were 2.6 mb, or 2.4%, higher than the same time a year earlier, but 2.2 mb/d, or 2.0%, less than the latest five-year average.

**Residual fuel stocks** also fell m-o-m by 2.1 mb in June to stand at 60.8 mb. This is 3.1 mb, or 4.8%, lower than the same month in 2021, and 5.8 mb, or 8.7%, below the latest five-year average.

**Naphtha stocks** fell by 0.2 mb in June, ending the month at 29.4 mb. This is 1.4 mb, or 4.9% higher than June 2021 levels, and 0.6 mb, or 2.2%, higher than the latest five-year average.

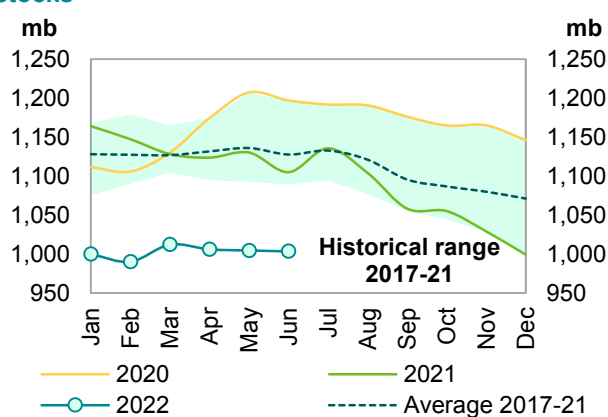
In contrast, **distillate stocks** rose m-o-m by 0.8 mb in June to stand at 373.7 mb. This is 66.3 mb, or 15.1%, below the same month in 2021, and 55.3 mb, or 12.9%, less than the latest five-year average.

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

EU stocks	Jun 21	Apr 22	May 22	Jun 22	Change Jun 22/May 22
<b>Crude oil</b>	<b>465.8</b>	<b>429.8</b>	<b>428.5</b>	<b>429.5</b>	<b>0.9</b>
Gasoline	107.5	112.0	110.8	110.2	-0.6
Naphtha	28.0	27.3	29.6	29.4	-0.2
Middle distillates	440.1	376.5	373.0	373.7	0.8
Fuel oils	63.8	60.6	62.9	60.8	-2.1
<b>Total products</b>	<b>639.4</b>	<b>576.3</b>	<b>576.2</b>	<b>574.1</b>	<b>-2.1</b>
<b>Total</b>	<b>1,105.2</b>	<b>1,006.1</b>	<b>1,004.7</b>	<b>1,003.5</b>	<b>-1.2</b>

Sources: Argus, Euroilstock and OPEC.

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



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 1.3 mb to 44.3 mb. This is 6.1 mb, or 12.2%, lower than the same month in 2021.

**Light distillate stocks** rose m-o-m by 0.2 mb in June to stand at 15.5 mb. This is 2.7 mb, or 21.5%, higher than the same month of the previous year.

**Middle distillate stocks** also rose m-o-m by 0.9 mb in June to stand at 7.9 mb. This is 5.9 mb, or 42.7%, lower than a year earlier.

**Residual fuel oil stocks** likewise rose m-o-m by 0.2 mb, ending June at 20.9 mb. This is 3.0 mb, or 12.6%, lower than in June 2021.

### ARA

**Total product stocks in ARA** rose m-o-m in June by 2.1 mb, reversing the stock draw of the last two months. At 39.3 mb, they were 7.2 mb, or 15.5%, lower than the same month in 2021.

**Gasoline stocks** in June fell by 0.3 mb m-o-m to stand at 10.3 mb, which is 1.6 mb, or 18.0%, higher than the same month of the previous year.

In contrast, **gasoil stocks** rose by 0.1 mb m-o-m, ending June at 11.3 mb. This is 6.3 mb, or 35.9%, lower than levels seen in May 2021.

**Fuel oil stocks** also rose by 1.1 mb m-o-m in June to stand at 8.0 mb, which is 1.4 mb, or 14.6%, lower than in June 2021.

Meanwhile, **jet oil stocks** remained unchanged m-o-m at 6.3 mb. This is 2.3 mb, or 27.0%, lower than levels seen in June 2021.

### Fujairah

During the week ending 1 August 2022, **total oil product stocks in Fujairah** rose w-o-w by 1.01 mb to stand at 23.39 mb, according to data from Fed Com and S&P Global Platts. At this level, total oil stocks were 4.46 mb higher than the same time a year ago.

**Light distillate stocks** rose by 1.16 mb w-o-w to stand at 7.60 mb in the week to 1 August 2022, which is 2.12 mb higher than the same period a year ago. **Middle distillate stocks** also rose by 0.19 mb to stand at 3.31 mb, which is 0.17 mb higher than a year ago. In contrast, **heavy distillate stocks** fell w-o-w by 0.33 mb to stand at 12.48 mb, which is 2.16 mb higher than the same time last year.

## Balance of Supply and Demand

Demand for OPEC crude in 2022 was revised down by 0.3 mb/d from the previous MOMR to stand at 28.8 mb/d. This is around 0.9 mb/d higher than in 2021. According to secondary sources, OPEC crude production averaged 28.4 mb/d in 1Q22, which is 0.3 mb/d lower than the demand for OPEC crude. In 2Q22, OPEC crude production averaged 28.6 mb/d, in line with demand for OPEC crude.

Demand for OPEC crude in 2023 was revised down by 0.3 mb/d from the previous MOMR to stand at 29.8 mb/d. This is around 0.9 mb/d higher than in 2022.

