



Organization of the Petroleum Exporting Countries

OPEC Monthly Oil Market Report

12 May 2022

Feature article: Non-OPEC oil supply development

Oil market highlights

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Oil Market Highlights

Crude Oil Price Movements

Crude oil spot prices dropped in April after three-consecutive months of rises. The OPEC Reference Basket dropped by \$7.84, or 6.9%, to settle at \$105.64/b. Crude futures prices declined m-o-m in April, amid elevated market volatility, fuelled by persistent uncertainty regarding market outlook. The ICE Brent front month fell \$6.54, or 5.8%, in April to average \$105.92/b and NYMEX WTI decreased by \$6.62, or 6.1%, to average \$101.64/b. Consequently, the Brent/WTI futures spread widened 8¢ to average \$4.28/b. The market structure of all three major crude benchmarks – ICE Brent, NYMEX WTI and DME Oman – softened significantly, but remained in backwardation. Hedge funds and other money managers kept net long positions in WTI and Brent little changed after the previous month's sharp selloff.

World Economy

World economic growth in 2022 is revised down to 3.5% from 3.9% in last month's assessment, following growth of 5.8% in 2021. US GDP growth for 2022 is revised down to 3.2% from 3.8%, after growth was reported at 5.7% for 2021. Euro-zone economic growth for 2022 is revised down to 3.1% from 3.5%, following growth of 5.4% in 2021. Japan's economic growth for 2022 is revised down to 1.8% from 1.9%, after growth of 1.7% in 2021. China's 2022 growth is revised down to 5.1% from 5.3%, after growth of 8.1% in 2021. India's 2022 GDP growth was revised down to 7.1% from 7.2%, after 2021 growth stood at 8.1%. Brazil's economic growth forecast for 2022 is revised down to 0.7% from 1.2%, following growth of 4.6% in 2021. For Russia, the 2022 GDP growth forecast is revised down to show a contraction of 6%, compared with a contraction of 2% expected in last month's assessment, which follows reported growth of 4.7% in 2021. Challenges related to ongoing geopolitical tensions, the continued pandemic, rising inflation, aggravated supply chain issues, high sovereign debt levels in many regions and expected monetary tightening by central banks in the US, the UK, Japan and the euro area require close monitoring.

World Oil Demand

World oil demand growth in 2021 remains broadly unchanged from the previous month's assessment at 5.7 mb/d. World oil demand growth in 2022 is expected to increase by 3.4 mb/d y-o-y, representing a downward revision of 0.3 mb/d from last month's report, with 1.8 mb/d in the OECD and 1.6 mb/d in the non-OECD. Oil demand growth in 2Q22 is projected to be slower at 2.8 mb/d, compared with 5.2 mb/d in 1Q22. Demand in 2022 is expected to be impacted by ongoing geopolitical developments in Eastern Europe, as well as COVID-19 pandemic restrictions.

World Oil Supply

Non-OPEC liquids supply growth y-o-y in 2021 is broadly unchanged at around 0.6 mb/d. Total US liquids production is estimated to have increased y-o-y by 0.15 mb/d. Non-OPEC supply growth for 2022 is revised down by 0.3 mb/d y-o-y to 2.4 mb/d. Russia's liquids production for 2022 is revised down by 0.36 mb/d. The US liquids supply growth forecast for 2022 is broadly unchanged at 1.29 mb/d. The main drivers of liquids supply growth for the year are expected to be the US, Canada, Brazil, Kazakhstan, Guyana and Norway. OPEC NGLs are forecast to grow by 0.1 mb/d both in 2021 and 2022 to average 5.1 mb/d and 5.3 mb/d, respectively. OPEC-13 crude oil production in April, increased by 153 tb/d m-o-m, to average 28.65 mb/d, according to available secondary sources.

Product Markets and Refining Operations

Refinery margins on all main trading hubs continued to soar in April, amid a continued tightening in global product balances, and lower crude prices. Favourable product demand-side dynamics, as the overall negative impact of Covid-19 further diminishes on a global level, strengthened fuel markets in general, including that of jet fuel, despite some mobility restrictions in a few Asian countries. Middle distillates were the main margin contributor over the month, while their margins spread widened further versus that of gasoline. Going forward, refinery intakes are expected to rise and that could provide partial relief to the global product shortage, and potentially de-pressure product prices.

Tanker Market

Suezmax and Aframax rates continued to outperform those in the VLCC class, with gains of 61% and 28% m-o-m. The Suezmax market was supported by a strong market in the Atlantic basin while Aframax saw from support from both the East and West markets. After a sluggish start to the year, VLCC rates finally saw a pickup of 24%. However, gains were short-lived dissipating by the end of the month amid ample availability. Clean rates continued to perform well, gaining a further 15%. The market has been supported by strength in the East and rising activity in tanker demand West of Suez, amid preparations ahead of the driving season in the Northern Hemisphere.

Crude and Refined Products Trade

Preliminary data shows US crude imports declined to an 11-month low of 5.9 mb/d in April, while exports averaged 3.4 mb/d for a gain of 5% m-o-m. US product exports strengthened for the seventh month in a row, averaging 6.4 mb/d, supported by strong flows to Latin America and increasing flows to Europe. In March, China's crude imports averaged 10.1 mb/d, recovering from the weak performance the month before. Recently released customs data shows China's crude imports increased to 10.5 mb/d in April, despite expectations that reduced demand due to COVID-19 lockdowns would weigh on imports. China's product imports declined 8%, while product exports rebounded, amid unexpectedly strong gasoil outflows. With domestic demand impacted by lockdowns, China's product outflows are likely to be higher than previously expected in April, particularly for jet fuel. India's crude imports dipped in March, but remained near the strong performance seen over the previous four months, averaging 4.5 mb/d for the month. Product exports saw a robust increase of 26% or about 0.3 mb/d to average 1.7 mb/d in March, the highest since September 2013, as Europe sought alternatives to Russian oil product flows. Japan's crude imports have risen steadily since the start of the year, averaging 2.9 mb/d in March, amid healthy demand.

Commercial Stock Movements

Preliminary March data showed total OECD commercial oil stocks increasing m-o-m by 10.1 mb. At 2,621 mb, inventories were 298 mb lower than the same time a year ago, 304 mb lower than the latest five-year average, and 293 mb below the 2015–2019 average. Within the components, crude stocks rose m-o-m by 12.9 mb, while products stocks fell m-o-m by 2.8 mb. At 1,265 mb, OECD crude stocks were 189 mb lower than the latest five-year average and 198 mb below the 2015-2019 average. OECD product stocks stood at 1,356 mb, representing a deficit of 115 mb compared with the latest five-year average and 95 mb below the 2015–2019 average. In terms of days of forward cover, OECD commercial stocks fell m-o-m by 0.3 days in March to stand at 57.4 days. This is 8.8 days below March 2021 levels, 8.7 days less than the latest five-year average, and 5.0 days lower than the 2015–2019 average

Balance of Supply and Demand

Demand for OPEC crude in 2021 was revised up by 0.1 mb/d from the previous month's assessment to stand at 28.2 mb/d, which is around 5.0 mb/d higher than in 2020. Demand for OPEC crude in 2022 was revised up by 0.1 mb/d from the previous month to stand at 29.0 mb/d, which is around 0.8 mb/d higher than in 2021.

Feature Article

Non-OPEC oil supply development

In 2021, non-OPEC supply increased by 0.59 mb/d. US liquids production increased by 0.15 mb/d y-o-y, mainly on the back of increased NGLs output from non-conventional basins and a few project start-ups in the Gulf of Mexico. At the same time, US tight crude and condensate production decreased by 70 tb/d, with all major US shale basins showing drops, except for the Permian. Output in the Permian increased by 0.2 mb/d y-o-y, supported by a lower breakeven price and higher drilling rig activities. Cumulative production in Canada rose by around 0.3 mb/d as production from oil sand basins hit a high of 3.3 mb/d in October 2021. China, Guyana, Argentina and Norway also contributed to production growth in 2021. This was offset by a cumulative supply decline of 0.6 mb/d, mainly from the UK, Brazil, Colombia and Indonesia.

Spending for oil and gas exploration and production (E&P) in non-OPEC countries increased by US\$16 bn in 2021 to US\$350 bn, and is expected to rise by around 14% in 2022. On a country level, E&P spending for 2022 is forecast to increase in Brazil, the US, Canada, and Norway by 36%, 28%, 15%, and 11%, respectively.

Graph 1: Non-OPEC investment in oil and gas vs. crude price

US\$ bn

800
700
600
500
400

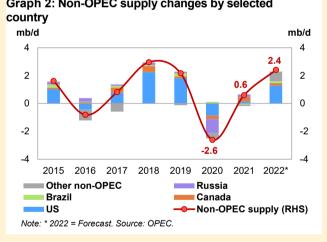
However, the overall level remains below prepandemic levels and significantly below the high of US\$749 bn seen in 2014. Upstream spending by major international companies has increased in response to higher oil prices and world oil demand growth, but remains lower than the level seen in 2019, as major shale producers continue to focus on capital discipline to improve their balance sheets.

US\$ bn US\$/b 800 120 700 100 600 80 500 60 400 300 40 200 20 0 2014 2015 2016 2017 2018 2019 2020 2021 2022* Offshore deepwater Offshore shelf Shale/Tight oil Oil sands Other onshore Brent price (RHS) Note: * 2022 = Forecast; Oil price average Jan 22-Apr 22. Sources: OPEC and Rystad Energy.

For 2022, non-OPEC liquids supply is forecast to grow y-o-y by 2.4 mb/d, a downward revision of 0.3 mb/d from the previous month's assessment. This is on the back of geopolitical developments and the impact of sanctions on Russian oil imports.

Liquids output in the OECD is expected to increase by 1.6 mb/d, on the back of production increases in the US, Canada, and Norway. US crude oil production is anticipated to grow by 0.9 mb/d, y-o-y, with NGLs and biofuels production set to rise too. In the US, the oil rig count has rebounded from 287 units in January 2021 to 552 units in the last week of April 2022. Moreover, US core oil frac operations continue to show steady increases.

Canadian oil production, particularly Alberta's oil sands, is forecast to grow by 0.16 mb/d y-o-y. Production growth in the North Sea and OECD Europe countries is projected at around 0.1 mb/d, supported by the start-up of the second phase of the Johan Sverdrup field development in 4Q22, which is projected to add 0.22 mb/d to Norway's output.



In the non-OECD region, total liquids output growth is forecast at 0.7 mb/d y-o-y. Latin America is the key driver of this supply growth. It is forecast to increase by 0.27 mb/d y-o-y in 2022, mainly from two offshore start-ups of Mero-1 and Peregrino Phase 2 in Brazil and Liza-2 FPSO in Guyana. Kazakhstan and China's liquids output are also expected to rise, by 0.14 mb/d and 0.08 mb/d, respectively.

Uncertainties to the forecast remain large, especially given recent geopolitical developments in Eastern Europe. Moreover, high inflation levels, coupled with labour shortages and tighter monetary policies by major central banks may also impact the cost of oil production and investment levels in the upstream beyond the short term. Ineede OPEC Member Countries and countries participating in the DoC will continue to closely monitor market developments over the course of the year and safeguard a stable and balanced market for the benefit of all oil market participants; consumers and producers alike.

Feature Article

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Crude Oil Price Movements

Crude oil spot prices trended lower in April. A slowdown in crude purchase interests, amid easing concerns about a tightening market, resulted in a sharp price correction with elevated volatility. Signs of a wellsupplied physical crude market, along with the availability of unsold cargoes, contributed to declining spot prices.

The OPEC Reference Basket (ORB) value fell sharply in April, dropping by nearly \$8, or 7% m-o-m. All ORB component values declined significantly alongside their respective crude oil benchmarks, specifically North Seat Dated. On a monthly basis, the ORB value declined to \$105.64/b, its lowest level since February.

Crude oil futures prices were sharply lower m-o-m in April, amid a market selloff. They declined 6% from March, which had seen their highest monthly value in about ten years. Oil futures prices retreated as concerns about the short-term oil supply that had supported oil prices the previous month lessened. Moreover, rising COVID-19 infections in China and the reinstatement of more COVID-19-related lockdowns, including in Shanghai, weighed on the oil demand outlook.

The ICE Brent front-month declined by \$6.54 in April, or 5.8%, to average \$105.92/b, and NYMEX WTI fell by \$6.62, or 6.1%, to average \$101.64/b. Y-t-d, ICE Brent was \$37.49, or 60.2%, higher at \$99.81/b, while NYMEX WTI was higher by \$37.58, or 63.6%, at \$96.63/b, compared with the same period a year earlier. DME Oman crude oil futures prices fell m-o-m in April by \$7.47, or 6.8%, to settle at \$102.71/b. Y-t-d, DME Oman was higher by \$36.59, or 59.8%, at \$97.73/b.

Hedge funds and other money managers were little changed on their bullish positions in April after the previous month's sharp sell-off, amid declining oil prices, an uncertain oil supply outlook and the resurgence of COVID-19 in China that clouded the economic and oil demand outlook.

The market structure of all three major oil benchmarks - ICE Brent, NYMEX WTI and DME Oman remained in sustained backwardation in April, although the futures forward curves flattened significantly in the front. Easing worries about oil supply shortages in the short-term, uncertainty about the short-term demand outlook, and the prospect of additional oil supply from Strategic Petroleum Reserves (SPR) resulted in a flattening of the futures forward curves.

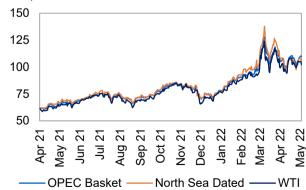
Sweet/sour crude differentials narrowed in almost all regions as the value of light sweet crude benchmarks corrected sharply lower in April, compared to other representatives' sour crude references. However, in Europe, the assessment of the Urals crude value remained at deep discounts against the Brent benchmark, which resulted in a further widening of the North Sea Dated-Urals crude spread.

Crude spot prices

Crude oil spot prices dropped in April. Softening Graph 1 - 1: Crude oil price movement crude buying interests compared to the previous month, amid easing concerns about a tightening market and an oil supply crunch that significantly reduced the risk premium, resulted in a sharp price correction with elevated volatility. Spot prices were under pressure in April due to a slowdown in buying interests, including from China; rising volumes of unsold cargoes for April and May loadings, with some sellers struggling to clear their cargoes; and refinery maintenances in several regions.

The reinstatement of mobility restrictions and the extension of lockdown measures in several major Chinese cities, including Shanghai, raised worries about softening demand for transportation fuels.

US\$/b 150



Sources: Argus, OPEC and Platts.

According to data from the National Bureau of Statistics (NBS), China's crude oil processing volumes declined m-o-m in March compared to January-February 2022 levels, while China's crude oil imports also fell in March and were 14% lower compared to the same period last year. In the US, oil prices came down on the announcement of an additional large volume of crude oil from the SPR in the coming months, along with increasing crude stocks and a drop in US refinery intakes due to turnarounds. According to Energy Information Administration (EIA) data, US crude oil stocks rose by 6 mb between the weeks of 25 March and 29 April, to stand at nearly 416 mb. Stocks at Cushing also rose near 5 mb during the same period. Additionally, the US refiner's net input of crude dropped by 447 tb/d between the weeks of 25 March and 29 April.

Spot prices declined more than futures prices in a sign that the crude market was better supplied than previously anticipated. This resulted in a drop of the North Sea Dated-ICE Brent spread by \$7.83 in April, which settled at a discount of \$1.55/b, compared to a premium of \$6.29/b in March.

However, uncertain geopolitical developments in Eastern Europe and strong refining margins, particularly for middle distillates like diesel/gasoil and jet fuel, amid tight oil product markets, limited the oil price decline.

In April, North Sea Dated fell the most m-o-m, by \$14.38, or 12.1%, to an average of \$104.37/b, while WTI and Dubai's first months fell respectively m-o-m by \$6.75 and \$7.58, or 6.2% and 6.9%, to settle at \$101.77/b and \$102.91/b.

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

			Change		Year-to	o-date
OPEC Reference Basket (ORB)	Mar 22	Apr 22	Apr 22/Mar 22	%	2021	2022
ORB	113.48	105.64	-7.84	-6.9	60.97	99.90
Arab Light	112.99	107.24	-5.75	-5.1	61.56	100.35
Basrah Medium	112.21	104.63	-7.58	-6.8	60.11	98.59
Bonny Light	120.68	106.39	-14.29	-11.8	61.91	103.60
Djeno	111.30	96.92	-14.38	-12.9	54.47	94.90
Es Sider	117.90	104.42	-13.48	-11.4	60.05	102.03
Girassol	121.58	105.28	-16.30	-13.4	62.37	104.42
Iran Heavy	112.40	106.28	-6.12	-5.4	60.75	99.63
Kuwait Export	113.28	107.46	-5.82	-5.1	61.35	100.51
Merey	88.12	83.40	-4.72	-5.4	43.38	76.79
Murban	112.48	104.48	-8.00	-7.1	61.05	99.38
Rabi Light	118.29	103.91	-14.38	-12.2	61.46	101.89
Sahara Blend	121.80	109.37	-12.43	-10.2	61.98	105.42
Zafiro	120.50	105.71	-14.79	-12.3	62.24	103.68
Other Crudes						
North Sea Dated	118.75	104.37	-14.38	-12.1	61.92	102.35
Dubai	110.49	102.91	-7.58	-6.9	60.88	97.52
Isthmus	107.42	100.40	-7.02	-6.5	58.60	94.56
LLS	110.80	103.45	-7.35	-6.6	61.09	98.73
Mars	106.50	100.72	-5.78	-5.4	59.42	94.94
Minas	111.23	103.44	-7.79	-7.0	60.00	97.79
Urals	92.59	72.55	-20.04	-21.6	61.06	86.79
WTI	108.52	101.77	-6.75	-6.2	58.97	96.57
Differentials						
North Sea Dated/WTI	10.23	2.60	-7.63	-	2.94	5.79
North Sea Dated/LLS	7.95	0.92	-7.03	-	0.83	3.63
North Sea Dated/Dubai	8.26	1.46	-6.80	-	1.03	4.83

Sources: Argus, Direct Communication, OPEC and Platts.