### Balance of supply and demand in 2022

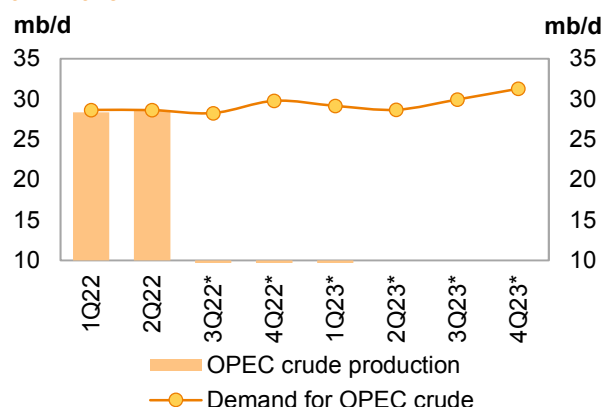
**Demand for OPEC crude in 2022** was revised down by 0.3 mb/d from the previous MOMR to stand at 28.8 mb/d. This is around 0.9 mb/d higher than in 2021.

Compared with the previous assessment, 2Q22 was revised up by 0.6 mb/d, while 3Q22 and 4Q22 were revised down by 1.2 mb/d and 0.7 mb/d, respectively. Meanwhile 1Q22 remained unchanged compared with the previous month.

Compared with the same quarters in 2021, demand for OPEC crude in 1Q22 and 2Q22 is estimated to be higher by 2.5 mb/d and 1.7 mb/d, respectively, while both 3Q22 and 4Q22 are forecast to be lower by 0.4 mb/d and 0.3 mb/d, respectively.

According to secondary sources, OPEC crude production averaged 28.4 mb/d in 1Q22, which is 0.3 mb/d lower than the demand for OPEC crude. In 2Q22, OPEC crude production averaged 28.6 mb/d, in line with demand for OPEC crude.

**Graph 10 - 1: Balance of supply and demand, 2022–2023\***



Note: \* 3Q22-4Q23 = Forecast. Source: OPEC.

**Table 10 - 1: Supply/demand balance for 2022\*, mb/d**

	2021	1Q22	2Q22	3Q22	4Q22	2022	Change 2022/21
<b>(a) World oil demand</b>	<b>96.92</b>	<b>99.36</b>	<b>98.56</b>	<b>99.93</b>	<b>102.22</b>	<b>100.03</b>	<b>3.10</b>
Non-OPEC liquids production	63.65	65.37	64.55	66.26	67.00	65.80	2.14
OPEC NGL and non-conventionals	5.28	5.35	5.38	5.41	5.43	5.39	0.11
<b>(b) Total non-OPEC liquids production and OPEC NGLs</b>	<b>68.94</b>	<b>70.71</b>	<b>69.93</b>	<b>71.66</b>	<b>72.43</b>	<b>71.19</b>	<b>2.25</b>
<b>Difference (a-b)</b>	<b>27.98</b>	<b>28.65</b>	<b>28.63</b>	<b>28.27</b>	<b>29.79</b>	<b>28.84</b>	<b>0.85</b>
OPEC crude oil production	26.34	28.35	28.58				
<b>Balance</b>	<b>-1.64</b>	<b>-0.30</b>	<b>-0.05</b>				

Note: \* 2022 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.



## Balance of supply and demand in 2023

**Demand for OPEC crude in 2023** was revised down by 0.3 mb/d from the previous MOMR to stand at 29.8 mb/d. This is around 0.9 mb/d higher than in 2022.

Compared with the previous assessment, demand for OPEC crude in 1Q23 and 2Q23 was revised up by 0.1 mb/d and 0.2 mb/d respectively, while 3Q22 and 4Q22 were revised down by 0.9 mb/d and 0.7 mb/d, respectively

Compared with the same quarters in 2022, demand for OPEC crude in 1Q23, 3Q23 and 4Q23 is forecast to be 0.5 mb/d, 1.7 mb/d and 1.5 mb/d higher, respectively, while 2Q23 is expected to be at the same level as 2Q22.

**Table 10 - 2: Supply/demand balance for 2023\*, mb/d**

	2022	1Q23	2Q23	3Q23	4Q23	2023	Change 2023/22
<b>(a) World oil demand</b>	<b>100.03</b>	<b>101.75</b>	<b>101.34</b>	<b>102.92</b>	<b>104.85</b>	<b>102.72</b>	<b>2.70</b>
Non-OPEC liquids production	65.80	67.16	67.20	67.54	68.13	67.51	1.71
OPEC NGL and non-conventionals	5.39	5.44	5.47	5.43	5.43	5.44	0.05
<b>(b) Total non-OPEC liquids production and OPEC NGLs</b>	<b>71.19</b>	<b>72.60</b>	<b>72.67</b>	<b>72.97</b>	<b>73.55</b>	<b>72.95</b>	<b>1.76</b>
<b>Difference (a-b)</b>	<b>28.84</b>	<b>29.16</b>	<b>28.67</b>	<b>29.95</b>	<b>31.29</b>	<b>29.78</b>	<b>0.94</b>