The crude market's soft fundamentals were reflected in the decline of many regional crude oil differentials, including in the North Sea, the Mediterranean, West Africa, and some East Suez crude markets. Despite strong refining margins, North Sea crude differentials corrected lower in April, specifically Forties, due to lower demand and higher supply, including WTI crude from the US Gulf Coast (USGC) and sweet crudes from West Africa. Forties crude differentials dropped to the lowest discount against North Sea Dated since May 2020 on lower price offers due to a lack of regional demand and unfavourable arbitrage outside Europe. The Forties and Ekofisk crude differentials fell on a monthly average in April by \$4.12 and \$1.55, respectively, to settle at a discount of $20 \phi/b$ and a premium of \$2.97/b.

Similarly, West African and Mediterranean crude oil differentials weakened in April on soft crude demand from Asian refiners, particularly in China, the availability of prompt unsold cargoes, and the steady flow of light sweet crude from the US to Europe. Higher freight rates also added downward pressure. The value of light sweet

crudes with a high Naphtha yield also weakened on lower Naphtha refining margin in April. Bonny Light, Forcados and Qua Iboe crude differentials declined in April against North Sea Dated, falling by a monthly average of 25ϕ , 68ϕ , and 92ϕ , respectively, to stand at a premium of \$1.57/b, \$2.07b, and \$1.78/b. The crude differential of medium-heavy sweet Cabinda also declined m-o-m by \$1.39 in April to settle at a premium of 74 ϕ /b. Saharan Blend crude differentials averaged lower, dropping by 30ϕ m-o-m to stand at a premium of \$1.77/b. The Caspian CPC Blend differential remained priced at a deep discount in April, although it rose slightly m-o-m, increasing by 44ϕ to average at a discount of \$6.15/b to North Sea Dated.

In the Middle East, crude differentials to Dubai in April weakened on slower spot market demand amid soft demand from Asia Pacific refiners, including China, and the prospect of increasing supply of medium sour crude from Europe to the Asia Pacific. The value of the Oman crude differential fell by \$6.09 m-o-m in April to a premium of \$3.21/b. In the USGC, crude differentials of Light Louisiana Sweet (LLS) weakened on lower demand from US refiners and increasing crude stocks, falling by 60ϕ on a monthly average to stand at a premium of \$1.67/b. However, Mars sour crude differentials strengthened on the prospect of a tighter sour crude market in the Atlantic Basin amid geopolitical tensions in Eastern Europe. Mars sour crude differential rose by 97ϕ to an average discount of \$1.05/b.

OPEC Reference Basket (ORB)

The **ORB value** fell sharply m-o-m in April, dropping by nearly \$8, or 7%, as all ORB component values declined significantly alongside their respective crude oil benchmarks, specifically North Seat Dated. On a monthly basis, the ORB value dropped to \$105.64/b, its lowest level since February as concerns about a global oil shortage were mitigated, reducing the high price risk premium. Subdued economic data, signs of slowing oil demand, and expectations of softening oil demand in Asia due to refinery maintenance and the resurgence of COVID-19 weighed on oil prices. Nonetheless, higher official selling prices of almost all grades and in all regions limited the ORB value decline.

The oil futures market

Crude oil futures prices were sharply lower m-o-m in April amid a market selloff. They declined 6% from March. Oil futures prices retreated last month as short-term oil supply concerns that had supported oil prices in March lessened. Moreover, investors eyed the resurgence of COVID-19 contaminations in China and the reinstatement of more COVID-19-related lockdowns, including in Shanghai, which weighed on the oil demand outlook.

Global oil supply prospects improved amid less than previously anticipated oil supply disruptions in Eastern Europe. Additionally, the US administration announced an unprecedented release of 1 mb/d of oil from the US SPR for six months from May, which was followed by an International Energy Agency (IEA) agreement to release a new round of an additional 60 mb of oil from strategic reserves. A large rise in US crude stocks in the first week of April, according to the EIA, also contributed to alleviating concerns about the short-term oil supply. Furthermore, signs of a well-supplied physical crude market, amid the peak refinery maintenance season, which was reflected in softening crude differentials in major regions, including the North Sea, and flattening market backwardation, also eased worries about global oil supply.

Oil futures prices came under further pressure on a weakening global oil demand outlook amid extended lockdowns measure in China, including in Shanghai, due to a new wave of COVID-19, and after the International Monetary Fund (IMF) revised down its 2022 global economic growth forecast to 3.6%, citing worsening global economic prospects compared to its previous forecast in January. Data also showed a slowing in China's economy in March, with the country's refinery throughputs falling in March to their lowest since last October, which further weighed on investors' sentiment.

A stronger US dollar in April that rose to more than two-year highs, and prospects of an interest rate hike from the US Federal Reserve, also weighed on oil futures prices.

However, the oil price decline was limited as investors eyed rising oil supply risks amid continuing geopolitical tensions in Eastern Europe and news that the EU might phase out Russian oil imports. A rally in diesel prices amid tight supply and low inventories added support to oil futures prices.

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

			Change		Year-to	-date
Crude oil futures	Mar 22	Apr 22	Apr 22/Mar 22	%	2021	2022
NYMEX WTI	108.26	101.64	-6.62	-6.1	59.05	96.63
ICE Brent	112.46	105.92	-6.54	-5.8	62.32	99.81
DME Oman	110.18	102.71	-7.47	-6.8	61.14	97.73
Spread						
ICE Brent-NYMEX WTI	4.20	4.28	0.08	1.9	3.27	3.18

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

The ICE Brent front-month declined by \$6.54 in April, or 5.8%, to average \$105.92/b, and NYMEX WTI fell by \$6.62, or 6.1%, to average \$101.64/b. Y-t-d, ICE Brent was \$37.49, or 60.2%, higher at \$99.81/b, while NYMEX WTI was higher by \$37.58, or 63.6%, at \$96.63/b, compared with the same period a year earlier. DME Oman crude oil futures prices fell m-o-m in April by \$7.47, or 6.8%, to settle at \$102.71/b. Y-t-d, DME Oman was higher by \$36.59, or 59.8%, at \$97.73/b.

The **front-month ICE Brent/NYMEX WTI spread** widened marginally in April adding to the sharp rise in March, as Brent futures remained more supported by a geopolitical risk premium compared to NYMEX WTI. Meanwhile, the prospects of higher US oil supply from SPRs in the coming months and rising crude stocks at Cushing, compared to February and early March levels, weighed on the value of NYMEX WTI. Crude stocks at Cushing stood at 27.5 mb in the week of April 22, compared with 22.2 mb in the week of March 04. The ICE Brent/NYMEX WTI spread widened by a m-o-m average of 8¢ in April to settle at \$4.28/b.

The North Sea Dated premium to WTI Houston dropped significantly in April, falling by \$7.05 on a monthly average to stand at a premium of \$1.44/b, as demand for North Sea crude in the Atlantic Basin weakened compared to the previous month, while the market remained well supplied. Forties crude differentials to North Sea Dated dropped in April to their lowest level since May 2020 on signs of a lack of demand and adequate supply in Northwest Europe. Meanwhile, surging US crude exports in April buoyed the WTI crude value in the USGC, which contributed to narrowing the North Sea Dated-WTI Houston spread. In the week of 15 April, US crude exports rose to 4.3 mb/d, its highest level since March 2020.

Hedge funds and other money managers were little changed in net long positions in April after the previous month's sharp sell-off, amid declining oil prices, an uncertain oil supply outlook and the resurgence of COVID-19 in China that clouded economic and the oil demand outlook.

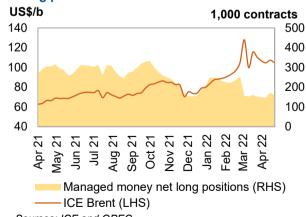
Speculators continued to close out more bullish positions in the first half of April, and total net long positions in ICE Brent and NYMEX WTI reached their lowest level since December 2021 amid deteriorating market sentiment. In the week of April 12, combined futures and options net long positions linked to ICE Brent and NYMEX WTI fell by 9,961 contracts, or 2.4%, compared with the level in the week to 29 March. Nonetheless, speculators recovered some of their net long positions in the second half of the month after oil prices rose.

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 were net sellers of an equivalent of about 7 mb in the ICE Brent contract in the first two weeks of April. Elevated market volatility and easing worries about global oil supply shortages prompted speculators to reduce their exposures and close bullish positions. However, in the second half of April, they closed more short positions, but the total net long positions remained well below February levels. Between the

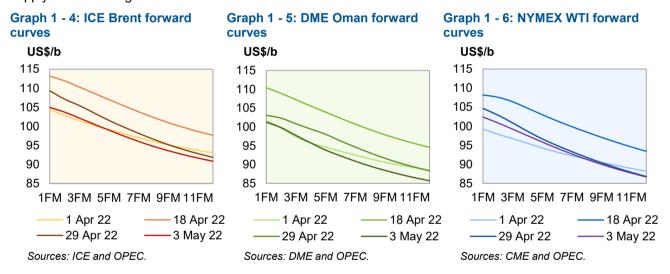
weeks of 29 March and 26 April, combined futures and options net long positions in ICE Brent rose by 6,207 contracts, or 4.1%, to stand at 159,128 lots, according to the ICE Exchange. During the same period, gross short positions fell by 19,233 lots, or 20.7%, to 73,844 contracts, while gross long positions declined by 13,026 lots, or 5.3%, to 232,972 contracts.

In April, however, speculators cut net long futures and options positions related to WTI futures, extending last month's selloff. Money managers reduced their net long potions in NYMEX WTI by 5,579 contracts, or 2.2%, to stand at 252,329 lots in the week of April 26. This is due to a decline in short positions by 3,211 lots, or 14.2%, to 19,388 contracts, and a drop of 8,790 contracts, or 3.1%, in long positions to 271,717 contracts, according to the US Commodity Futures Trading Commission (CFTC).

The **long-to-short ratio of speculative positions** in the ICE Brent contract remained unchanged m-o-m in April, standing at about 3:1 in the week of April 26. However, the NYMEX WTI long-to-short ratio rose to about 14:1 in the week to April 26, compared to 12:1 in the week to 29 March. **Total futures and options open interest volumes** on the two exchanges continued to decline in April, dropping by 5.7%, or 311,108 lots, to stand at 5.2 million contracts in the week ending April 26.

The futures market structure

The **market structure** of all three major oil benchmarks – ICE Brent, NYMEX WTI and DME Oman – stayed in sustained backwardation in April. However, the futures forward curves flattened significantly in the front, compared to March, as worries about short-term oil supply shortages eased, and traders turned focus on uncertainty about the short-term oil demand outlook amid a resurgence of COVID-19 in China and low seasonal crude demand. The prospect of additional oil supply from SPRs also contributed to alleviating concerns about supply and flattening the futures forward curves.



The backwardation structure of Brent futures softened in April as the supply risk premium that supported front-month prices in March lessened significantly amid a change in market sentiment, which resulted in a sharp downward price correction, particularly for the near-months futures contracts. Signs of a well-supplied crude market, including in Northwest Europe, soft demand amid refinery maintenance season, as well as the availability of unsold cargoes, weighed on the first-month price compared to forward months, resulting in weaker the ICE Brent futures backwardation. The ICE Brent first-month premium to the third month narrowed m-o-m by \$4.70 to a backwardation of \$1.92/b. Similarly, the ICE Brent's M1/M6 backwardation declined last month by \$7.85 to settle at \$5.77 on average, compared to a backwardation of \$13.62 in March.

The NYMEX WTI forward curve also flattened in April on higher supply coming from the US SPR and rising US commercial crude stocks, including at Cushing, the delivery point of the WTI futures contract, which put more pressure on the value of the NYMEX WTI first month contract compared to forward month contracts. Meanwhile, crude demand from US refiners fell in April, and along with a lower refinery utilization rate, resulted in a lower supply of oil products and a further decline in middle distillates and gasoline inventories. The NYMEX WTI M1/M3 month spread narrowed by \$3.70 to a backwardation of \$2.04/b on average in April, compared with a backwardation of \$5.74/b in February.

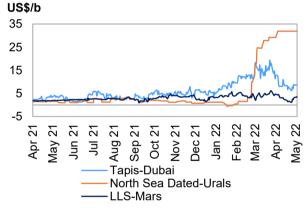
Following the same trend as other major international crude benchmarks, DME Oman and Dubai structures flattened significantly last month moving into softer backwardation. This was after prompt month prices came under pressure from signs of softer crude buying interest, compared to the previous month, and the prospect of slower Asian oil demand due to the resurgence of COVID-19 in China and the reinstatement of lockdowns and mobility restrictions in some large cities. Furthermore, market participants expected higher sour crude flows from Europe to Asia in April and the coming months. On a monthly average, the DME Oman M1/M3 spread narrowed m-o-m by \$4.66 to a backwardation of \$2.49/b on average in April.

The backwardation structure of spot crude prices flattened significantly in April, on the back of lower than expected crude supply disruptions in Eastern Europe, subdued crude demand in the spot market, and signs of well-supplied physical crude markets. In terms of the M1/M3 structure, the North Sea Brent M1/M3 backwardation narrowed in April on a monthly average from \$6.56 to \$1.03/b. In the US, the WTI M1/M3 backwardation also narrowed in April by \$3.59 to \$1.98/b, compared with a backwardation of \$5.58/b in March. The Dubai M1/M3 monthly average spread was in a backwardation of \$3.72/b in April, narrowing from a backwardation of \$8.83/b in March.

Crude spreads

The sweet/sour crude differentials narrowed in almost all regions as the value of light sweet crude benchmarks corrected sharply lower in April, compared to other representatives' sour crude references. North Sea Dated benchmark has fallen twice as much as the other crude references, as the expected large supply disruption was less than previously anticipated, and the physical crude market was well supplied. However, in Europe, the assessment of the Urals crude value remained at deep discounts against the Brent benchmark, which resulted in a further widening of the North Sea Dated-Urals crude spread.

In Europe, the North Sea Dated-Urals spread in April Graph 1 - 7: Differential in Asia, Europe and USGC widened further by \$5.66 to average \$31.82/b, a record high level, despite a sharp decline in the Brent benchmark and lower crude differential of light sweet North Sea grade crudes. The value of medium sour Urals crude weakened further amid persistent geopolitical tensions in Eastern Europe, low apparent trading activity and reduced demand for the grade from refiners in West Suez regions. Similarly, Urals crude differentials moved into deeper discounts in April in Northwest Europe and the Mediterranean, averaging respectively \$34.67/b and \$31.81/b, a decline of \$5.84 and \$5.65 m-o-m.



Sources: Argus, OPEC and Platts.

In the USGC, the value of sour crude strengthened last month against the value of sweeter crude, despite the announcement of the release of a large volume of crude oil from the SPR. The LLS premium over medium sour Mars declined on average in April by \$1.57 to \$2.72/b. The value of light sweet crude was under pressure due to the higher supply of Atlantic Basin sweet crude and weakening values of similar crude quality in Northwest Europe and West Africa. Meanwhile, Mars's sour crude value increased on expectations of lower Urals supply in the US and Europe, which should raise the value of sour crude in these regions.

In Asia, the Tapis premium over Dubai also declined in April as the value of light sweet crude fell significantly following the drop in North Sea Dated and similar crude quality in the Atlantic Basin. The Tapis/Dubai spread narrowed by \$6.74 in April to \$8.61/b, from \$15.35/b the previous month. Favourable west-to-east arbitrage economics and weaker naphtha refining margins also helped to narrow the sweet-sour crude spread. Asian light sweet crudes came under more pressure on low demand from regional refiners and were less competitive due to the weak value of similar crude in the Atlantic Basin and a narrower North Sea Dated-Dubai spread. The North Sea Dated-Dubai spread dropped m-o-m by \$6.80 in April to average \$1.46/b.

Commodity Markets

Commodity prices for energy, base and precious metals declined m-o-m in April, but this was partially offset by an increase in agricultural commodity prices. China's economic slowdown amid COVID-19 outbreaks and a wide range of government intervention measures helped ease the pressure on commodity prices across the month.

Commodity price volatility was lower compared to March, but it continued to dampen investor's risk appetite in the futures market. Total open interest and money managers' net length positions declined for the second consecutive month across the selected commodities.

China's economic slowdown has led to a drop in demand for commodities and released some pressure on prices. However, the economic slowdown has added more supply chain challenges that will likely continue to sustain inflationary pressure across consumer nations.

Geopolitical tensions in Eastern Europe, in addition to western sanctions on Russia that have led to private sector divestments and increased trade disruptions in selected commodities, will also continue to add considerable uncertainty to commodity markets and further sustain inflationary pressure.

Trends in selected commodity markets

The **energy price index** declined m-o-m by 6.1% following three straight months of gains. The decline was driven mainly by lower natural gas prices in Europe, followed by coal and average crude oil prices, which were partially offset by an increase in US natural gas prices. The index is up by 84.5% y-o-y.

The **non-energy index** increased m-o-m by 0.6%, trending upwards for the fourth consecutive month. Early in April, Indonesia announced an export ban on palm oil that added more supply uncertainly around the exports of edible oils. Moreover, adverse weather concerns in Latin America (extended drought) and in the US (extended colder weather) have added further supply uncertainty to agricultural commodities and food on top of the geopolitical developments in Eastern Europe. Both factors are sustaining upward pressure on the index, which is up by 26.5% y-o-y.

Table 2 - 1: Commodity prices

Commodity	Unit	Monthly averages			% Change	Annual av	erage
	Onic	Feb 22	Mar 22	Apr 22	Apr 22/Mar 22	2021	2022
Energy*	Index	131.3	163.2	153.3	-6.1	78.0	142.3
Coal, Australia	US\$/mt	222.0	324.4	288.2	-11.2	90.2	257.9
Crude oil, average	US\$/b	93.5	112.4	103.4	-8.0	60.2	98.3
Natural gas, US	US\$/mbtu	4.7	4.9	6.5	33.7	3.2	5.1
Natural gas, Europe	US\$/mbtu	27.2	42.4	32.2	-24.0	6.7	32.5
Non-energy*	Index	128.9	139.0	139.9	0.6	105.5	132.9
Base metal*	Index	138.9	149.9	146.1	-2.5	106.8	142.0
Precious metals*	Index	142.2	149.6	148.1	-1.1	140.5	144.7

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

Sources: World Bank and OPEC.

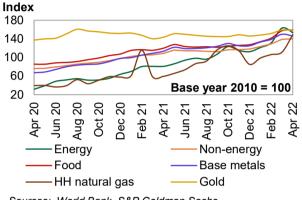
Average crude oil prices declined by 8.0% m-o-m. A dampened Chinese demand outlook amid COVID-19 lockdowns, coordinated SPR releases, and a stronger US dollar amid higher interest rates supported the price decline. Additionally, the decline in Russia crude supply was less than anticipated, thus easing and the market's perception of supply tightness. Prices are up by 63.3% y-o-y as market fundamentals still show a tight supply as we approach the driving season.

Henry Hub natural gas prices advanced for the fourth consecutive month, increasing by 33.7% m-o-m. At a time of low demand in the US amid warmer weather, competition for US LNG cargos has intensified between Asian and European buyers making it harder to restock ahead of the storage injection season. Meanwhile, according to the EIA, inventories remain 17% below the five-year average (2017–2021). Both factors continue to sustain the upward pressure on high Henry Hub prices. Y-o-y, prices are up by 58.1%.

Natural gas prices in Europe declined considerably from the record highs registered in March. The average Title Transfer Facility (TTF) price went from \$42.4/mmbtu in March to \$32.2/mmbtu in April, a 24.0% m-o-m decline. The price decline was supported by declining demand in the EU, amid warmer weather; lower imports from China, as excess inventory capacity and warmer weather helped increase LNG exports to Europe; and some European buyers expressing a desire to continue to receive Russian gas supplies by complying with Russia's new two-payment system to avoid violating sanctions. Nevertheless, upside risk remains and y-o-y prices are up by 387.2%.

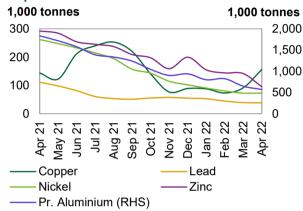
Australian thermal coal prices fell by 11.2% m-o-m following three consecutive months of gains. Coal prices initially jumped following Japan's and the EU's announcement of a ban on Russia coal imports. However, prices quickly receded as factories and power utilities shifted to natural gas and fuel oil as alternative sources of energy. Moreover, China's coal imports have been in steady decline since the 4Q21 in an attempt to boost local production. However, coal flows in China have suffered as result of the recent COVID-19 outbreaks. The province of Hebe, a major hub to transport coal from the northern producing areas to the south region has been in lockdown since March 2022 dampening the outlook for coal demand in China and thus easing pressure on prices. Prices are up 186.0% y-o-y, and there remains upside risk.

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 price index** fell by 2.5% m-o-m driven by declines in aluminium, nickel and copper, which were partially offset by increases in zinc and lead. Ongoing lockdowns in China amid Covid-19 outbreaks, continued to weigh on the economy and have dampened demand for base metals, offsetting the impact of supply chain challenges and geopolitical developments. Nevertheless, the index is still up by 33.0% y-o-y.

Aluminium prices declined by 7.3% m-o-m. The construction sector, the biggest consumer of aluminium in China, has been hit hard by the ongoing lockdowns putting downward pressure on prices. Nevertheless, the risk to aluminium prices remains to the upside as the London Metal Exchange (LME) continues to report declining stocks (11.9% lower m-o-m), while high energy costs continue to weigh on aluminium production in the EU. These risk factors continue to support the upward yearly trend in aluminium prices, which are up by 51.2% y-o-y.

Average monthly copper prices declined by 0.7% m-o-m. According to the LME, stocks increased by 70.7% m-o-m, supporting the downward pressure on prices. Additionally, China's softer demand amid Covid-19 lockdowns has also helped eased pressure on prices. Prices are up by 15.4% y-o-y.

Lead prices advanced for the second consecutive month, increasing by 1.5% m-o-m. Declining stocks levels at the LME (1.5% lower m-o-m) continue to support the upward pressure on prices. Y-o-y, prices are up by 16.1%.

Nickel prices receded by 2.3% m-o-m. The decline in prices is supported by the absence of the volatility generated by the short-squeeze the previous month, as well as LME stock levels being up 0.4% m-o-m. However, uncertainty around supply remains and prices are up by 63.5% y-o-y.

Zinc prices continued on an upward trend, rising for the fourth consecutive month. They increased by 10.1% m-o-m. The zinc price rally continues to be supported declining stock levels at the LME. Stocks levels fell by 32.8% m-o-m.

The **precious metals index** declined by 1.1% m-o-m following a decline in prices across all index components. Gold prices declined m-o-m by 0.6%, driven mainly by expectations of additional interest rate increases by the US Federal Reserve (Fed).

The decline in the safe heaven appeal of gold has had a knock on effect on other precious metals, as both silver and platinum declined m-o-m by 3.0% and 7.5% respectively. Both metals also continue to trend downwards; silver is down by 7.6% y-o-y and platinum down by 13.6% over the same period. Gold, however, trended upwards again in March increasing by 5.6% and thus sustaining the positive yearly trend of the index, which is up by 3.0% y-o-y.

Investment flows into commodities

Money managers' net length positions fell m-o-m by 6.2% on selected commodities following net length declines in gold, crude oil and copper, although this was partially offset by a net length increase in natural gas. Meanwhile, total open interests fell for the second consecutive month, declining by 2.9% m-o-m following a drop in crude oil and gold open interests. This was partially offset by open interest increases in natural gas and copper.

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

Selected commodity	Open	interest		Net le	ength	
Selected Commodity	Mar 22	Apr 22	Mar 22	% OI	Apr 22	% OI
Crude oil	2,806	2,662	268	10	250	9
Natural gas	1,108	1,175	-7	-1	22	2
Gold	835	762	151	18	123	16
Copper	208	216	36	17	25	11

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

Sources: CFTC and OPEC.

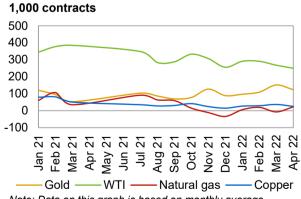
Total crude oil (WTI) open interest (OI) fell for the second consecutive month, decreasing m-o-m by 5.1%. Additionally, net length declined by 6.6% in the same period. Although, crude prices have dropped, volatility continues to dampen money managers' risk appetite.

Total Henry Hub's natural gas OI increased m-o-m by 6.0% as net length moved into positive territory, increasing to 2% from total open interest. The bullishness of money managers' is supported by the commodity's price increase.

Gold's OI declined by 8.7% m-o-m, in addition to a decline in net length positions of 18.6% over the same period. The increasingly hawkish tone from the Fed led to a sell-off by money managers in an attempt to take profit before interest kicks-in and further erodes the value of the metal.

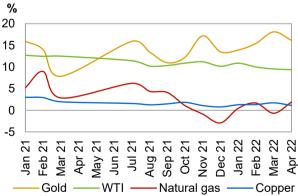
Copper's OI increased by 3.8% m-o-m, while net length fell by 32.0% over the same period. The bearish outlook of the commodity supports the sell-off by money managers as physical stocks are showing signs of a recovery, therefore driving down prices.

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



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

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



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

World Economy

World economic growth for 2022 is revised down to 3.5%, compared to 3.9% in last month's assessment, amid a variety of deteriorating global economic factors, and following a growth estimate of 5.8% for 2021.

Geopolitical tensions in Eastern Europe, and their impact on the global economy, particularly in Europe, continue. Global inflation has risen further and hence, financial tightening continues. Furthermore, supply chain bottlenecks constitute an ongoing concern. While the world has become more accustomed to living with the pandemic, it continues to impact lives and consumer spending habits and it may also be one important reason for growing global labour market tightness, especially in the US and the Euro-zone. Additionally, increasing debt levels in major economies, in combination with rising interest rates, have already led to a selective increase in bond yields, which in turn makes refinancing more challenging.

These issues and their outcomes have already been partly reflected in a 1Q22 contraction in the US and a relatively low growth dynamic in the Eurozone and China, among others. It is only towards the end of 2Q22 that some pick up is expected, which is then carried over into 2H22, and partially also due to some expected seasonality related to the pandemic.

An important underlying assumption to a gradually recovering global economy towards the end of 2Q22 and beyond is the situation in Eastern Europe not worsening, and with no further major spill-overs into other economies, beyond the current impact. However, it is important to monitor how consumers deal with a shortfall in agricultural products from Ukraine and Russia, and what a potential decline in Russian fossil fuel exports to G7 economies could mean for energy supplies, energy prices and consequently global economic growth. Assumptions with regards to the pandemic are guided by the seasonal pattern of the last two years, so the relative improvements in mobility towards the end of 2Q22 are anticipated, that will then carry-over into 3Q22. The 4Q22 is expected to again be impacted by a slowdown in economic activity due to a return of some social-distancing measures.

The upside potential to the current forecast is quite limited. However, it may come from a solution to the Russia and Ukraine situation, fiscal stimulus, where possible, and a fading pandemic, in combination with a strong rise in service sector activity.

Table 3 - 1: Economic growth rate and revision, 2021-2022*, %

				Euro-						
	World	OECD	US	zone	UK	Japan	China	India	Brazil	Russia
2021	5.8	5.4	5.7	5.4	7.4	1.7	8.1	8.1	4.6	4.7
Change from previous month	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2022	3.5	3.0	3.2	3.1	3.5	1.8	5.1	7.1	0.7	-6.0
Change from previous month	-0.4	-0.4	-0.6	-0.4	-0.2	-0.1	-0.2	-0.1	-0.5	-4.0

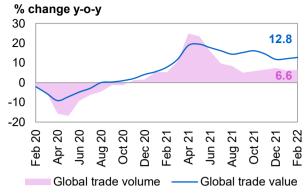
Note: * 2021 = Estimation and 2022 = Forecast. The GDP numbers have been adjusted to reflect 2017 ppp.

Source: OPEC.

Update on latest global developments

With the global pandemic remaining significant in 1Q22, the Russia-Ukraine situation escalating, and with rising and accelerating inflation levels, economic growth in 1Q22 has been significantly impacted. This can be viewed in the quarterly decline in the US and the relatively low 1Q22 growth numbers in the Euro-zone and China, among others. One of the important factors that will shape near-term growth is the ongoing cycle of monetary tightening by major central banks, especially the US Fed. The Fed has most recently lifted its key policy rate by 50 basis points, the largest rate hike in 22 years, and it has announced that it will continue trying to reign in inflationary developments as it deems necessary. These dampening factors were accompanied by an ongoing labour market tightness, particularly in advanced economies. Factors such as a looming EU oilembargo on Russian oil imports and furthermore curtailing gas imports towards the end of the year, combined with China's lockdown measures on major cities, will likely curtail global economic growth potential in the near term. Moreover, supply-chain bottlenecks remain problematic, whether they come from logistical logjams, lockdown measures or a lack of input goods. The global economic dynamic has shifted down over the past month.

With the support of a booming commodities market Graph 3 - 1: Global trade and an acceleration in inflation, global trade developments have seen positive developments. World trade volumes increased by 6.6% y-o-y in February, compared with 6.2% y-o-y in January, based on the CPB World Trade Monitor Index provided by the CPB Netherlands Bureau for Economic Policy Analysis. Trade in value terms rose by 12.8% y-o-y in February, after 12.2% y-o-y, in January.



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

Near-term global expectations

Global growth in 1Q22is much lower-than-expected at the start of the year, with US growth now anticipated to decline by 1.4% q-o-q SAAR and the Euro-zone's growth is only 0.8% q-o-q SAAR. Moreover, China as the third major contributor to global growth, is expected to see its economy expand by only 4.8%, below its growth target of around 5.5% on a yearly average.

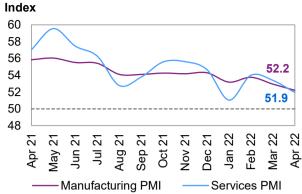
Moreover, it is now forecast that both Russia and Ukraine will face severe recessions in 2022 and that the rest of the global economy will be thoroughly impacted by the conflict through a variety of channels. One of the most important factors is rising inflation impacting the global economy, through strong increases in commodity prices, in combination with ongoing supply-chain bottlenecks and COVID-19 related logistical logiams in China and elsewhere that are fuelling global inflation further. Food inflation, in particular, will likely be an existential challenge for low-income and less-developed economies. Moreover, increasingly tight labour markets in major advanced economies are expected to further fuel wage and salary increases, feeding into an extend inflation trend. The price pressure has guided central banks across the world to act swiftly to rein in inflation. This has been clear in the actions of the US Fed, as well as the gradual actions of the ECB, among others. These developments will need close monitoring. Given the geopolitical situation and the regional and global effect of price rises, consumer and business sentiment is expected to decline, particularly in Europe, but the rest of the world too.

After an estimated global GDP of 3.3% y-o-y in 1Q22, growth in 2Q22 is forecast to decelerate slightly to stand at 3.2% y-o-y. The forecast assumes that 2H22 growth will, relative to 1H22 growth, accelerate, and on a yearly base it will remain clearly below 2021 growth levels. This considers that the conflict in Ukraine 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. Additionally, Russia is assumed to manage better its decline in exports, drop in domestic demand and rising inflation, in 2H22. It is also assumed that price rises in agricultural products due to reduced exports from Ukraine and Russia will not accelerate further in 2H22, although this development needs to be closely watched.

With regards to the other major uncertainty, the ongoing pandemic, the key assumptions are that the negative impact of COVID-19 will be very limited in 2H22. Some COVID-19-related seasonality has been taken into account for 4Q22, similar to the slowing dynamic in economic activity that were seen in 2020 and 2021 caused by rising infections and consequent social-distancing measures.

Global purchasing managers' indices (PMIs) Graph 3 - 2: Global PMI

have so far continued to hold up relatively well, despite the quickly unfolding Ukraine-related developments, the ongoing pandemic and rising inflation, among additional dampening factors. The global manufacturing PMI retracted only slightly to stand at 52.2 in April, compared to 52.9 in March. The global services sector PMI was more severely impacted, standing at 51.9 in April, compared to a level of 53.4 in March.



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

By taking into consideration the severe 1Q22 slow- Table 3 - 2: World economic growth rate and revision, down in the US and the low 1Q22 GDP growth level 2021-2022*, % in the Euro-zone and China, and the worsening of the conflict in Ukraine and its consequent spill-overs, global economic growth in 2022 was revised down to 3.5%. This compares with a global GDP growth level of 3.9% in the previous month. This comes after a 2021 growth level of 5.8%.

	World
2021	5.8
Change from previous month	0.0
2022	3.5
Change from previous month	-0.4

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

OECD

OECD Americas

US

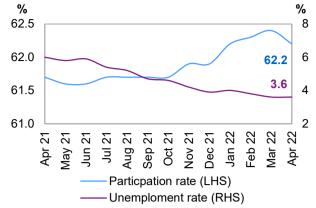
Update on the latest developments

US GDP growth in 1Q22 is reported to have witnessed a severe decline of 1.4% g-o-g SAAR. Growth has likely been impacted by the latest Omicron wave and its associated impacts on the contact-intensive services sector. Furthermore, dislocations as a result of the Ukraine crisis that had started to unfold in at the end of February, such as rising import prices, led to a severe negative contribution in net trade. Economic indicators for the current guarter point to some recovery, but the extent of the rebound remains to be seen. Amid rising inflation, the Fed has continued its monetary tightening efforts and lifted its key policy rate further by 50 basispoints at its most recent rate setting meeting in May. The advancing key policy rate acceleration is very much guided by the latest **inflation** numbers, which reached 8.5% y-o-y in March, following 7.9% y-o-y in February. The strongest appreciation once again came from transportation, pointing to the possibility of some transitory effects on this sub-sector. Transportation sector prices rose by 22.6% y-o-y in April, compared with 21.1% y-o-y in March. Excluding the volatile components of energy and food, inflation stood at 6.4% y-o-y in March, the same level as February.