Note: \* 2022-2023 = 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	2019	2020	2021	1Q22	2Q22	3Q22	4Q22	2022	1Q23	2Q23	3Q23	4Q23	2023
<b>World demand</b>													
Americas	25.53	22.56	24.28	24.88	24.99	25.31	25.45	25.16	25.25	25.47	25.86	25.96	25.64
of which US	20.58	18.35	19.93	20.38	20.37	20.74	20.91	20.60	20.42	20.56	20.99	21.06	20.76
Europe	14.31	12.43	13.08	13.09	13.31	14.16	14.18	13.69	13.10	13.35	14.33	14.29	13.77
Asia Pacific	7.93	7.14	7.41	7.89	7.12	7.23	7.93	7.54	7.92	7.18	7.27	7.94	7.58
<b>Total OECD</b>	<b>47.78</b>	<b>42.13</b>	<b>44.77</b>	<b>45.86</b>	<b>45.42</b>	<b>46.70</b>	<b>47.57</b>	<b>46.39</b>	<b>46.27</b>	<b>46.00</b>	<b>47.46</b>	<b>48.20</b>	<b>46.99</b>
China	13.71	13.86	14.94	14.67	14.81	15.25	15.75	15.12	15.31	15.83	15.97	16.31	15.86
India	4.99	4.51	4.77	5.18	5.16	4.91	5.32	5.14	5.38	5.41	5.17	5.56	5.38
Other Asia	9.06	8.13	8.63	9.09	9.39	8.73	8.90	9.02	9.48	9.72	9.09	9.25	9.38
Latin America	6.59	5.90	6.23	6.32	6.31	6.55	6.40	6.40	6.48	6.44	6.71	6.54	6.54
Middle East	8.20	7.45	7.79	8.06	8.02	8.38	8.17	8.16	8.43	8.30	8.71	8.46	8.47
Africa	4.34	4.05	4.22	4.51	4.19	4.22	4.53	4.36	4.70	4.38	4.41	4.72	4.55
Russia	3.57	3.39	3.61	3.67	3.35	3.49	3.59	3.52	3.68	3.37	3.66	3.77	3.62
Other Eurasia	1.19	1.07	1.21	1.22	1.15	0.98	1.21	1.14	1.22	1.15	0.99	1.22	1.15
Other Europe	0.76	0.70	0.75	0.79	0.75	0.73	0.80	0.77	0.80	0.76	0.75	0.82	0.78
<b>Total Non-OECD</b>	<b>52.42</b>	<b>49.06</b>	<b>52.15</b>	<b>53.50</b>	<b>53.14</b>	<b>53.23</b>	<b>54.66</b>	<b>53.63</b>	<b>55.48</b>	<b>55.35</b>	<b>55.46</b>	<b>56.65</b>	<b>55.74</b>
<b>(a) Total world demand</b>	<b>100.20</b>	<b>91.19</b>	<b>96.92</b>	<b>99.36</b>	<b>98.56</b>	<b>99.93</b>	<b>102.22</b>	<b>100.03</b>	<b>101.75</b>	<b>101.34</b>	<b>102.92</b>	<b>104.85</b>	<b>102.72</b>
<b>Y-o-y change</b>	<b>1.00</b>	<b>-9.01</b>	<b>5.74</b>	<b>5.32</b>	<b>2.95</b>	<b>2.27</b>	<b>1.91</b>	<b>3.10</b>	<b>2.39</b>	<b>2.79</b>	<b>2.99</b>	<b>2.62</b>	<b>2.70</b>
<b>Non-OPEC liquids production</b>													
Americas	25.82	24.75	25.22	25.86	26.30	26.87	27.31	26.59	27.58	27.68	28.05	28.41	27.93
of which US	18.47	17.64	17.82	18.27	18.88	19.19	19.52	18.97	19.78	20.08	20.28	20.51	20.17
Europe	3.70	3.89	3.76	3.73	3.44	3.76	4.00	3.73	4.06	3.98	3.89	3.99	3.98
Asia Pacific	0.52	0.52	0.51	0.49	0.52	0.55	0.54	0.53	0.54	0.50	0.53	0.49	0.51
<b>Total OECD</b>	<b>30.04</b>	<b>29.16</b>	<b>29.49</b>	<b>30.08</b>	<b>30.26</b>	<b>31.18</b>	<b>31.85</b>	<b>30.85</b>	<b>32.18</b>	<b>32.16</b>	<b>32.47</b>	<b>32.89</b>	<b>32.43</b>
China	4.05	4.15	4.31	4.49	4.49	4.42	4.43	4.46	4.51	4.50	4.47	4.47	4.49
India	0.82	0.78	0.77	0.77	0.77	0.80	0.82	0.79	0.82	0.80	0.79	0.78	0.80