Consumer confidence remained at a relatively low level, and dropped again compared to previous months. The index provided by the Conference Board retracted to 107.3 in April, compared with 107.6 in March.

The unemployment rate remained at a low level of Graph 3 - 3: US monthly labour market 3.6% in April. The participation rate declined slightly to stand at 62.2% in April, compared with 62.4% in March, which is low compared to pre-pandemic levels.

Non-farm payrolls continued to rise considerably, with an increase of 428.000 jobs in April, the same as in March. With ongoing labour market tightness, wage developments need be closely monitored as they could materially lift inflation. Hourly earnings rose by 5.5% y-o-y in April, compared with 5.6% y-o-y in March, and continued a rising trend that sees earnings substantially above annual pre-COVID-19 growth of between 2% and 3%.



Sources: Bureau of Labor Statistics and Haver Analytics.

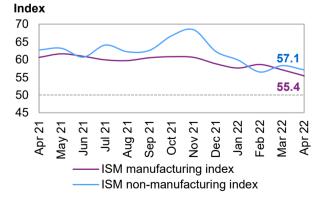
Near-term expectations

Following the severe decline of 1Q22 growth, the US economy is forecast to recover over the remainder of the vear. The 1Q22 factors that led to the 1.4% q-o-q decline are considered to partially be temporary. A considerable negative impact came from the severe rise in import prices, mainly via commodities, leading to a negative trade balance. Moreover, the inventory drawdowns caused GDP to decline too, which may also have been impacted by supply-chain constraints. It remains to be seen how the trade balance and the ongoing supply chain disruptions will evolve on a quarterly base, but some of these largely negative effects are assumed to lessen. Additionally, some growth seems to have been held back by some ongoing COVID-19 related social distancing measures as the spread of the Omicron variant kept consumers from spending, particularly in the contact intensive service sector. With a lessening in COVID-19 infections, the services sector is forecast to recover considerably in 2Q22 and beyond, particularly with the support of the travel and tourism sector and an expected recovery in leisure and hospitality.

One important area to monitor will be the Fed's near-term monetary policies. After the March and May rate hikes, and amid the strong rise in inflation it is clear that the US central bank will pursue the strategy of reigning in inflation. In the current environment, it is very likely that it will continue its forceful actions and a further one percentage point rate hike has been accommodated into the current 2022 forecast. Some moderation in inflation is forecast to materialise in 2H22, leading to a full-year inflation level of 7.4%. However, the continuing rise in wages and salaries, as well as rents and rent equivalents, which accounts for around 40% of US core inflation, may keep inflation at high levels, beyond the expected temporary factors of food and energy prices.

In terms of quarterly growth developments, a GDP decline of 1.4% q-o-q growth in 1Q22 is forecast to be followed by 2Q22 growth of 4.6% q-o-q SAAR. In 3Q22, growth is forecast to reach 4.2% q-o-q SAAR, followed by a slight slowdown to 3.7% g-o-g SAAR in 4Q22.

April PMI levels, as provided by the Institute for Graph 3 - 4: US-ISM manufacturing and Supply Management (ISM), point to an ongoing non-manufacturing indices positive dynamic, albeit at a slowing rate amid the latest inflationary developments, continued labour market tightness and onaoina vlagus bottlenecks. The index level for the services sector, representing around 70% of the US economy, retracted to stand at 57.1 in April, compared with 58.3 in March. The manufacturing PMI also fell in April to stand at 55.4, after 57.1 in March.



Sources: Institute for Supply Management and Haver Analytics.

By taking into consideration actual 1Q22data, and at Table 3 - 3: US economic growth rate and revision, the same time considering a solid rebound for the 2021-2022*, % remainder of the year, the 2022 US GDP growth estimate has been revised down to 3.2%, compared with 3.8% in March. This follows estimated growth of 5.7% in 2021.

	US
2021	5.7
Change from previous month	0.0
2022	3.2
Change from previous month	-0.6

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

OECD Europe

Euro-zone

Update on the latest developments

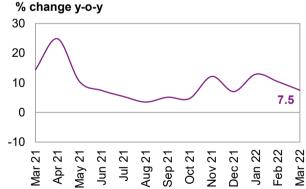
The Euro-zone grew at a lower-than-expected 0.8% g-o-g SAAR in 1Q22. As this is the first estimate published by the EU's statistical office. Eurostat, no further details are available. But net trade, which was impacted by rising import prices, and consumption, affected by COVID-19-related social-distancing measures, may have been two important factors dampening 1Q22 growth. Rising inflation may have also had a dampening impact on private household consumption. Growth in 4Q21 stood at only 1.2% q-o-q SAAR, so the 1Q22 trend is to some extent a continuation of this dynamic. It remains to be seen how the trend will evolve during the remainder of 2022, given the latest developments in Ukraine as well as the ongoing pandemic.

Inflation continued to rise at a high level in April on a yearly basis. Inflation in the Euro-zone stood at 7.5% y-o-y in April, unchanged from March and compared with 5.8% in February. When excluding volatile items such as food and energy, inflation stood at 3.9% y-o-y in April, compared with 3.2% y-o-y in March. Supported by the European Central Bank's (ECB) ongoing monetary easing measures, lending to the private sector by financial institutions continued to expand in March, rising by a 4.1% y-o-y after reaching 4.4% y-o-y in February. In the meantime, the ECB shifted towards monetary tapering and higher interest rates. While its monetary tightening policies are still significantly behind the schedules of the Fed and the Bank of England (BoE), a rate hike in the summer should not be ruled out.

The labour market continued to see improvements. According to the latest numbers from Eurostat, the unemployment rate stood at 6.8% in March, compared with 6.9% in both February and January.

Retail sales continued to rise on a yearly basis in Graph 3 - 5: Euro-zone retail sales value terms, with growth of 7.5% y-o-y in March, following 10.4% y-o-y in February and 12.9% y-o-y in January. That translates into monthly rises of 1.3% y-o-y in March, compared with 1.5% m-o-m in February and 0.7% m-o-m in January.

Industrial production rose in February, the latest available data, increasing by 1.5% y-o-y, compared with a decline of 1% y-o-y in January. This translates into a monthly rise of 0.7% m-o-m in February, compared with a monthly decline of 0.7% m-o-m in January.



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

Near-term expectations

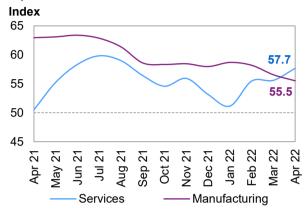
Following low 1Q22 GDP growth, the 2022 GDP growth forecast sees a sound rebound for the remainder of the year. Social-distancing measures at the beginning of the year had a considerable negative impact on the economic dynamic. Furthermore, the start of the armed conflict in Ukraine at the end of February together with a strong rise in inflation may have negatively impacted consumption. With the current reopening of large parts of the Euro-zone economy, a rebound in the contact-intensive services sector is forecast to materialise. Travel and transportation, leisure and hospitality in particular are forecast to rebound and contribute to the European recovery. On the other hand, the manufacturing sector is forecast to remain impacted by ongoing supply chain bottlenecks and a gradual slowdown on the demand side.

The uncertainties for the remainder of the year loom large and the growth dynamic will very much depend on the outcome of the armed conflict in Ukraine and its potential spill-over effect on the Euro-zone economy. The energy supply question will need to be carefully monitored, given the potential implementation of an embargo on Russian oil imports by the EU and its plan to phase out around two-thirds of Russian gas imports by the end of the year. In addition, the pandemic is ongoing in the Euro-zone, and while the impact currently seems the be very mild, the seasonality of COVID-19 over the past two years suggests that it will likely become a topic again in the autumn and winter, with a potential return of social-distancing measures. In the meantime, the ECB has started to gradually tighten its quantitative easing measures, but seems to be much more reluctant to take measures as forceful as those pursued by the Fed and the BoE. This in turn has weakened the Euro and has pushed up imported inflation, a trend that is forecast to continue into 2H22.

After 1Q22 growth of 0.8% q-o-q SAAR, impacted by Graph 3 - 6: Euro-zone PMIs the requirement for social distancing due to the rise in COVID-19 infections, 2Q22 growth is forecast to pick up by 2.4%. In 2H22 the pick-up in services sector demand is leading growth to 3.2% q-o-q SAAR, before the dynamic slows to 2.8% q-o-q SAAR in the final quarter of the year.

The Euro-zone's April PMI pointed to ongoing momentum in manufacturing and to a strong dynamic especially in the services sector. The PMI for services, the largest sector in the Euro-zone, rose to 57.7 in April, following a level of 55.6 in March. The manufacturing PMI retracted slightly to stand at 55.5 in April, after 56.5 in March.

By taking into consideration the lower-than-expected Table 3 - 4: Euro-zone economic growth rate and growth in 1Q22, the GDP growth estimate for 2022 revision, 2021-2022*, % was revised down to 3.1%. This growth forecast considers strong support from the services sector, leading to a sound recovery in the remainder of the year. This revised forecast compares with a growth forecast of 3.5% in the previous month and comes after an upwardly revised growth of 5.4% in 2021.



Sources: IHS Markit and Haver Analytics.

	Euro-zone
2021	5.4
Change from previous month	0.1
2022	3.1
Change from previous month	-0.4

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

OECD Asia Pacific

Japan

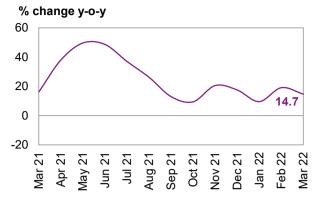
Update on latest developments

The latest economic developments and measures indicate that 1Q22 growth in Japan has been impacted by the latest Omicron wave, as well as a slow-down in external trading activity with its two major trading partners, the US and China, with both witnessing slowing growth momentum in 1Q22. Moreover, growth in Japan has been at around 1% average pre-pandemic levels, and growth, in general, is not anticipated to significantly exceed this yearly average level, particularly given the traditional constraints in the economy's growth potential, such as a tight labour market and high capacity utilization. In contrast to its OECD peer economies, inflation has remained low and the Bank of Japan (BoJ), along with the government, will likely continue its stimulus efforts. It should be noted, however, that the combination of rising inflation and the ongoing monetary stimulus efforts has considerably lowered the exchange rate of the Japanese yen, especially compared to the US dollar. In turn, this has led to rising import prices, particularly through rising prices for necessary commodity imports. Rising import prices, alongside the ongoing pandemic related economic constraints has led to the low growth level in 1Q22. Inflation stood at 1.2% y-o-y in March, low compared to others in the OECD, but the highest level since 2018.

Industrial production (IP) declined in March, falling Graph 3 - 7: Japan's exports by 0.7% y-o-y, a significant drop when compared to the February growth level of 1%. Closely correlated to IP, **exports** in March retracted, albeit rising by 14.7% y-o-y, but this compares with an increase of 19.1% in February.

Retail sales rose slightly in March, at a rate of 1% y-o-y, after a decline of 0.9% y-o-y in February. All three dimensions of IP, exports and retail sales, exhibit a slowing quarterly trend in 1Q22.

Consumer confidence continued on a declining trend, highlighting the ongoing impact of socialdistancing measure in 1Q22, as well as in April. Given the re-opening of most parts of the economy, it should be expected that consumer confidence will recover in



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

the coming months. However, this will evidently depend on pandemic related developments, as well as nearterm geopolitical developments and particularly the external trade dynamic. The consumer confidence index level, as reported by the Cabinet Office, stood at 32 in April, following a level of 32.7 in March and 35 in February.

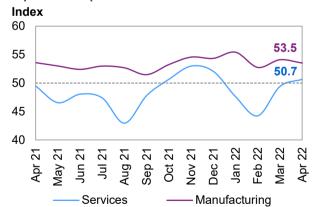
Near-term expectations

Japan's economy is forecast to remain impacted by a number of ongoing and challenging factors.

Continuing supply-chain bottlenecks, rising input prices, and a slowdown in its main trading partners, means external trade is forecast to expand only at a low level. Moreover, the domestic consumption trend remains soft, despite monetary and fiscal stimulus efforts. The BoJ is aiming for higher inflation, but the current lift in inflation via rising import prices, which is forecast to continue, will likely have a negative impact, not only dampening trade-related GDP contributions, but also taxing consumers via higher prices. With the expectation of an ongoing weak Japanese Yen, this negative net-impact on GDP is forecast to remain. The further reopening of Japan's economy from COVID-19 related lockdown measures should, however, be a supportive factor for local consumption and as saving rates are healthy, domestic demand will likely rise gradually, despite rising inflation. Additionally, some of the price-rise dynamic is expected to be compensated via the latest income rises in the labour market, which in February reached their highest levels in more than six months.

GDP in 1Q22 is estimated to have expanded by 0.8% q-o-q SAAR. This low 1Q22 growth level is forecast to rebound to stand at 2.6% q-o-q SAAR in 2Q22 and move towards 2.7% q-o-q SAAR entering 3Q22. Growth is expected to reach 2.2% q-o-q SAAR in the final quarter of the year.

While a continuing slowdown in manufacturing activity Graph 3 - 8: Japan's PMIs is reflected in April's PMI numbers, the services sector index points to a gradual recovery in April. The services sector PMI, which constitutes around twothirds of the Japanese economy, rose slightly, moving above the growth-indicating level of 50, to stand at compared with 49.4 in March. manufacturing PMI fell to a level of 53.5, compared with 54.1 in March. Although, this still indicates a sound underlying momentum in the manufacturing sector.



Sources: IHS Markit, Nikkei and Haver Analytics.

GDP growth for 2022 was lowered slightly to stand Table 3 - 5: Japan's economic growth rate and at 1.8%. This compared with a growth forecast level revision, 2021-2022*, % of 1.9% in last month's report. This anticipates a sound recovery in 2Q22 and 3Q22, in particular. In addition to some recovery in external trade, GDP growth is expected to remain well supported by domestic demand in the near term, although COVID-19-related developments remain influential. Ongoing stimulus measures are also expected to support a recovery in private household consumption Source: OPEC. and investment

	Japan
2021	1.7
Change from previous month	0.0
2022	1.8
Change from previous month	-0.1

Note: * 2021 = Estimation and 2022 = Forecast.

Non-OECD

China

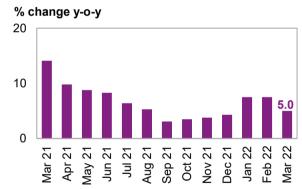
Update on the latest developments

China's real GDP advanced 4.8% y-o-y in 1Q22, showing a better-than-expected economic performance and surpassing the growth of 4% y-o-y recorded in 4Q21. Yet the risk of a sharp slowdown in economic activity in the coming months heightened, due to the zero-COVID-19 strategy, a prolonged downturn in the property sector and uncertainty stemming from the geopolitical tension in Eastern Europe.

Recent data suggested a significant downturn in economic activity. For instance, retail sales contracted 3.5% y-o-y in March, falling into contraction territory for the first time since July 2020. Retail trade advanced only by 3.3% in 1Q22 compared with a gain of 12.5% in 2021.

Industrial production grew at a softer pace of 5% Graph 3 - 9: China's industrial production y-o-y in March following a 7.5% y-o-y gain in January-February combined as both manufacturing and utilities production slowed, amid a further rise in mining output. For the first three months of 2022 industrial output advanced by 6.5% y-o-y.

Meantime, China's labour market showed signs of increasing joblessness. Indeed, according to China's nationwide survey, the unemployment rate increased to 5.8% in March, the sharpest since May 2020, and up from 5.5% in February. The March unemployment rate was higher than the government's 5.5% target for this year. Over 1Q22, China created 2.85 million new jobs and the government set a target of creating over 11 million new urban jobs for 2022 after adding 12.69 million in 2021.



Sources: China National Bureau of Statistics and Haver Analytics.

The latest external demand data indicated that China's trade surplus jumped to \$51.12 billion in April from \$40.89 billion in April 2021, the largest trade surplus since January, Exports increased by 3.9% y-o-y, the smallest export rise in nearly two years as well as the first single-digit increase in 18 months. Meanwhile, import growth remained flat over a year earlier at \$222.50 billion in April 2022, following a 0.1% fall a month earlier amid lingering uncertainty due to geopolitical tensions and the ongoing COVID-19 curbs in some key Chinese cities. In April, China's trade surplus with the US rose by 14.7% y-o-y to \$32.2 billion from \$32.09 billion in March. Over the January-April period, China's goods account posted a surplus of \$214 billion.

Noticeably, according to the People's Bank of China, China's FX reserves fell to \$3.1197 trillion in April from March's \$3.188 trillion, which was the fourth monthly decline in a row amid growing pressures on capital outflow and a weakening yuan.

On the monetary policy front, in late April, Chinese officials moved to support the falling yuan by cutting the amount of money that banks need to keep in reserve for their foreign-currency holdings. The PBoC cut its benchmark reserve requirement ratio for all banks by 25 bps, in an effort to boost the long-term funds for banks, and kept borrowing costs of its medium-term lending facility (MLF) steady for the third straight month. Moreover, the People's Bank of China (PBoC) kept its benchmark interest rates unchanged for corporate and household loans and for the one-year loan prime rate (LPR). The five-year rate was kept at 4.6% after a 5-basis-point cut in January.

In the interim, the PBoC pledged to continue improving the structural monetary policy framework. PBoC highlighted that prior use of these structural tools kept interbank liquidity ample, supported credit growth, and had a unique advantage in boosting the economy's weak links. According to Bloomberg, these monetary instruments have led to 2.3 trillion yuan (\$345 billion) in new base money since 2020.