Other Asia	2.72	2.51	2.41	2.37	2.32	2.36	2.35	2.35	2.35	2.31	2.28	2.26	2.30
Latin America	6.08	6.03	5.95	6.14	6.13	6.30	6.43	6.25	6.40	6.61	6.69	6.76	6.61
Middle East	3.19	3.19	3.24	3.29	3.33	3.38	3.38	3.34	3.37	3.40	3.41	3.40	3.39
Africa	1.51	1.41	1.35	1.33	1.31	1.33	1.32	1.32	1.33	1.35	1.36	1.38	1.36
Russia	11.61	10.59	10.80	11.33	10.62	10.90	10.70	10.88	10.49	10.48	10.54	10.57	10.52
Other Eurasia	3.07	2.92	2.93	3.06	2.81	3.09	3.22	3.05	3.14	3.01	2.96	3.04	3.04
Other Europe	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.11	0.10	0.10	0.10	0.10	0.10
<b>Total Non-OECD</b>	<b>33.18</b>	<b>31.71</b>	<b>31.87</b>	<b>32.89</b>	<b>31.89</b>	<b>32.68</b>	<b>32.75</b>	<b>32.55</b>	<b>32.51</b>	<b>32.56</b>	<b>32.60</b>	<b>32.77</b>	<b>32.61</b>
Total Non-OPEC production	63.23	60.87	61.37	62.97	62.15	63.86	64.60	63.40	64.69	64.73	65.07	65.66	65.04
Processing gains	2.37	2.16	2.29	2.40	2.40	2.40	2.40	2.40	2.47	2.47	2.47	2.47	2.47
<b>Total Non-OPEC liquids production</b>	<b>65.60</b>	<b>63.03</b>	<b>63.65</b>	<b>65.37</b>	<b>64.55</b>	<b>66.26</b>	<b>67.00</b>	<b>65.80</b>	<b>67.16</b>	<b>67.20</b>	<b>67.54</b>	<b>68.13</b>	<b>67.51</b>
OPEC NGL + non-conventional oils	5.21	5.17	5.28	5.35	5.38	5.41	5.43	5.39	5.44	5.47	5.43	5.43	5.44
<b>(b) Total non-OPEC liquids production and OPEC NGLs</b>	<b>70.81</b>	<b>68.19</b>	<b>68.94</b>	<b>70.71</b>	<b>69.93</b>	<b>71.66</b>	<b>72.43</b>	<b>71.19</b>	<b>72.60</b>	<b>72.67</b>	<b>72.97</b>	<b>73.55</b>	<b>72.95</b>
<b>Y-o-y change</b>	<b>2.11</b>	<b>-2.62</b>	<b>0.74</b>	<b>2.78</b>	<b>1.30</b>	<b>2.71</b>	<b>2.22</b>	<b>2.25</b>	<b>1.88</b>	<b>2.74</b>	<b>1.31</b>	<b>1.12</b>	<b>1.76</b>
<b>OPEC crude oil production (secondary sources)</b>	29.36	25.71	26.34	28.35	28.58								
<b>Total liquids production</b>	100.18	93.91	95.28	99.07	98.51								
<b>Balance (stock change and miscellaneous)</b>	-0.02	2.72	-1.64	-0.30	-0.05								
<b>OECD closing stock levels, mb</b>													
Commercial	2,894	3,038	2,648	2,618	2,712								
SPR	1,535	1,541	1,484	1,442	1,348								
<b>Total</b>	<b>4,429</b>	<b>4,579</b>	<b>4,131</b>	<b>4,060</b>	<b>4,060</b>								
<b>Oil-on-water</b>	1,033	1,148	1,202	1,225	1,292								
<b>Days of forward consumption in OECD, days</b>													
Commercial onland stocks	69	68	57	58	58								
SPR	36	34	32	32	29								
<b>Total</b>	<b>105</b>	<b>102</b>	<b>89</b>	<b>89</b>	<b>87</b>								
<b>Memo items</b>													
<b>(a) - (b)</b>	<b>29.39</b>	<b>22.99</b>	<b>27.98</b>	<b>28.65</b>	<b>28.63</b>	<b>28.27</b>	<b>29.79</b>	<b>28.84</b>	<b>29.16</b>	<b>28.67</b>	<b>29.95</b>	<b>31.29</b>	<b>29.78</b>

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

Source: OPEC.

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

World oil demand and supply balance	2019	2020	2021	1Q22	2Q22	3Q22	4Q22	2022	1Q23	2Q23	3Q23	4Q23	2023
<b>World demand</b>													
Americas	-	-	-	0.05	-	-0.18	-0.31	-0.11	0.05	-	-0.18	-0.31	-0.11
of which US	-	-	-	-	-0.20	-0.25	-0.31	-0.19	-	-0.20	-0.25	-0.31	-0.19
Europe	-	-	-	-	-	-0.13	0.03	-0.02	-	-	-0.13	0.03	-0.02
Asia Pacific	-	-	-	-0.02	-0.07	-0.02	-	-0.03	-0.02	-0.07	-0.02	-	-0.03
<b>Total OECD</b>	-	-	-	<b>0.03</b>	<b>-0.07</b>	<b>-0.33</b>	<b>-0.28</b>	<b>-0.16</b>	<b>0.03</b>	<b>-0.07</b>	<b>-0.33</b>	<b>-0.28</b>	<b>-0.16</b>
China	-	-	-	-	-0.15	-0.17	-0.22	-0.14	-	-0.15	-0.17	-0.22	-0.14
India	-	-	-	-	0.21	-0.10	-0.07	0.01	-	0.21	-0.10	-0.07	0.01
Other Asia	-	-	-	-	-0.15	-0.20	-0.05	-0.10	-	-0.15	-0.20	-0.05	-0.10
Latin America	-	-	-	-	0.03	0.02	-0.02	0.01	-	0.03	0.02	-0.02	0.01
Middle East	-	-	-	-	0.20	0.06	0.08	0.09	-	0.20	0.06	0.08	0.09
Africa	-	-	-	-	0.04	-0.01	-0.01	-	-	0.04	-0.01	-0.01	-
Russia	-	-	-	-	0.07	0.04	0.05	0.04	-	0.07	0.04	0.05	0.04
Other Eurasia	-	-	-	-	-	-0.03	-0.03	-0.01	-	-	-0.03	-0.03	-0.01
Other Europe	-	-	-	-	0.04	-	-	0.01	-	0.04	-	-	0.01
<b>Total Non-OECD</b>	-	-	-	-	<b>0.29</b>	<b>-0.39</b>	<b>-0.27</b>	<b>-0.10</b>	-	<b>0.29</b>	<b>-0.39</b>	<b>-0.27</b>	<b>-0.10</b>
<b>(a) Total world demand</b>	-	-	-	<b>0.03</b>	<b>0.22</b>	<b>-0.72</b>	<b>-0.55</b>	<b>-0.26</b>	<b>0.03</b>	<b>0.22</b>	<b>-0.72</b>	<b>-0.55</b>	<b>-0.26</b>
Y-o-y change	-	-	-	<b>0.03</b>	<b>0.22</b>	<b>-0.72</b>	<b>-0.55</b>	<b>-0.26</b>	-	-	-	-	-
<b>Non-OPEC liquids production</b>													
Americas	-	0.03	0.07	-	-0.05	-0.08	-0.15	-0.07	-0.07	0.09	0.17	0.17	0.09
of which US	-	0.03	0.07	-	-0.06	-0.08	-0.15	-0.07	-0.07	0.03	0.08	0.08	0.03
Europe	-	-	-	-	-0.13	-0.03	-0.12	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07
Asia Pacific	-	-	-	-	0.01	-0.01	-	-	-	-	-	-	-
<b>Total OECD</b>	-	<b>0.03</b>	<b>0.07</b>	-	<b>-0.18</b>	<b>-0.12</b>	<b>-0.27</b>	<b>-0.14</b>	<b>-0.14</b>	<b>0.02</b>	<b>0.10</b>	<b>0.10</b>	<b>0.02</b>
China	-	-	-	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-0.01	-	-0.01	-	-	-	-	-	-
Other Asia	-	-	-	-	-0.04	-	-	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Latin America	-	-	-	-	-0.08	0.09	-	-	-	-	-	-	-
Middle East	-	-	-	-	0.02	-	-	-	-	-	-	-	-
Africa	-	-	-	-	0.02	0.02	-	0.01	0.01	0.01	0.01	0.01	0.01
Russia	-	-	-	-	-0.01	0.61	0.40	0.25	0.07	0.07	0.11	0.11	0.09
Other Eurasia	-	-	-	-	-0.10	-0.08	-	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Non-OECD</b>	-	-	-	-	<b>-0.21</b>	<b>0.64</b>	<b>0.39</b>	<b>0.21</b>	<b>0.03</b>	<b>0.03</b>	<b>0.07</b>	<b>0.07</b>	<b>0.05</b>
Total Non-OPEC production	-	0.03	0.07	0.01	-0.40	0.52	0.12	0.06	-0.12	0.04	0.17	0.17	0.07
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Non-OPEC liquids production</b>	-	<b>0.03</b>	<b>0.07</b>	<b>0.01</b>	<b>-0.40</b>	<b>0.52</b>	<b>0.12</b>	<b>0.06</b>	<b>-0.12</b>	<b>0.04</b>	<b>0.17</b>	<b>0.17</b>	<b>0.07</b>
OPEC NGL + non-conventional oils	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>(b) Total non-OPEC liquids production and OPEC NGLs</b>	-	<b>0.03</b>	<b>0.07</b>	<b>0.01</b>	<b>-0.40</b>	<b>0.52</b>	<b>0.12</b>	<b>0.06</b>	<b>-0.12</b>	<b>0.04</b>	<b>0.17</b>	<b>0.17</b>	<b>0.07</b>
Y-o-y change	-	<b>0.03</b>	<b>0.03</b>	<b>-0.12</b>	<b>-0.45</b>	<b>0.47</b>	<b>0.09</b>	-	<b>-0.12</b>	<b>0.44</b>	<b>-0.35</b>	<b>0.04</b>	-
<b>OPEC crude oil production (secondary sources)</b>	-0.01	-	-	-0.01	-0.04	-	-	-	-	-	-	-	-
<b>Total liquids production</b>	-0.01	0.03	0.06	-	-0.44	-	-	-	-	-	-	-	-
<b>Balance (stock change and miscellaneous)</b>	-0.01	0.03	0.06	-0.03	-0.66	-	-	-	-	-	-	-	-
<b>mb</b>													
Commercial	-	-	-	-9	-	-	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	<b>-9</b>	-	-	-	-	-	-	-	-	-
<b>Oil-on-water</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Days of forward consumption in OECD, days</b>													
Commercial onland stocks	-	-	-	-	-	-	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Memo items</b>													
<b>(a) - (b)</b>	-	<b>-0.03</b>	<b>-0.07</b>	<b>0.02</b>	<b>0.62</b>	<b>-1.24</b>	<b>-0.67</b>	<b>-0.33</b>	<b>0.15</b>	<b>0.18</b>	<b>-0.89</b>	<b>-0.72</b>	<b>-0.33</b>

Note: \* This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the July 2022 issue.

This table shows only where changes have occurred.

Source: OPEC.