Following the US interest rate hikes, there are concerns about the outflow of capital from the Chinese ecosystem, resulting in tightening financial conditions at a time when growth is already slowing due to COVID-19 lockdowns. Yet it is believed that the PBoC might have sufficient ammunition to counteract the Fed's tightening offensive by cutting interest rates itself. Yet it is worth to notice that as far as the economy is under strain from lockdowns to curb COVID-19 outbreak, the PBoC might keep take smaller future RRR cuts on – 25 bps magnitude.

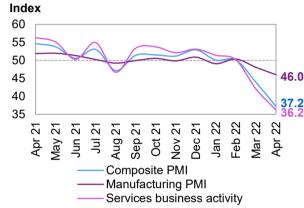
Near-term expectations

China's short-term economic outlook could be skewed further to the downside due to the prolonged lockdown in Shanghai and other main provinces. These lockdown policies have been shown to be severely disruptive to domestic economic activity and shipping logistics.

Meanwhile, repercussions from the geopolitical Graph 3 - 10: China's PMI tensions in Eastern Europe could weigh on external demand. The government most likely would shore up growth with stronger stimulus policies. However, as long as mobility is widely restricted, the effectiveness of these policies could be limited.

April's PMI reflected the downturn in economic activity as both the manufacturing and service PMIs remained in contraction territory. The manufacturing PMI slumped to a 26-month low of 46.0 in April from 48.1 in March. The services PMI sank to 36.2 in April from 42.0 in March. Both manufacturing and services business sentiment were subdued amid concerns about the trajectory of the ongoing COVID-19 measures.

Considerina the recent developments in China, the country's real GDP revision, 2021-2022*, % forecast for 2022 is revised down to 5.1% from 5.3% in the last month's assessment. Uncertainty still high. as both upside potentials and down side risks are highly depended on the COVID-19 trajectory.



Sources: Caixin, IHS Markit and Haver Analytics.

macroeconomic Table 3 - 6: China's economic growth rate and

	China
2021	8.1
Change from previous month	0.0
2022	5.1
Change from previous month	-0.2

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

Other Asia

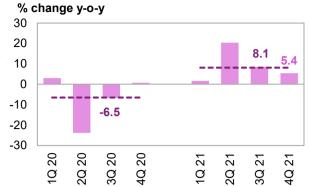
India

Update on the latest developments

The combination of repressed demand, supply chain issues and the Russia-Ukraine tensions has clouded India's growth outlook. However, recent economic indicators suggest that consumer confidence rose to 71.7 in March compared with the previous available data of 64.4 in January. This is the highest reading in two years and may reflect improved sentiment on employment and household income. Despite the ongoing global supply shortage of semiconductors, total passenger vehicle sales advanced 6.3% y-o-y to 279,501 units in March, accelerating from a 3.4% y-o-y in February.

On the production side, recent data indicated that Graph 3 - 11: India's GDP quarterly growth industrial output growth advanced 1.7% y-o-y in February from an upwardly revised 1.5% y-o-y in January.

On the employment front, pressure on the labour market increased as the unemployment rate edged up to 7.8% in April from 7.6% in March. India's jobless rate dropped to 7.4% in 1Q22 compared with 7.5% in -10 4Q21.



Sources: National Informatics Centre (NIC) and Haver Analytics.

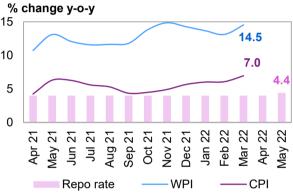
The consumer price index (CPI) accelerated to Graph 3 - 12: Repo rate and inflation in India almost 7.0% in March 2022 from 6.1% in February 2022, recording the highest rate since October 2020 15 and exceeding the upper boundary of the central bank's inflation rate target of 2-6%. The main upward 10 pressures are from higher food prices, especially for essential goods such as cooking oil, meat and vegetables.

Similarly, the wholesale price index (WPI) increased to 14.5% in March 2022 from 13.1% a month earlier amid the elevated input cost and delays in global shipments.

Incorporating the surging commodity prices, the Reserve Bank of India (RBI) upwardly revised the country's inflation forecast for FY 2022-2023 to 5.7% from 5.3%.

Moreover, unexpectedly on 4 May 2022, the RBI Graph 3 - 13: India's trade balance raised the **key repo rate** by 40 bps to 4.4% from 4.0% and raised the cash reserve ratio by 50 bps to 4.5% from 4% as inflation pressures are becoming more acute and there is a risk that inflation could remain elevated. Policymakers pledged to maintain an accommodative monetary policy to support the economic recovery and help mitigate the negative impacts of COVID-19.

Regarding the external demand outlook, preliminary data indicated that India's trade deficit widened \$20.1 billion in April 2022, higher than the \$15.3 billion deficit in April 2021. Exports increased 24.2% y-o-y to \$38.19 billion and imports rose 26.6% \$58.26 billion.



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



Sources: Ministry of Commerce and Industry and Haver Analytics.

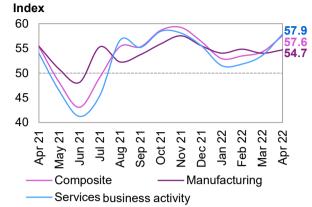
Near-term expectations

India's economic outlook is bolstered by rising consumer and business confidence. Nonetheless, the economy is facing headwinds such as the rapid increase in inflation; limited room for fiscal stimulus to support growth; rising external risks due to the supply chain issues; and lower foreign demand driven by either by COVID-19 outbreaks or geopolitical tensions. The latter could result in a critical drop in India's current account balance considering the country's dependence on imports to meet its energy requirements. Meanwhile, the rising food inflation rate could offset the recovery in private consumption. Moreover, the indirect impact of high inflation could increase pressure on the labour market considering the decrease in real wages.

Additionally, the recent US Fed rate hikes may impact foreign institutional investments in emerging markets, including India. This might lead to a drop in rupee value against the dollar leading to additional pressure on the already high import prices, then to a higher imported inflation and production costs as well as higher retail inflation.

April PMI indices have mirrored the increased Graph 3 - 14: India's PMIs consumer and business confidence following the relaxation of COVID-19 restrictions. The S&P Global India manufacturing PMI rose to 54.7 in April from 54.0 in March.

Meanwhile, the S&P Global India services PMI surged to 57.9 in April from 53.6 in March and marked the highest reading since November 2021. Yet business sentiment for both manufacturing and services sectors could weaken amid concerns inflationary pressures.



Sources: IHS Markit and Haver Analytics.

For this month's report, India's 2022 GDP is revised Table 3 - 7: India's economic growth rate and down slightly to 7.1% from 7.2% in last MOMR. There revision, 2021-2022*, % are further risks to the downside due to global economic uncertainties driven by geopolitical tensions and local inflation concerns.

	India
2021	8.1
Change from previous month	0.0
2022	7.1
Change from previous month	-0.1

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

Latin America

Brazil

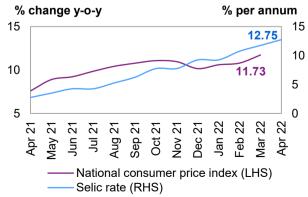
Update on latest developments

Brazil's recent leading economic indicators suggested that the economy may have recovered some lost ground following the end of the first Omicron wave. On the consumer side, retail trade rose 1.3% y-o-y following a revised 1.5% contraction in January. Moreover, the consumer confidence index surged to 78.0 in April from 76.6 in March. Industrial production contracted at a softer rate and decreased 2.1% y-o-y in March compared with a decline of 4.2% y-o-y in February.

Labour market pressures have eased as well. Brazil's unemployment rate remained at 11.2% in March 2022, unchanged from February. In 1Q22 unemployment rate averaged 11.2%.

Inflationary pressures continued to grow, with Graph 3 - 15: Brazil's inflation vs. interest rate inflation surging to 11.7% in March 2022 from 10.8% in the previous month. This was the seventh ₁₅ consecutive month of double-digit inflation and the sharpest rise since October 2003. The highest price increases were seen for transport, food, housing and 10 residential electricity.

In response, the central bank continued its rate normalization policy and raised the Selic rate by another 100 bps to 12.75% in April from 11.75% in previous month, with the possibility of another 100 basis point increase in the upcoming month.



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

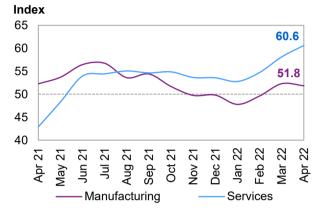
Although the contractionary monetary policy might weigh on the economic recovery, the central bank is battling persistent energy and food shocks that have kept inflation above 10% for at least seven consecutive months and it is hoping to combat secondary impacts of surging commodity prices by following these tighter monetary conditions.

Near-term expectations

Brazil's fiscal outlook was supposed to be positive following the increase in commodity prices fed by the tensions in Eastern Europe. Yet the surging inflation rate as well as the tighter monetary policy could offset this positive outlook and indeed increase the uncertainty regarding near-term economic conditions. The latest data still shows resilient economic performance. However, the economic recovery could be muted by policy tightness and the political uncertainty at both the local and global levels.

The recent services PMI reflected an optimistic Graph 3 - 16: Brazil's PMIs outlook as it rose to 60.6 in April from 58.1 in March. The solid increases was driven by robust domestic demand that led to increases in both services output and new business.

On the other hand, the manufacturing PMI mirrored concerns over the uncertain economic environment amid persistent supply bottlenecks. The manufacturing PMI dropped to 51.8 in April from 52.3 in the previous month, driven by slower growth in production and new orders.



Sources: IHS Markit and Haver Analytics.

Brazil's GDP growth forecast for 2022 is revised Table 3 - 8: Brazil's economic growth rate and down to 0.7% from 1.2% in the last MOMR to account revision, 2021-2022*, % for the impact of the tight monetary policy as well as elevated inflation. This forecast could be skewed further down amid concerns over higher inflation. while fiscal stress following COVID-19 support efforts is an additional risk factor for the recovery. Additionally, the developments related to geopolitical tension in Eastern Europe and the political uncertainties associated with the upcoming 2022 presidential election could add other downside risks.

	Brazil
2021	4.6
Change from previous month	0.0
2022	0.7
Change from previous month	-0.5

Note: * 2021 = Estimation and 2022 = Forecast. Source: OPEC.

Africa

South Africa

Update on the latest developments

The recent Quarterly Bulletin of the South African Reserve Bank (SARB) suggested that the country's ratio of household debt to nominal disposable income dropped to 67.0% in 2021 from 77.1% in 2020. Yet the ratio of debt to disposable income remained high as private debt increased. Indeed, household disposable income might be constrained further by tight labour market conditions characterized by the elevated jobless rate, muted job creation growth as well as the soft nominal wage increase. For instance, The FNB/BER Consumer Confidence Index for South Africa fell to -13 in 1Q22 from -9 in in 4Q21. This was the lowest reading since 2Q21, mirroring concerns over the global impact of both elevated inflation and the geopolitical tension in Eastern Europe. February's retail trade data suggested that retail activity decreased for the first time since the middle of 3Q21 to 0.9% y-o-y compared with growth of 7.7% y-o-y in January. Similarly, industrial production growth decelerated sharply to 0.2% y-o-y in February from the downwardly revised 2% growth in the prior month.

Meantime, the boom in commodity prices renewed the focus on South Africa's mineral potential. However, South Africa's economy might not take full advantage of the price boom amid a wide range of underlying challenges in the country's mining sector, such as power supply constraints, logistics bottlenecks and regulatory uncertainty. Indeed the latest Annual Survey of Mining Companies by the Fraser Institute, a think tank, indicated a significant drop in South Africa's Investment Attractiveness Index rank in 2021 to 75 (out of 84 jurisdictions) from 60 (out of 77 jurisdictions) in 2020, mainly due to deterioration in the mineral potential. Recently the government unveiled a new policy to support mining exploration, but the proposed policy might be insufficient in the face of the detrimental impact of frequent power rationing as well as rail and port capacity challenges.

The annual inflation rate jumped to 5.9% and remains close to the upper boundary of the SARB's target range of 3-6%. On a monthly basis, consumer prices went up by 1% in March, faster than a rise of 0.6% in February.

Near-term expectations

The geopolitical tension in Eastern Europe has increased the stagflation risk in South Africa's economy, which already featured low GDP growth and high inflation prior to the Russia-Ukraine tensions. Indeed, over the 2015-2019 period, the economy grew on average by less than 1% p.a., while inflation averaged 5.0% p.a. Additionally, the elevated living costs and contractionary monetary policy might weigh heavily on private spending, which would slow the economic recovery. The seasonally adjusted Absa Purchasing Managers' Index fell to 50.7 in April from 60 in March. The index pointed to the ninth straight month of expansion in manufacturing activity. However, April's reading was the weakest since July 2021 amid the devastating floods in the KwaZulu-Natal province, which left the area with significant infrastructure damage.

For this MOMR, South Africa's 2022 GDP forecast is Table 3 - 9: South Africa's economic growth rate kept unchanged at 2.5%. The uncertainty surrounding and revision, 2021-2022*, % this forecast remains high considering the rising inflationary pressures, the soft households' financials. weak labour market and the geopolitical tension in Eastern Europe.

	South Africa		
2021	4.9		
Change from previous month	0.0		
2022	2.5		
Change from previous month	0.0		

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

Russia and Central Asia

Russia

Update on the latest developments

According to the monthly GDP estimates released by Russia's Ministry of Economic Development, the country's economic growth slowed to 1.6% y-o-y in March 2022, from 4.3% y-o-y in February, as the economy faces unprecedented sanctions sparked by the geopolitical tension with Ukraine. Nonetheless, some of the macroeconomic indicators posted growth but at a slower pace compared with the previous month. For instance, retail trade grew 2.2% y-o-y in March compared with 5.7% y-o-y in the prior month. Similarly, consumer confidence edged up to -21 points in 1Q22 from -23 points in 4Q21, however the higher household confidence of 1Q21 might have been driven by the optimistic following the easing of most COVID-19 restrictions.

Industrial production grew by only 3% y-o-y in March, easing from 6.3% y-o-y growth in February. This was the smallest annual expansion in industrial output since March last year due to the slower rate of output growth for the extraction of raw materials as well as a decline in manufacturing activity. On a monthly basis (NSA), industrial output surged 9.9% in March following a contraction of 3% in February.

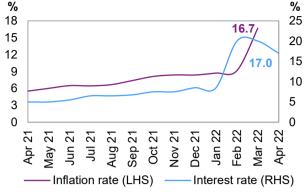
According to the latest available data, the consumer price index (CPI) indicated that inflation accelerated to 16.7% y-o-y in March 2022, up from 9.2% in February 2022.

Similarly, the producer price index (PPI) jumped 26.7% y-o-y in March compared with 23.5% y-o-y in February. This was the highest inflation rate since March 2015 amid the sharp rouble depreciation and increase in global food prices.

Russia's central bank expects inflation (CPI) to decrease to 12.5% in April from 18.3% in March.

Russia's central bank recently cut the benchmark Graph 3 - 17: Russia's inflation vs. interest rate interest rate by 300 bps to 14% in May, from 17% in April, amid a change in the balance of risks of 18 accelerated consumer price growth, as well as a 15 decline in economic activity. Additionally, the 12 government has increased the fund that cushions the economy with \$3.4 billion in additional oil and gas revenues resulting from rising energy prices.

Regarding the labour market, the latest data suggested that Russia's unemployment rate was 4.1% in March 2022, unchanged from the previous month. Nevertheless, the short-term unemployment rate may rise because of the departure of several foreign firms.

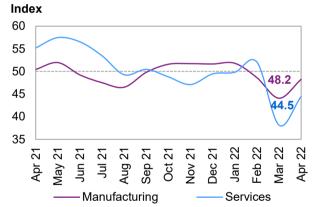


Sources: Federal State Statistics Service, Central Bank of Russia and Haver Analytics.

Near-term expectations

Despite the recent positive figures from the main macroeconomic indicators, the economic outlook could decline drastically amid the external sanctions imposed on Russia, the sharp drop in business and consumer activity, as well as the financial conditions. So far, Russia's economy has benefitted from a strong macrofinancial framework supported by increased energy prices, but these external conditions might lead to significant economic challenges, especially if the ongoing geopolitical tension stretches beyond 1H22. The increase in defence spending may provide significant support but the consumption outlook might be grim amid labour market pressures and the drop in real income driven by elevated inflation. Moreover, soft household spending and the tight external economic conditions might restrain industrial output growth. Nevertheless, the rouble recently gained ground amid a strong flow of energy revenues and tough capital controls as well as mandated hard currency sales by exporters.

April's manufacturing PMI tumbled at a softer rate Graph 3 - 18: Russia's PMI compared to the previous month as it increased to 48.2 in April 2022 from 44.1 in March. Yet this was the third straight month of contraction in factory activity amid the decline in output, new orders, employment. and stocks of purchases. Indeed, according to an IHS Markit economics survey, manufacturing business sentiment in April was the second lowest since June 2020 due to the sanctions and a drop in customer purchasing power.



Sources: IHS Markit and Haver Analytics.

Similarly, the S&P Global Russia services PMI edged up to 44.5 in April 2022 from March's 22-month low of 38.1. Still, the reading suggested the second straight month of contraction in the services sector, and business sentiment remained pessimistic on inflation pressures and a further fall in employment amid efforts to cut costs.