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

OECD oil stocks and oil on water	2020	2021	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22
<b>Closing stock levels, mb</b>												
<b>OECD onland commercial</b>	<b>3,038</b>	<b>2,648</b>	<b>2,982</b>	<b>3,217</b>	<b>3,182</b>	<b>3,038</b>	<b>2,918</b>	<b>2,875</b>	<b>2,755</b>	<b>2,648</b>	<b>2,618</b>	<b>2,712</b>
Americas	1,615	1,466	1,583	1,719	1,691	1,615	1,570	1,543	1,508	1,466	1,410	1,460
Europe	1,043	858	1,033	1,099	1,079	1,043	1,002	974	892	858	892	926
Asia Pacific	380	324	366	400	411	380	346	357	355	324	316	326
<b>OECD SPR</b>	<b>1,541</b>	<b>1,484</b>	<b>1,537</b>	<b>1,561</b>	<b>1,551</b>	<b>1,541</b>	<b>1,546</b>	<b>1,524</b>	<b>1,513</b>	<b>1,484</b>	<b>1,442</b>	<b>1,348</b>
Americas	640	596	637	658	644	640	640	623	620	596	568	492
Europe	488	479	484	487	490	488	493	487	485	479	468	457
Asia Pacific	414	409	416	416	417	414	413	413	408	409	406	399
<b>OECD total</b>	<b>4,579</b>	<b>4,131</b>	<b>4,519</b>	<b>4,779</b>	<b>4,733</b>	<b>4,579</b>	<b>4,464</b>	<b>4,398</b>	<b>4,268</b>	<b>4,131</b>	<b>4,060</b>	<b>4,060</b>
<b>Oil-on-water</b>	<b>1,148</b>	<b>1,202</b>	<b>1,187</b>	<b>1,329</b>	<b>1,174</b>	<b>1,148</b>	<b>1,138</b>	<b>1,131</b>	<b>1,169</b>	<b>1,202</b>	<b>1,225</b>	<b>1,292</b>
<b>Days of forward consumption in OECD, days</b>												
<b>OECD onland commercial</b>	<b>68</b>	<b>57</b>	<b>79</b>	<b>76</b>	<b>74</b>	<b>72</b>	<b>66</b>	<b>63</b>	<b>59</b>	<b>58</b>	<b>58</b>	<b>58</b>
Americas	67	58	79	76	73	71	64	62	60	59	56	58
Europe	80	63	94	85	86	88	79	70	64	66	67	65
Asia Pacific	51	43	55	59	56	50	49	50	45	41	44	45
<b>OECD SPR</b>	<b>35</b>	<b>34</b>	<b>41</b>	<b>37</b>	<b>36</b>	<b>36</b>	<b>35</b>	<b>33</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>29</b>
Americas	26	24	32	29	28	28	26	25	25	24	23	19
Europe	37	35	44	38	39	41	39	35	35	37	35	32
Asia Pacific	56	54	63	62	57	54	59	58	52	52	57	55
<b>OECD total</b>	<b>104</b>	<b>91</b>	<b>120</b>	<b>113</b>	<b>110</b>	<b>108</b>	<b>101</b>	<b>96</b>	<b>91</b>	<b>90</b>	<b>89</b>	<b>87</b>

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

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

Non-OPEC liquids production and OPEC NGLs	Change												
	2019	2020	2021	3Q22	4Q22	2022	22/21	1Q23	2Q23	3Q23	4Q23	2023	23/22
US	18.5	17.6	17.8	19.2	19.5	19.0	1.1	19.8	20.1	20.3	20.5	20.2	1.2
Canada	5.4	5.2	5.4	5.7	5.8	5.6	0.2	5.8	5.6	5.8	6.0	5.8	0.2
Mexico	1.9	1.9	2.0	2.0	2.0	2.0	0.0	1.9	1.9	1.9	1.9	1.9	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
<b>OECD Americas</b>	<b>25.8</b>	<b>24.7</b>	<b>25.2</b>	<b>26.9</b>	<b>27.3</b>	<b>26.6</b>	<b>1.4</b>	<b>27.6</b>	<b>27.7</b>	<b>28.0</b>	<b>28.4</b>	<b>27.9</b>	<b>1.3</b>
Norway	1.7	2.0	2.0	2.1	2.2	2.0	0.0	2.2	2.2	2.2	2.3	2.2	0.2
UK	1.1	1.1	0.9	0.9	1.0	0.9	0.0	1.0	1.0	0.9	0.9	0.9	0.0
Denmark	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.8	0.7	0.7	0.7	0.7	0.0
<b>OECD Europe</b>	<b>3.7</b>	<b>3.9</b>	<b>3.8</b>	<b>3.8</b>	<b>4.0</b>	<b>3.7</b>	<b>0.0</b>	<b>4.1</b>	<b>4.0</b>	<b>3.9</b>	<b>4.0</b>	<b>4.0</b>	<b>0.2</b>
Australia	0.5	0.5	0.4	0.5	0.5	0.5	0.0	0.5	0.4	0.5	0.4	0.4	0.0
Other Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
<b>OECD Asia Pacific</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	<b>0.0</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.0</b>
<b>Total OECD</b>	<b>30.0</b>	<b>29.2</b>	<b>29.5</b>	<b>31.2</b>	<b>31.9</b>	<b>30.8</b>	<b>1.4</b>	<b>32.2</b>	<b>32.2</b>	<b>32.5</b>	<b>32.9</b>	<b>32.4</b>	<b>1.6</b>
China	4.1	4.2	4.3	4.4	4.4	4.5	0.2	4.5	4.5	4.5	4.5	4.5	0.0
India	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Brunei	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Indonesia	0.9	0.9	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Malaysia	0.7	0.6	0.6	0.6	0.7	0.6	0.0	0.7	0.6	0.6	0.6	0.6	0.0
Thailand	0.5	0.5	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Vietnam	0.3	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	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
<b>Other Asia</b>	<b>2.7</b>	<b>2.5</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>2.3</b>	<b>-0.1</b>	<b>2.4</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>0.0</b>
Argentina	0.7	0.7	0.7	0.7	0.7	0.7	0.1	0.8	0.8	0.8	0.8	0.8	0.1
Brazil	3.6	3.7	3.6	3.8	3.9	3.7	0.2	3.8	3.9	4.0	4.0	3.9	0.2
Colombia	0.9	0.8	0.8	0.7	0.7	0.7	0.0	0.7	0.8	0.7	0.8	0.7	0.0
Ecuador	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Guyana	0.0	0.1	0.1	0.2	0.3	0.2	0.1	0.3	0.3	0.3	0.4	0.3	0.1
Latin America	0.4	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
<b>Latin America</b>	<b>6.1</b>	<b>6.0</b>	<b>6.0</b>	<b>6.3</b>	<b>6.4</b>	<b>6.3</b>	<b>0.3</b>	<b>6.4</b>	<b>6.6</b>	<b>6.7</b>	<b>6.8</b>	<b>6.6</b>	<b>0.4</b>
Bahrain	0.2	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	1.0	1.0	1.0	1.1	1.1	1.1	0.1	1.1	1.1	1.1	1.1	1.1	0.0
Qatar	1.9	1.9	2.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Syria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Yemen	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0
<b>Middle East</b>	<b>3.2</b>	<b>3.2</b>	<b>3.2</b>	<b>3.4</b>	<b>3.4</b>	<b>3.3</b>	<b>0.1</b>	<b>3.4</b>	<b>3.4</b>	<b>3.4</b>	<b>3.4</b>	<b>3.4</b>	<b>0.0</b>
Cameroon	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Chad	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Egypt	0.7	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Ghana	0.2	0.2	0.2	0.2	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.0
South Africa	0.1	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	0.2	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	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
<b>Africa</b>	<b>1.5</b>	<b>1.4</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>	<b>0.0</b>	<b>1.3</b>	<b>1.3</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>	<b>0.0</b>
<b>Russia</b>	<b>11.6</b>	<b>10.6</b>	<b>10.8</b>	<b>10.9</b>	<b>10.7</b>	<b>10.9</b>	<b>0.1</b>	<b>10.5</b>	<b>10.5</b>	<b>10.5</b>	<b>10.6</b>	<b>10.5</b>	<b>-0.4</b>
Kazakhstan	1.9	1.8	1.8	1.9	2.0	1.9	0.1	2.0	2.0	1.9	2.0	2.0	0.1
Azerbaijan	0.8	0.7	0.7	0.8	0.8	0.8	0.0	0.8	0.7	0.7	0.7	0.7	-0.1
Eurasia others	0.4	0.4	0.4	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
<b>Other Eurasia</b>	<b>3.1</b>	<b>2.9</b>	<b>2.9</b>	<b>3.1</b>	<b>3.2</b>	<b>3.0</b>	<b>0.1</b>	<b>3.1</b>	<b>3.0</b>	<b>3.0</b>	<b>3.0</b>	<b>3.0</b>	<b>0.0</b>
<b>Other Europe</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>
<b>Total Non-OECD</b>	<b>33.2</b>	<b>31.7</b>	<b>31.9</b>	<b>32.7</b>	<b>32.7</b>	<b>32.5</b>	<b>0.7</b>	<b>32.5</b>	<b>32.6</b>	<b>32.6</b>	<b>32.8</b>	<b>32.6</b>	<b>0.1</b>
Non-OPEC	63.2	60.9	61.4	63.9	64.6	63.4	2.0	64.7	64.7	65.1	65.7	65.0	1.6
Processing gains	2.4	2.2	2.3	2.4	2.4	2.4	0.1	2.5	2.5	2.5	2.5	2.5	0.1
<b>Non-OPEC liquids production</b>	<b>65.6</b>	<b>63.0</b>	<b>63.7</b>	<b>66.3</b>	<b>67.0</b>	<b>65.8</b>	<b>2.1</b>	<b>67.2</b>	<b>67.2</b>	<b>67.5</b>	<b>68.1</b>	<b>67.5</b>	<b>1.7</b>
OPEC NGL	5.1	5.1	5.2	5.3	5.3	5.3	0.1	5.3	5.4	5.3	5.3	5.3	0.0
OPEC Non- conventional	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
<b>OPEC (NGL+NCF)</b>	<b>5.2</b>	<b>5.2</b>	<b>5.3</b>	<b>5.4</b>	<b>5.4</b>	<b>5.4</b>	<b>0.1</b>	<b>5.4</b>	<b>5.5</b>	<b>5.4</b>	<b>5.4</b>	<b>5.4</b>	<b>0.0</b>
<b>Non-OPEC &amp; OPEC (NGL+NCF)</b>	<b>70.8</b>	<b>68.2</b>	<b>68.9</b>	<b>71.7</b>	<b>72.4</b>	<b>71.2</b>	<b>2.3</b>	<b>72.6</b>	<b>72.7</b>	<b>73.0</b>	<b>73.6</b>	<b>72.9</b>	<b>1.8</b>