Accounting for the further slowdown in economic Table 3 - 10: Russia's economic growth rate and activity indicated by recent developments and taking revision, 2021-2022*, % account of the high energy prices, Russia's 2022 GDP forecast is revised down to -6.0% from -2.0% in the last MOMR.

	Russia
2021	4.7
Change from previous month	0.0
2022	-6.0
Change from previous month	-4.0

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

OPEC Member Countries

Saudi Arabia

Saudi Arabia's real GDP grew by 9.6% y-o-y in 1Q22, according to preliminary estimates. This was the strongest quarterly economic expansion since 2011, driven by 20.4% y-o-y growth in oil activity. Non-oil activity expanded by 3.7 % v-o-v. Public spending edged up by 2.4% v-o-v.

On a guarterly seasonally adjusted basis, the Saudi economy grew by 2.2% amid the positive contribution of both oil and non-oil activity. Meanwhile, government services activity dropped by 0.9%.

The Saudi Central Bank (SAMA) raised both the reportate and the reverse reportate by 50 bps to 1.75% and 1.25%, respectively, following the hike in the US Federal Reserve benchmark rate, because the Saudi currency is pegged to the dollar. The S&P Global Saudi Arabia PMI fell to 55.7 in April 2022 from March's four-month high of 56.8. However, the index pointed to the 20th straight month of growth as output remains significantly positive, driven by the improvement in both purchasing and supplier delivery times. The Saudi economy is most likely to continue to expand over the short term, supported by higher fossil fuel prices and strong growth in domestic demand.

Nigeria

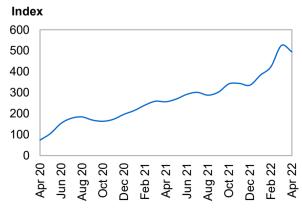
Nigeria's private sector has continued to gain momentum this year. Indeed, the Stanbic IBTC Bank purchasing managers' index (PMI) rose to 55.8 in April from 54.1 in March, which is higher than the long-run series. This reading pointed the sharp improvement in business conditions that have been building up for the past 22 months. Meanwhile, the strong recovery in the hydrocarbons sector might further bolster the economic recovery. Yet rising insecurity, domestic supply chain disruptions, localised food shortages and inflationary pressures - driven by both local and global factors - might still pose challenges and weigh on economic activity.

The United Arab Emirates (UAE)

The recent S&P Global UAE PMI stood at 54.8 in March 2022, unchanged from a month earlier, yet the reading pointed the 16th straight month of non-oil private-sector expansion. On the policy front, the Central Bank of the United Arab Emirates (CBUAE) increased the base rate of the overnight deposit facility by 50bps to 2.25%, tracking the increase in the federal funds rate. Moreover, the bank indicated that the rate on borrowing short-term liquidity from the CBUAE through all standing credit facilities would stand at 50 bps above the base rate. Overall, the economic outlook remained positive, due to improving economic conditions supported by the easing of COVID-19-related constrains and the improvement in fossil fuel prices. However, elevated inflation, shipping delays and the tension in Eastern Europe could pose challenges for the short-term economic recovery.

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

The US dollar (USD) continued its strong Graph 3 - 19: The Modified Geneva I + US\$ Basket performance, advancing for the fourth consecutive (base June 2017 = 100) month. The index increased by 2.3% m-o-m supported by an increasingly hawkish US Federal Reserve (Fed) and divergences in monetary policies. The USD rally is particularly stronger against developed market (DM) currencies. The USD increased by 2.9% against the euro and by another 2.9% against the yen in the same period. Both increases are mainly driven by a divergence in monetary policies as both the European Central Bank and the Bank of Japan continue keep interest rates low while the Fed is aggressively hiking its policy rates in an attempt to curb inflationary pressure.



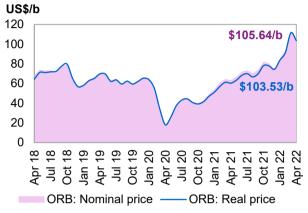
Sources: IMF and OPEC.

Meanwhile, the USD increased against the British pound by 2.9% m-o-m; despite the Bank of England's tighter monetary policies, inflation continues to erode the purchasing power of the pound against the USD. In emerging markets (EM), the USD increased by 1.6% m-o-m against the rupee and by 0.1% against the yuan in the same period. Monetary policy divergence also appears to be a key driver as both India and China have kept interest rates low. Meanwhile, the USD declined against the Brazilian real; Brazil increased interest rates to almost 12% last month and has continued to signal rate increases amid inflationary pressure.

The strengthening of the USD amid higher interest Graph 3 - 20: Impact of inflation and rates continues to ease inflationary pressure on the currency fluctuations on the spot ORB price ORB. Inflation (nominal price minus real price) fell for (base June 2017 = 100) the second consecutive month, declining by 0.9% m-o-m.

In nominal terms, accounting for inflation, the price of the ORB went from \$113.48/b in March 2022 to \$105.64/b in April 2022, a 6.9% decline m-o-m.

In real terms (excluding inflation), the ORB went from \$111.35/b in March 2022 to \$103.53/b in April 2022, a 7.0% decline m-o-m.



Source: OPEC.

World Oil Demand

World oil demand growth in 2021 was revised up by a slight 0.04 mb/d to 5.7 mb/d to accommodate trends in the historical data. The changes reflect latest annual data, as well as upwardly adjusted OECD oil demand as a result of improvements in 4Q21. In 2021, OECD oil demand increased by 2.6 mb/d, while non-OECD oil demand showed growth of 3.1 mb/d y-o-y.

In 2022, oil demand growth was revised down by 0.3 mb/d to average 3.4 mb/d y-o-y, accounting for potential declines in global GDP and the resurgence of the Omicron variant of COVID-19 in China and its impact on global oil demand. World oil demand is projected to average 100.3 mb/d, which is 0.2 mb/d lower than the previous month's estimates and approximately 0.1 mb/d higher than 2019.

In 1Q22, world oil demand recorded robust growth, mainly due to a strong economic rebound, supported by stimulus programmes and a further easing of COVID-19 containment measures amid accelerated vaccination rollouts. OECD oil demand grew by 3.3 mb/d y-o-y while non-OECD requirements gained 1.9 mb/d as compared to the same quarter in 2021. Downward revisions in 2Q22, 3Q22 and 4Q22 oil demand growth mainly took into account current economic forecasts and other developments that could potentially impact world oil requirements.

Diesel and gasoline are anticipated to be the main drivers of demand for petroleum products y-o-y as economic activity, mobility and industrial activities recover globally. A recovery in mobility, coupled with decreasing COVID-19 restrictions and an easing of trade-related bottlenecks in major consuming countries, will support gasoline and diesel demand, while light distillates will be largely supported by strong petrochemical demand, notably in China, the US and India. Finally, the recovery in global air travel amid the relaxation of travel restrictions will back jet kerosene demand.

Table 4 - 1: World oil demand in 2021*, mb/d

Table 4 - 1. World on demand	1111 2021,	IIID/U							
							Change 2021/20		
World oil demand	2020	1Q21	2Q21	3Q21	4Q21	2021	Growth	%	
Americas	22.56	22.82	24.38	24.83	25.05	24.28	1.72	7.62	
of which US	18.35	18.60	20.17	20.35	20.56	19.93	1.58	8.60	
Europe	12.43	11.91	12.64	13.85	13.90	13.08	0.65	5.21	
Asia Pacific	7.14	7.67	7.04	7.11	7.82	7.41	0.27	3.77	
Total OECD	42.13	42.40	44.05	45.79	46.76	44.76	2.64	6.26	
China	13.76	14.08	14.98	14.85	15.44	14.84	1.08	7.83	
India	4.51	4.98	4.50	4.59	5.02	4.77	0.26	5.81	
Other Asia	8.13	8.56	8.98	8.34	8.62	8.63	0.50	6.09	
Latin America	5.90	6.17	6.08	6.38	6.26	6.23	0.32	5.50	
Middle East	7.55	7.85	7.62	8.16	7.95	7.89	0.35	4.63	
Africa	4.05	4.35	4.01	4.11	4.42	4.22	0.17	4.22	
Russia	3.39	3.65	3.42	3.63	3.76	3.61	0.23	6.69	
Other Eurasia	1.07	1.23	1.24	1.09	1.28	1.21	0.14	12.69	
Other Europe	0.70	0.78	0.72	0.73	0.79	0.75	0.06	8.27	
Total Non-OECD	49.06	51.65	51.55	51.87	53.54	52.16	3.10	6.32	
Total World	91.19	94.05	95.60	97.66	100.30	96.92	5.74	6.29	
Previous Estimate	91.13	93.98	95.53	97.59	100.12	96.82	5.70	6.25	
Revision	0.06	0.07	0.07	0.07	0.18	0.10	0.04	0.04	

Note: * 2021 = Estimation. Totals may not add up due to independent rounding. Source: OPEC.

Table 4 - 2: World oil demand in 2022*, mb/d

							Change 20	22/21
World oil demand	2021	1Q22	2Q22	3Q22	4Q22	2022	Growth	%
Americas	24.28	24.78	25.09	25.67	25.72	25.32	1.04	4.30
of which US	19.93	20.10	20.67	21.17	21.18	20.78	0.86	4.30
Europe	13.08	12.98	13.06	14.29	14.14	13.62	0.54	4.14
Asia Pacific	7.41	7.96	7.22	7.25	7.93	7.59	0.18	2.42
Total OECD	44.76	45.71	45.36	47.21	47.79	46.53	1.76	3.94
China	14.84	14.57	15.26	15.28	15.83	15.24	0.40	2.70
India	4.77	5.18	4.82	4.97	5.35	5.08	0.31	6.43
Other Asia	8.63	9.13	9.59	8.93	8.95	9.15	0.52	6.04
Latin America	6.23	6.32	6.25	6.53	6.42	6.38	0.16	2.53
Middle East	7.89	8.16	7.86	8.41	8.18	8.15	0.26	3.29
Africa	4.22	4.51	4.14	4.23	4.55	4.36	0.13	3.13
Russia	3.61	3.67	3.28	3.45	3.54	3.48	-0.13	-3.58
Other Eurasia	1.21	1.22	1.15	1.01	1.24	1.15	-0.06	-4.71
Other Europe	0.75	0.81	0.71	0.73	0.80	0.76	0.01	1.01
Total Non-OECD	52.16	53.57	53.08	53.53	54.85	53.76	1.60	3.07
Total World	96.92	99.28	98.44	100.74	102.64	100.29	3.36	3.47
Previous Estimate	96.82	98.95	99.12	101.06	102.81	100.50	3.67	3.79
Revision	0.10	0.33	-0.67	-0.32	-0.16	-0.21	-0.31	-0.32

Note: * 2021 = Estimation and 2022 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

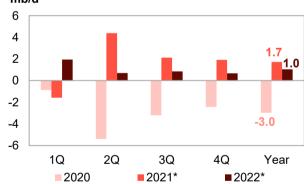
OECD

OECD Americas

Update on the latest developments

US oil demand rebounded in February amid mobility Graph 4 - 1: OECD Americas oil demand, y-o-y improvements and the petrochemical sector's change requirements for distillates. February data indicates bullish oil demand growth of 3.0 mb/d, y-o-y growing by 17%, comfortably above January's level by almost 0.7 mb/d. Demand in February was above pre-pandemic levels as well. Behind the strong mobility recovery, the Apple mobility index for February shows annual growth of 34%, coupled with GDP expansion which fuelled gasoline demand growth of 0.9 mb/d y-o-y.

Strong petrochemical industry requirements, in line -6 with a viable and economical steam cracker feedstock in the US backed the demand for LPG to grow by 1.1 mb/d, or equivalently 39% y-o-y during February.



Note: * 2021 = Estimation and 2022 = Forecast. Source: OPEC.

2022. As naphtha demand remained flat y-o-y, LPG always become viable substitute to naphtha as feedstock for steam cracker when the price of the latter is higher. LPG demand was also supported by residential sector demand. The demand for diesel remained in positive territory in February, though it was still below pre-pandemic levels. Diesel posted growth of 0.2 mb/d y-o-y, with demand in the US is backed by trucking and industrial sector requirements as well as demand for power generation in the residential sector and construction. The strong recovery in air traffic also featured in rising jet kerosene demand, which grew by 0.3 mb/d y-o-y in February. North American air traffic grew in February by 237% compared with 2021 levels, and by 149% compared with January 2022, according to the International Air Transport Association (IATA).

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

rusio 4 of oo on domain, misra			Change	Feb 22/Feb 21
By product	Feb 21	Feb 22	Growth	%
LPG	2.70	3.76	1.06	39.1
Naphtha	0.13	0.14	0.01	7.9
Gasoline	7.74	8.60	0.85	11.0
Jet/kerosene	1.12	1.40	0.28	24.9
Diesel	3.95	4.18	0.23	5.9
Fuel oil	0.26	0.36	0.10	40.2
Other products	1.84	2.29	0.46	24.9
Total	17.73	20.73	2.99	16.9

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

Near-term expectations

Looking ahead, US oil demand is expected to be impacted by some challenges with glimpse of expectations, and the current global economic trajectories necessitate a downward review of economic performance in the US. On the downside, the lower-than-expected performance of the US economy in the near-term is expected to weigh on industrial production and GDP expansion. For now, inflation in the US is at a four-decade high; these factors are expected to suppress oil demand growth to below pre-pandemic levels. Consequently, US oil demand is forecast to grow by 0.9 mb/d y-o-y in 2022. On the other hand, massive government stimulus packages, including a tax holiday, combined with a recovery in mobility, air traffic and petrochemical feedstock requirements are expected to boost oil demand in the near term. In 1Q22, US oil demand is expected to post growth of 1.5 mb/d y-o-y. In this quarter, transportation fuels, gasoline, diesel and jet kerosene are expected to be the main drivers of the demand recovery. Petrochemical feedstock requirements for diesel and residential sector requirements are projected to boost the consumption of LPG.

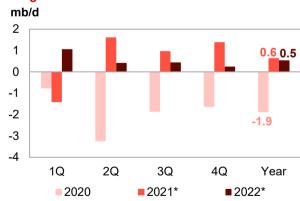
However, in 2Q22, US oil demand growth is expected to fall to 0.5 mb/d y-o-y, on the back of rising inflation, although summer driving activities will bring succour to transportation fuels, including gasoline, diesel and jet kerosene. In 3Q22, demand is expected to slightly pick up and grow by 0.8 mb/d, supported mostly by transportation fuel demand. However, demand will slide to 0.6 mb/d y-o-y in 4Q22 as driving activity is expected to slow during the winter.

OECD Europe

Update on the latest developments

robust ahead of geopolitical challenges in the region. change The latest available data for February in OECD Europe shows oil demand in the region robust, posting growth of approximately 1.5 mb/d y-o-y. Driven by a strong transportation sector recovery, mobility and freight activities strongly supported demand for transportation fuels in the region. Apple's mobility index for February indicated a strong driving appetite by motorists, despite the colder weather, with Italy posting 69% y-o-y growth, Germany recording mobility growth of 37%, while Spain, the UK and France posted growth of 39%, 38% and 30%, respectively. Consequently, gasoline recorded growth of 0.4 mb/d y-o-y, equivalent to 26%, stemming, however, from low the historical levels of the same month in 2021.

February 2022 oil demand in Europe remained Graph 4 - 2: OECD Europe's oil demand, y-o-y



Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

On the back of improved demand for tracking and haulage, European diesel demand was additionally supported by fuel switching in households and small generating plants to avoid higher costs of natural gas. Diesel posted growth of 0.7 mb/d y-o-y, equivalent to 12%. Air travel rose significantly in February with air traffic demand up by 381%, according to IATA. Compared with the same period last year, air traffic demand improved 224% m-o-m. Consequently, jet kerosene requirements increased by 0.4 mb/d y-o-y, or 56%. LPG recorded marginal growth of 41 tb/d y-o-y and naphtha contracted by 65 tb/d y-o-y in February.

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

,			Change	Feb 22/Feb 21
By product	Feb 21	Feb 22	Growth	%
LPG	0.46	0.47	0.02	3.3
Naphtha	0.65	0.58	-0.07	-10.7
Gasoline	0.90	1.12	0.22	24.7
Jet/kerosene	0.42	0.58	0.17	40.0
Diesel	2.88	3.11	0.23	7.9
Fuel oil	0.15	0.17	0.02	14.8
Other products	0.38	0.48	0.10	25.5
Total	5.83	6.51	0.68	11.7

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 ahead, the region is likely to be mostly affected by geopolitical challenges, which are expected to affect commodity flows and may have spill over effects on the region's economies. Consequently, the risks for oil demand in 2022 are rather skewed to the downside in line with the economic forecast for the region. These developments are likely to affect oil demand in the transportation and industry sectors as well as others.

European oil demand is forecast to grow by 0.5 mb/d y-o-y in 2022. In 1Q22, oil demand is expected to post strong growth of 1.1 mb/d y-o-y, supported by the transportation sector, with gasoline and diesel as the main gainers. Jet kerosene will also benefit from the ongoing air travel recovery. However, in 2Q22, oil demand growth is forecast to slow to 0.4 mb/d v-o-v because of geopolitical challenges, spill over effects to economies. as well as the high historical baseline in 2021. Risks are furthermore skewed to the downside depending on the degree of impacts on the region's trade-related supply chain management and the overall performance of the manufacturing sector. Furthermore, persistently high inflation in the region will impact mobility and social activities. In 3Q22, oil demand is forecast to post growth of 0.4 mb/d y-o-y, while in 4Q22 oil demand growth will decline to 0.2 mb/d.