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

Table 11 - 5: World rig count, units

World rig count	2019	2020	Change		4Q21	1Q22	2Q22	Jun 22	Jul 22	Change Jul/Jun
			2021	2021/20						
US	944	436	475	39	559	634	718	740	758	18
Canada	134	90	133	43	161	195	114	147	191	44
Mexico	37	41	45	4	48	44	44	46	45	-1
<b>OECD Americas</b>	<b>1,116</b>	<b>567</b>	<b>654</b>	<b>87</b>	<b>770</b>	<b>874</b>	<b>878</b>	<b>935</b>	<b>997</b>	<b>62</b>
Norway	17	16	17	1	18	16	18	18	16	-2
UK	15	6	8	2	8	7	10	12	13	1
<b>OECD Europe</b>	<b>74</b>	<b>59</b>	<b>58</b>	<b>-1</b>	<b>61</b>	<b>57</b>	<b>65</b>	<b>68</b>	<b>67</b>	<b>-1</b>
<b>OECD Asia Pacific</b>	<b>29</b>	<b>22</b>	<b>23</b>	<b>1</b>	<b>25</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>1</b>
<b>Total OECD</b>	<b>1,219</b>	<b>648</b>	<b>735</b>	<b>87</b>	<b>856</b>	<b>954</b>	<b>966</b>	<b>1,027</b>	<b>1,089</b>	<b>62</b>
Other Asia*	221	187	174	-13	182	185	184	186	186	0
Latin America	128	58	91	33	105	111	113	112	116	4
Middle East	68	57	57	0	59	60	62	63	59	-4
Africa	55	43	42	-1	49	57	55	55	56	1
Other Europe	14	12	9	-3	9	9	9	11	11	0
<b>Total Non-OECD</b>	<b>486</b>	<b>357</b>	<b>373</b>	<b>16</b>	<b>404</b>	<b>423</b>	<b>423</b>	<b>427</b>	<b>428</b>	<b>1</b>
<b>Non-OPEC rig count</b>	<b>1,705</b>	<b>1,005</b>	<b>1,108</b>	<b>103</b>	<b>1,260</b>	<b>1,376</b>	<b>1,389</b>	<b>1,454</b>	<b>1,517</b>	<b>63</b>
Algeria	45	31	26	-5	31	30	32	33	33	0
Angola	4	3	4	1	5	6	6	6	6	0
Congo	3	1	0	-1	1	1	0	0	1	1
Equatorial Guinea**	1	0	0	0	1	1	0	0	0	0
Gabon	7	3	2	-1	4	2	3	3	1	-2
Iran**	117	117	117	0	117	117	117	117	117	0
Iraq	74	47	39	-8	45	46	50	55	54	-1
Kuwait	46	45	25	-20	23	27	27	26	28	2
Libya	14	12	13	1	14	15	4	2	2	0
Nigeria	16	11	7	-4	7	8	10	11	11	0
Saudi Arabia	115	93	62	-31	64	70	71	64	72	8
UAE	62	54	42	-12	42	38	48	48	48	0
Venezuela	25	15	6	-9	3	3	3	3	3	0
<b>OPEC rig count</b>	<b>529</b>	<b>432</b>	<b>343</b>	<b>-89</b>	<b>358</b>	<b>364</b>	<b>371</b>	<b>368</b>	<b>376</b>	<b>8</b>
<b>World rig count***</b>	<b>2,234</b>	<b>1,437</b>	<b>1,451</b>	<b>14</b>	<b>1,618</b>	<b>1,740</b>	<b>1,760</b>	<b>1,822</b>	<b>1,893</b>	<b>71</b>
<i>of which:</i>										
Oil	1,788	1,116	1,143	27	1,294	1,383	1,392	1,447	1,501	54
Gas	415	275	275	0	293	329	337	342	358	16
Others	31	46	33	-13	31	28	31	33	34	1

Note: \* Other Asia includes India and offshore rigs for China.

\*\* Estimated data when Baker Hughes Incorporated did not reported the data.

\*\*\* Data excludes onshore China as well as Russia and other Eurasia.

Totals may not add up due to independent rounding.

Sources: Baker Hughes and OPEC.

## Glossary of Terms

### Abbreviations

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

### Acronyms

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



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

## Glossary of Terms

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



## OPEC Basket average price

US\$/b



down 9.17 in July

July 2022	108.55
June 2022	117.72
<b>Year-to-date</b>	<b>105.82</b>

## July OPEC crude production

mb/d, according to secondary sources



up 0.22 in July

July 2022	28.90
June 2022	28.68

## Economic growth rate

per cent

	World	OECD	US	Euro-zone	Japan	China	India
<b>2022</b>	3.1	2.5	1.8	3.2	1.4	4.5	7.1
<b>2023</b>	3.1	1.8	1.7	1.7	1.6	5.0	6.0

## Supply and demand

mb/d

<b>2022</b>		<b>22/21</b>	<b>2023</b>		<b>23/22</b>
World demand	100.0	3.1	World demand	102.7	2.7
Non-OPEC liquids production	65.8	2.1	Non-OPEC liquids production	67.5	1.7
OPEC NGLs	5.4	0.1	OPEC NGLs	5.4	0.0
<b>Difference</b>	<b>28.8</b>	<b>0.9</b>	<b>Difference</b>	<b>29.8</b>	<b>0.9</b>

## OECD commercial stocks

mb

	<b>Apr 22</b>	<b>May 22</b>	<b>Jun 22</b>	<b>Jun 22/May 22</b>
Crude oil	1,316	1,324	1,330	6.4
Products	1,360	1,367	1,381	14.5
<b>Total</b>	<b>2,676</b>	<b>2,691</b>	<b>2,712</b>	<b>20.9</b>
Days of forward cover	59.1	58.8	58.9	0.1

Next report to be issued on 13 September 2022.