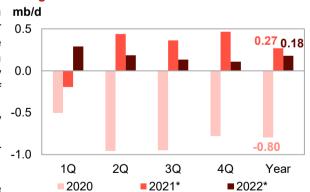
Factors that could further increase oil demand growth are an easing of geopolitical challenges, more government stimulus packages and consequent economic support, as well as lower inflation rates.

OECD Asia Pacific

Update on the latest developments

Oil demand in the Asia Pacific recorded growth of Graph 4 - 3: OECD Asia Pacific oil demand, y-o-y 0.2 mb/d y-o-y in February, following growth of change 0.5 mb/d in January. Demand for major transportation fuels - gasoline and diesel - contracted amid poor mobility in some major oil-consuming countries in the region. South Korea recorded a 19% decline in mobility in February, according to Apple's mobility index. However, Japan saw a mobility recovery of 30% in February, but lower than the previous month. Consequently, gasoline and diesel posted y-o-y losses of 57 tb/d and 23 tb/d, respectively. Similarly, demand for naphtha nosedived by 0.1 mb/d y-o-y after a positive gain of 0.2 mb/d y-o-y in January.

Demand for jet kerosene remained on a positive trajectory in response to the region's air traffic recovery. A report from IATA shows that total traffic



Note: * 2021 = Estimation and 2022 = Forecast. Source: OPEC.

in February 2022 was up 115.9% compared to February 2021, an improvement from January 2022, which was up 83.1%. On the back of this development in the aviation industry, the demand for jet kerosene remained healthy and grow by 0.1 mb/d y-o-y, up by 13%. Similarly, LPG was also on a recovery trajectory, backed by household and petrochemical feedstock requirements as a viable alternative to naphtha. LPG demand posted positive growth in February of 67 tb/d, an increase of 7% y-o-y.

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

Table 1 Croapart Con admarta, mora			Change	Mar 22/Mar 21
By product	Mar 21	Mar 22	Growth	%
LPG	0.47	0.48	0.01	2.1
Naphtha	0.75	0.60	-0.15	-20.0
Gasoline	0.73	0.71	-0.02	-2.6
Jet/kerosene	0.41	0.43	0.03	6.6
Diesel	0.75	0.75	-0.01	-0.8
Fuel oil	0.26	0.28	0.01	4.5
Other products	0.20	0.21	0.01	2.6
Total	3.58	3.46	-0.12	-3.4

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

Near-term expectations

Looking ahead, 2022 oil demand in the Asia Pacific is forecast to grow by 0.2 mb/d y-o-y. The bulk of this growth will be in 1Q22, recording 0.3 mb/d. Non-road transportation and jet kerosene demand are expected to be the main drivers of oil demand growth in 1Q22. In line with the regional aviation sector and improving trade, jet kerosene demand will continue to recover and provide additional support for the 2022 oil demand recovery in the region. In addition, household requirements and petrochemical feedstock demand will boost LPG demand in the near future. In 2Q22, in line with the expected slowdown in global GDP, oil demand growth in the region is projected to slow by 0.1 mb/d, to grow at 0.2 mb/d, y-o-y. Transportation fuels, gasoline and diesel are expected to recover due to summer driving activity and industrial sector requirements for distillates as jet fuel and other products continue to take the lion's share of the oil products recovery mix. Oil demand in the Asia Pacific is expected to continue the same trend, as for 2Q22, into 3Q22 and 4Q22, slowing to 0.1 mb/d in both quarters. Overall, there are prospects for gradual demand recovery as regional economies improve amid sustained government support and as trade-related bottlenecks ease. However, the risk is still tilted to the downside.

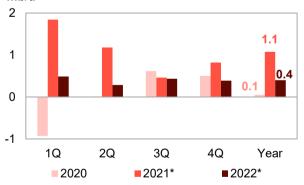
Non-OECD

China

Update on the latest developments

China's oil demand growth sank to a mere 0.1 mb/d Graph 4 - 4: China's oil demand, y-o-y change y-o-y in March 2022, following higher growth of mb/d 0.5 mb/d in February 2022 and 0.8 mb/d in January 2022. The resurgence of COVID-19 Omicron cases in China, which necessitated the re-introduction of lockdowns in some major provinces and in line with the domestic zero COVID-19 containment policy, consequently weighing heavily on manufacturing activities and logistics, with resultant negative impact on oil products demand.

LPG remains the main gainer in March 2022 oil demand, recording growth of 0.2 mb/d y-o-y, or equivalently 7%. LPG demand in China mostly originates in the residential and commercial sectors with significant industrial and petrochemical sector's



Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

propane dehydrogenation (PDH) plants, including two newly commissioned Tengda and Jiangsu Sailboat and Qixiang Tengda. Naphtha demand also grew by 0.1 mb/d y-o-y.

Demand for transportation fuels has been negatively affected by lockdown policies, which weighed heavily on mobility and domestic road freight with more than 20 provinces restricting access to highways in an effort to curb the spread of COVID-19. Those factors, apart from slowing down mobility and trucking activities, impacted factory operations, which slowed demand for gasoline and diesel in March 2022. Consequently, gasoline and diesel witnessed growth of a mere 0.1 mb/d y-o-y, each. The main looser in March 2022 oil demand is the aviation sector with jet kerosene demand showing the biggest contraction among all oil products due to a drastic decline in the daily number of flights. Flights registered a sharp decline of more than 70% in March 2022, m-o-m, while jet kerosene demand contracted by 0.3 mb/d y-o-y.

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

Table 4 of Clinia Con actually, insta			Change	Mar 22/Mar 21
By product	Mar 21	Mar 22	Growth	%
LPG	2.26	2.42	0.16	6.9
Naphtha	1.33	1.45	0.13	9.5
Gasoline	3.12	3.21	0.10	3.1
Jet/kerosene	0.79	0.54	-0.25	-31.5
Diesel	3.01	3.13	0.13	4.2
Fuel oil	0.69	0.70	0.02	2.6
Other products	1.62	1.50	-0.12	-7.7
Total	12.81	12.96	0.15	1.1

Note: * Apparent oil demand. Totals may not add up due to independent rounding.

Sources: Argus Global Markets, China OGP (Xnhua News Agency), Facts Global Energy, JODI, National Bureau of Statistics

China and OPEC.

Near-term expectations

In the near term, the prospects for demand recovery is surrounded by some uncertainties but there is also a glimpse of hope. Overall, oil demand is expected to grow by 0.4 mb/d in 2022. Most of the growth will materialize in 1Q22, with 0.5 mb/d y-o-y. The growth in 2Q22 has been lowered to 0.3 mb/d due to the recent COVID-19 outbreak; many provinces, including Shanghai, have extended lockdowns and the asymmetric rise of cases across the country pose some challenges for a complete recovery in 2Q22. Nevertheless, with vaccinations and other containment measures, by 3Q22, the virus will most likely be contained, enabling an easing of restrictions and leading to mobility recovery and an easing of logistical bottlenecks. Additionally, the economy is expected to be supported by stimulus packages. Under these assumptions, oil demand is projected to grow by 0.4 mb/d in 3Q22 y-o-y; oil demand growth will remain flat at the level of 0.4 mb/d in 4Q22 to account for a seasonal slowdown in gasoline demand during 4Q22.

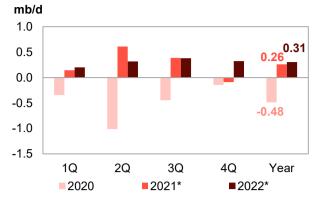
Among oil products, diesel is likely to be the major beneficiary for the stipulated 2022 oil demand growth as local authorities in China plan to resume factory operations and improve logistics. Similarly, if COVID-19 is fully controlled, the summer travel season will boost demand for gasoline, with some recovery in jet kerosene demand. The LPG and naphtha requirements will continue to gain support from domestic cooking requirements for LPG and requirements from two new PDH plants, Qixiang Tengda and Jiangsu Sailboat, which started operations in March. Qixiang Tengda started trial runs in early March and achieved on-spec propylene production within a week. However, it is important to stress that, despite these prospects, there are also some risks to the downside and these relate to COVID-19 developments, challenges in economy, as well as fuel substitution and efficiencies.

India

Update on the latest developments

India's social and economic activities have been rising since the lifting of COVID-19 restrictions. These developments have significantly supported oil demand growth. The latest available data for **March 2022** show an increase of 0.2 mb/d y-o-y, following a strong y-o-y increase also during January 2022. Transportation fuels are among the major components of March 2022 oil demand growth, as mobility has continued to improve and average driving activity in India increased by more than 40% according to the Apple Global Mobility Index. Furthermore, Indian transportation fuel demand has been on increase as people show a preference for private vehicles rather than public transportation for safety reasons. India's gasoline demand rose solidly y-o-y in March, as the market accumulated supplies, foreseeing price spikes while easing COVID-19-related curbs boosted demand.

Spurred by the recovery in mobility, an increase in Graph 4 - 5: India's oil demand, y-o-y change construction activity and rising industrial sector requirements, diesel demand increased by 0.1 mb/d, or 6%, y-o-y. Similarly, economic growth and consequently mobility-related driving activities boosted gasoline demand by 46 tb/d y-o-y. LPG demand rose by 84 tb/d y-o-y, recording a 9% y-o-y increase, as small-scale industrial requirements and household demand for cooking continue to recover. Air traffic remains weak: it has been on a recovery path since February, yet jet kerosene demand grew by only about 7 tb/d y-o-y. Naphtha demand witnessed a 46 tb/d y-o-y contraction in March, as higher retail prices impacted segments in the industrial sector, particularly weakening naphtha and pet coke requirements in India.



Note: * 2021 = Estimation and 2022 = Forecast. Source: OPEC.

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

			Change	Mar 22/Mar 21
By product	Mar 21	Mar 22	Growth	%
LPG	0.88	0.97	0.08	9.5
Naphtha	0.42	0.38	-0.05	-10.9
Gasoline	0.80	0.85	0.05	5.8
Jet/kerosene	0.19	0.19	0.01	3.8
Diesel	1.78	1.88	0.11	5.9
Fuel oil	0.25	0.27	0.02	6.5
Other products	0.50	0.50	0.00	0.4
Total	4.83	5.04	0.21	4.5

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

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

Near-term expectations

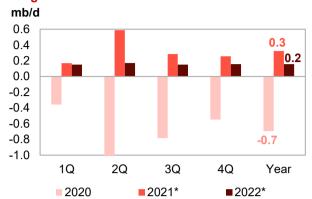
As the Indian economy continues to recover from the recent Omicron wave, oil demand is expected to rise robustly in 2022. The economy is forecast to record robust growth of 7.1%, and as the impact of the COVID-19, domestic economic and social activities will also rebound. Backed by easing logistical bottlenecks and a rise in mobility, oil demand in India is forecast to record annual growth of 0.3 mb/d in 2022 y-o-y. In 1Q22. India's oil demand is forecast to register growth of 0.2 mb/d. For 2Q22, v-o-v oil demand growth is expected to reach 0.3 mb/d followed by 0.4 mb/d in 3Q22, due to summer driving activities. However, the demand will decline slightly to 0.3 mb/d in 4Q22 due to the seasonal slowdown in mobility.

Driven by the post-COVID-19 recovery in mobility and tracking, the transportation fuels segments are expected to be the main drivers of oil demand growth, with gasoline and diesel being the main beneficiaries. Gasoline and diesel demand is likely to be particularly favoured by the expected rise in domestic economic activity and recovering mobility and consequently driving activity. Similarly, in line with a forecast for a robust economy in 2022, the industrial sector will provide support for diesel, LPG and naphtha. LPG will also gain an additional push from vibrant residential sector cooking requirements. Jet kerosene demand is also expected to recover during 2Q22.

Latin America

Update on the latest developments

In Latin America, February data suggest that oil Graph 4 - 6: Latin America's oil demand, y-o-y demand is still healthy showing growth of 0.1 mb/d change y-o-y. On a monthly basis, oil demand growth is stronger than in January. Transportation fuels (gasoline and diesel) were the main drivers of February oil demand in the region. Gasoline demand was backed by strong mobility improvements in Brazil as Apple mobility trends indicate 33% annual mobility growth in Brazil in February. During February, gasoline demand in the region posted growth of 0.2 mb/d, or equivalently of about 17%, y-o-y Increasing diesel demand was backed by heating and power generation: diesel demand recorded growth of 0.1 mb/d y-o-y, marginally higher than January growth levels. Air traffic in the region rose by 243% as compared to February 2021, lending support for jet kerosene to grow by 22 tb/d y-o-y, and an improvement of 24%, y-o-y. Naphtha posted a 2 tb/d growth as LPG declined by 10 tb/d y-o-y.



Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

Near-term expectations

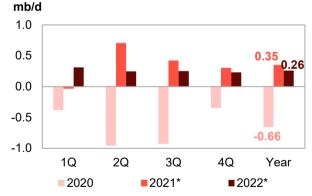
Looking ahead, the oil demand forecast for 2022 in the region remains dependent on developments in the economies of major oil-consuming countries as more than two-thirds of people in the region have now received two COVID-19 vaccine doses. As economies of the countries continue to improve, mobility and economic activities are expected to respond positively. Accordingly, Latin America's 2022 oil demand is forecast to grow by 0.2 mb/d y-o-y. Mobility-induced gasoline and diesel are expected to be the driving force for demand recovery in the region. Furthermore, as international and local aviation continue to improve, jet kerosene will maintain its positive growth trajectory. LPG is also expected to grow.

Middle East

Update on the latest developments

Oil demand in the Middle East was healthy due to Graph 4 - 7: Middle East's oil demand, y-o-y change continuous mobility improvements, with February data indicating growth of 0.3 mb/d, or equivalently 6%, V-O-V.

According to Apple mobility data. Saudi Arabia recorded a rise in driving mobility of 12% annually, while driving mobility in the United Arab Emirates (UAE) rose 48% as compared to same period a year earlier. Behind these healthy developments, gasoline posted growth of 0.1 mb/d, about 8% y-o-y. Diesel demand recorded growth of 81 tb/d y-o-y, up by 6%. Diesel demand Middle East in February was supported by construction activities in Saudi Arabia and the UAE as well as trucking and energy requirements for small electricity generating plants.



Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

Furthermore, industrial requirements for distillates helped residual fuel oil to grow by 0.1 mb/d v-o-v, Finally. jet kerosene demand continued to gradually improve as governments in the Middle East relaxed all travel restrictions.

Consequently, Middle East airline traffic climbed 215% in February 2022, according to IATA. Backed by these developments, jet kerosene demand grew in February by 12 tb/d y-o-y, an improvement over a decline of 18 tb/d in January, y-o-y.

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

,			Change	Mar 22/Mar 21
By product	Mar 21	Mar 22	Growth	%
LPG	0.05	0.05	0.00	-4.6
Gasoline	0.47	0.51	0.03	7.1
Jet/kerosene	0.02	0.07	0.05	235.6
Diesel	0.51	0.55	0.04	7.3
Fuel oil	0.56	0.46	-0.10	-17.1
Other products	0.40	0.42	0.02	4.4
Total	2.02	2.06	0.04	1.8

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

Sources: JODI and OPEC.

Near-term expectations

Behind the healthy developments in transportation sector demand in the Middle East, oil demand in the near term is expected to remain firm and maintain its positive growth trajectory. Accordingly, oil demand is projected to post positive growth of 0.3 mb/d in 2022. This growth is expected to be driven by transportation fuel requirements as driving and trucking activities continue to progress. As a result, demand for gasoline and diesel will continue picking up. Similarly, the recovery in international aviation activities in Saudi Arabia and the UAE will accelerate demand for jet kerosene in the region. In addition, stable GDP growth and resumption in social activities coupled with an easing of trade-related bottlenecks are expected to support the oil demand recovery process in the region.

In 1Q22, oil demand is projected to grow by 0.3 mb/d, y-o-y. Demand growth will decline slightly during the remaining quarters of the year, marking a growth of 0.2 mb/d, y-o-y for each. On a final note, there are expectations for a positive growth in the region in the near future.

World Oil Supply

Non-OPEC liquids supply growth y-o-y in 2021 (including processing gains of 0.1 mb/d) is broadly unchanged at around 0.6 mb/d, for an average of 63.6 mb/d. Total US liquids production is estimated to have increased y-o-y by 0.15 mb/d in 2021. The largest increases for the year were seen in Canada, which rose by 0.3 mb/d, followed by Russia and China, which are estimated to each have grown by 0.2 mb/d. At the same time, production is estimated to have declined in the UK, Brazil, Colombia and Indonesia.

Non-OPEC supply growth for 2022 is revised down by 0.3 mb/d y-o-y to 2.4 mb/d, for a yearly average level of 65.97 mb/d. Russia's liquids production for 2022 is revised down by 0.36 mb/d. Increased drilling and completion activities in the US could support higher production levels in the coming months, with possible higher shale production in 2H22. Nevertheless, the US liquids supply growth forecast for 2022 remained broadly unchanged at 1.29 mb/d. The main drivers of liquids supply growth for the year are expected to be the US, Brazil, Canada, Kazakhstan, Guyana and Norway.

OPEC NGLs and non-conventional liquids production in 2021 is unchanged from the previous assessment and estimated to have grown by 0.1 mb/d y-o-y for an average of 5.1 mb/d. Similarly, growth of 0.1 mb/d y-o-y is forecast for 2022. OPEC-13 crude oil production in April increased by 153 tb/d m-o-m to average 28.65 mb/d, according to available secondary sources.

Preliminary non-OPEC liquids production in April, including OPEC NGLs, is estimated to have declined m-o-m by 0.92 mb/d to average 70.10 mb/d, but is up by 1.69 mb/d y-o-y. As a result, preliminary data indicates that global oil supply in April decreased by 0.77 mb/d m-o-m to average 98.74 mb/d, up by 5.22 mb/d v-o-v.

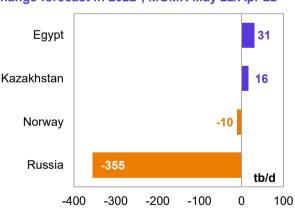
Non-OPEC liquids production growth in 2021 remained unchanged from the previous month's assessment to average 0.6 mb/d. The OECD region is estimated to have grown by 0.3 mb/d and the non-OECD region by 0.2 mb/d.

The non-OPEC supply growth forecast for 2022 was revised down by 0.3 mb/d from the previous month's assessment to 2.4 mb/d. This month's upward revisions were more than offset by downward adjustments in Eurasian countries.

In the OECD, a downward revision of 230 tb/d in 1Q22 Graph 5 - 1: Major revisions to annual supply was mostly offset by upward revisions in the following change forecast in 2022*, MOMR May 22/Apr 22 quarters, leading to a minor downward revision of 8 tb/d for the year. The main downward adjustment was due to lower-than-expected production in Norway. However, lower 1Q22 production in the US is expected to be compensated in 2H22.

The non-OECD supply forecast for 2022 was revised down by 0.3 mb/d, mainly due to a downward revision in Russia, which was much higher than minor growth revisions to Africa.

With this, the non-OPEC liquids supply forecast for 2022 was revised down by 300 tb/d to average 65.97 mb/d, with y-o-y growth revised down to 2.4 mb/d.

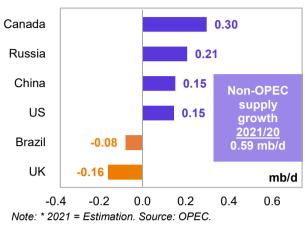


Note: * 2022 = Forecast_Source: OPEC

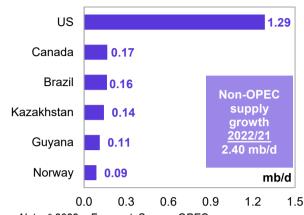
Key drivers of growth and decline

The **key drivers of non-OPEC liquids supply growth in 2021** are estimated to have been Canada, Russia, China and the US, while output is estimated to have declined in the UK and Brazil.

Graph 5 - 2: Annual liquids production changes for selected countries in 2021*



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



Note: * 2022 = Forecast. Source: OPEC.

For **2022**, the key drivers of non-OPEC supply growth are forecast to be the US, Canada, Brazil, Kazakhstan, Guyana and Norway, while oil production is projected to decline mainly in Indonesia and Thailand.

Non-OPEC liquids production in 2021 and 2022

Table 5 - 1: Non-OPEC liquids production in 2021*, mb/d

							Change 2	2021/20
Non-OPEC liquids production	2020	1Q21	2Q21	3Q21	4Q21	2021	Growth	%
Americas	24.70	24.10	25.17	25.20	26.13	25.15	0.46	1.84
of which US	17.61	16.63	17.93	17.85	18.58	17.75	0.15	0.83
Europe	3.89	3.95	3.51	3.81	3.78	3.76	-0.13	-3.34
Asia Pacific	0.52	0.50	0.45	0.53	0.51	0.50	-0.02	-4.02
Total OECD	29.11	28.55	29.13	29.53	30.42	29.41	0.30	1.05
China	4.15	4.30	4.34	4.33	4.26	4.31	0.15	3.65
India	0.78	0.78	0.77	0.77	0.77	0.77	0.00	-0.44
Other Asia	2.51	2.51	2.45	2.33	2.35	2.41	-0.10	-4.09
Latin America	6.03	5.94	5.97	6.09	5.83	5.96	-0.08	-1.26
Middle East	3.19	3.22	3.23	3.24	3.27	3.24	0.05	1.46
Africa	1.41	1.37	1.35	1.32	1.32	1.34	-0.07	-5.28
Russia	10.59	10.47	10.74	10.81	11.17	10.80	0.21	1.95
Other Eurasia	2.92	2.96	2.89	2.79	3.08	2.93	0.02	0.57
Other Europe	0.12	0.12	0.11	0.11	0.11	0.11	-0.01	-4.66
Total Non-OECD	31.71	31.66	31.86	31.79	32.17	31.87	0.16	0.50
Total Non-OPEC production	60.82	60.22	60.98	61.32	62.59	61.28	0.46	0.76
Processing gains	2.15	2.28	2.28	2.28	2.28	2.28	0.13	6.03
Total Non-OPEC liquids production	62.97	62.50	63.26	63.60	64.87	63.56	0.59	0.94
Previous estimate	62.97	62.50	63.26	63.60	64.87	63.56	0.59	0.94
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: * 2021 = Estimation. Totals may not add up due to independent rounding. Source: OPEC.

Table 5 - 2: Non-OPEC liquids production in 2022*, mb/d

							Change 2	2022/21
Non-OPEC liquids production	2021	1Q22	2Q22	3Q22	4Q22	2022	Growth	%
Americas	25.15	25.74	26.29	27.01	27.47	26.63	1.48	5.88
of which US	17.75	18.22	18.94	19.29	19.69	19.04	1.29	7.24
Europe	3.76	3.73	3.74	3.80	4.12	3.85	0.09	2.36
Asia Pacific	0.50	0.49	0.54	0.53	0.53	0.52	0.02	4.41
Total OECD	29.41	29.96	30.56	31.34	32.13	31.00	1.59	5.41
China	4.31	4.48	4.31	4.35	4.43	4.39	0.08	1.97
India	0.77	0.77	0.78	0.80	0.83	0.79	0.02	2.78
Other Asia	2.41	2.38	2.39	2.37	2.36	2.38	-0.03	-1.43
Latin America	5.96	6.15	6.21	6.17	6.40	6.23	0.27	4.62
Middle East	3.24	3.30	3.36	3.38	3.38	3.35	0.11	3.52
Africa	1.34	1.32	1.31	1.30	1.31	1.31	-0.03	-2.13
Russia	10.80	11.33	10.68	10.76	10.74	10.88	0.08	0.72
Other Eurasia	2.93	3.06	3.06	3.17	3.22	3.13	0.20	6.67
Other Europe	0.11	0.11	0.11	0.10	0.10	0.10	-0.01	-6.90
Total Non-OECD	31.87	32.89	32.22	32.41	32.77	32.57	0.70	2.19
Total Non-OPEC production	61.28	62.85	62.78	63.75	64.89	63.57	2.29	3.73
Processing gains	2.28	2.39	2.39	2.39	2.39	2.39	0.11	4.91
Total Non-OPEC liquids production	63.56	65.24	65.17	66.14	67.28	65.97	2.40	3.78
Previous estimate	63.56	65.47	65.65	66.42	67.50	66.26	2.70	4.25
Revision	0.00	-0.23	-0.48	-0.28	-0.21	-0.30	-0.30	-0.47

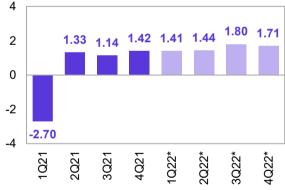
Note: * 2021 = Estimation and 2022 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

OECD

OECD liquids production in 2021 is estimated to **Graph 5 - 4: OECD quarterly liquids supply,** have increased by 0.30 mb/d y-o-y to average **y-o-y changes**29.41 mb/d, unchanged from the previous **mb/d**assessment.

OECD Americas is estimated to have grown by 0.46 mb/d to average 25.15 mb/d for the year. Production in OECD Europe and OECD Asia Pacific is estimated to have declined y-o-y by 0.13 mb/d and 0.02 mb/d, to average 3.76 mb/d and 0.50 mb/d, respectively.

For **2022**, oil production in the OECD region is forecast to increase by 1.6 mb/d y-o-y, to average 31 mb/d. This has been revised down by a minor 8 tb/d compared to a month earlier, amid a slight downward revision of 10 tb/d for OECD Europe, mainly due to lower-than-expected production in the



Note: * 1Q22-4Q22 = Forecast. Source: OPEC.

North Sea. At the same time, OECD Americas was revised up by a minor 6 tb/d.

Based on these revisions, OECD Americas is forecast to grow by 1.48 mb/d, to average 26.63 mb/d. Oil production in OECD Europe and OECD Asia Pacific is anticipated to grow y-o-y by 0.10 mb/d and 0.02 mb/d to average 3.85 mb/d and 0.52 mb/d, respectively.

OECD Americas

US

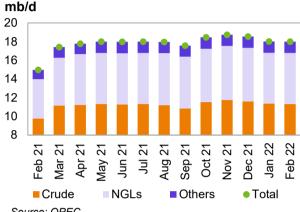
US liquids production in 2021 is estimated to have increased by 0.15 mb/d to average 17.75 mb/d. unchanged m-o-m. Crude oil output fell by 0.1 mb/d v-o-y to average 11.2 mb/d, while NGLs production and non-conventional liquids, particularly ethanol, increased by 0.2 mb/d and 0.02 mb/d y-o-y to average 5.4 and 1.2 mb/d, respectively. Average tight crude output in 2021 is estimated at 7.28 mb/d, according to the latest information from the US Energy Information Administration (EIA).

2022 by a minor 9 tb/d to average 18.0 mb/d, but was component higher by 3.0 mb/d compared with February 2021, mb/d when freezing weather caused a slump in US output.

Crude oil and condensate production fell in February 2022 by 50 tb/d m-o-m to average 11.31 mb/d, but was up by 1.54 mb/d y-o-y.

Regarding the crude and condensate production 12 breakdown by region (PADDs), production declined mainly in the US Gulf Coast (USGC), dropping by 54 tb/d to average 8.0 mb/d. It also decreased slightly in the Midwest in North Dakota and Oklahoma, while the Rocky Mountains and East Coast showed a slight increase, and the West Coast remained unchanged. m-o-m. The decline in some regions was mainly due to freezing weather in some parts of US in February.

US liquids production declined m-o-m in February Graph 5 - 5: US monthly liquids output by key



Source: OPEC.

NGLs production was up by 29 tb/d m-o-m to average 5.48 mb/d in February, which was higher by 1.26 mb/d y-o-y. Production of non-conventional liquids (mainly ethanol) increased by 12 tb/d m-o-m to average 1.22 mb/d, according to the US Department of Energy (DOE). Preliminary estimates see non-conventional liquids averaging 1.24 mb/d in March 2022, up by 16 tb/d compared to the previous month.

Production in the Gulf of Mexico (GoM) declined marginally m-o-m by 93 tb/d in February to average 1.6 mb/d due to the maintenance events.

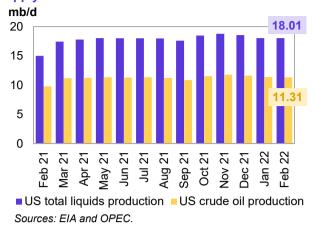
Looking at individual states, oil production in New Mexico increased by 64 tb/d m-o-m to average 1.4 mb/d, 424 tb/d higher than a year ago. Production in Texas decreased by 27 tb/d to average 4.8 mb/d, 1.1 mb/d higher than a year ago. Production in North Dakota dropped by 23 tb/d m-o-m to average 1.1 mb/d, up by 55 tb/d y-o-y. Production in Colorado was up slightly by 18 tb/d to average 0.4 mb/d. However, oil output in Alaska remained unchanged while Oklahoma showed a marginal m-o-m decline of 10 tb/d. In the onshore lower 48, February production increased m-o-m by 43 tb/d to average 9.25 mb/d.

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

				Cha	nge
State	Feb 21	Jan 22	Feb 22	m-o-m	у-о-у
Texas	3,745	4,858	4,831	-27	1,086
Gulf of Mexico (GOM)	1,762	1,708	1,615	-93	-147
New Mexico	983	1,343	1,407	64	424
North Dakota	1,016	1,094	1,071	-23	55
Alaska	457	450	450	0	-7
Colorado	373	403	421	18	48
Oklahoma	315	395	385	-10	70
Total	9,773	11,362	11,312	-50	1,539

Sources: EIA and OPEC.

Graph 5 - 6: US monthly crude oil and total liquids supply



US tight crude output in February 2022 increased Graph 5 - 8: US tight crude output breakdown by 111 tb/d m-o-m to average 7.6 mb/d, which was 1.6 mb/d higher than the same month a year earlier. according to EIA estimates.

The m-o-m increase from shale and tight formations through horizontal wells came mostly from the Permian, which increased by 58 tb/d to average 4.4 mb/d. This was up by 1.2 mb/d, y-o-y.

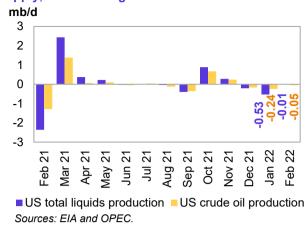
In the Williston Basin, production in the Bakken shale rose marginally by 39 tb/d to average 1.1 mb/d, and was up by 45 tb/d y-o-y. Tight crude output at Eagle Ford in Texas rose by a minor 10 tb/d to average 1.0 mb/d up by 165 tb/d y-o-y, while production in Niobrara-Codell in Colorado and Wyoming was down marginally by 2 tb/d to average 0.4 mb/d.

US liquids production in 2022, excluding processing Graph 5 - 9: US liquids supply developments by gains, is forecast to grow y-o-y by 1.29 mb/d to component average 19.0 mb/d, unchanged from the previous mb/d assessment. The 2022 gains are due primarily to expected tight crude production growth of 0.9 mb/d, to average 8.16 mb/d, NGLs growth mainly from unconventional basins of 0.4 mb/d, to average 10 5.8 mb/d, and projected growth of 0.1 mb/d in the GoM. Non-conventional liquids are projected to grow by 0.04 mb/d to average 1.21 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 0.8 mb/d y-o-y to average 12.0 mb/d in 2022. This forecast assumes ongoing capital discipline, current inflation rates, continuing supply chain issues, and the oil field service section limitations (labour and equipment).

Graph 5 - 7: US monthly crude oil and total liquids supply, m-o-m changes



mb/d 7.6 8 6 4 Jun 21 Jul 21 Aug 21 Sep 21 2 7 May 2 Ö NoV. Dec. Jan ■Permian ■ Eagle Ford ■ Bakken ■ Niobrara ■ Others

Sources: EIA, Rystad Energy and OPEC.

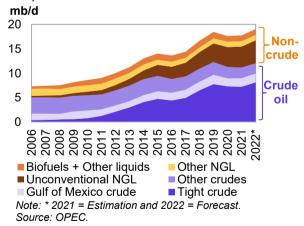


Table 5 - 4: US liquids production breakdown, mb/d

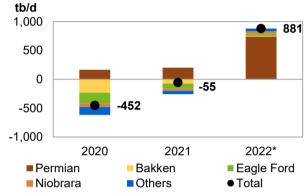
		Change		Change		Change
US liquids	2020	2020/19	2021	2021/20	2022*	2022/21
Tight crude	7.33	-0.45	7.28	-0.06	8.16	0.88
Gulf of Mexico crude	1.64	-0.25	1.70	0.06	1.78	0.08
Conventional crude oil	2.31	-0.30	2.21	-0.10	2.11	-0.10
Total crude	11.28	-1.01	11.19	-0.10	12.04	0.85
Unconventional NGLs	4.09	0.25	4.28	0.20	4.70	0.42
Conventional NGLs	1.09	0.10	1.12	0.03	1.10	-0.02
Total NGLs	5.17	0.35	5.40	0.22	5.80	0.40
Biofuels + Other liquids	1.15	-0.20	1.17	0.02	1.21	0.04
US total supply	17.61	-0.86	17.75	0.15	19.04	1.29

Note: * 2021 = Estimation and 2022 = Forecast. Sources: EIA, OPEC and Rystad Energy.

US tight crude production in the Permian in 2021 is Graph 5 - 10: US tight crude output by shale play, estimated to have increased by 202 tb/d to 4.1 mb/d y-o-y changes and is forecast to grow by 740 tb/d y-o-y to average 4.9 mb/d in **2022**.

The decline rate in Bakken shale production slowed in 2021 compared with 2020, from a contraction of 234 tb/d to a decline of 75 tb/d. Production is now estimated to average 1.1 mb/d in 2021. For 2022, tight crude production from the Bakken shale is forecast to grow by 11 tb/d on the back of increased drilling activity in North Dakota and available DUC wells, and despite the impact of a blizzard in April.

The Eagle Ford in Texas is estimated to have declined by 86 tb/d in 2021 to average 0.97 mb/d, but is forecast to expand in 2022 by 38 tb/d to average 1.0 mb/d. The rig-weighted average productivity (new-well oil production per rig) shows a m-o-m drop



Note: * 2021 = Estimation and 2022 = Forecast. Sources: EIA, Rystad Energy and OPEC.

of 62 b/d in the Eagle Ford, according to the EIA-DPR (Drilling Productivity Report) forecast for May 2022. However, overall Eagle Ford production is expected to increase m-o-m by 26 tb/d during the same time.

Production in the Niobrara, following an estimated decline of 37 tb/d in 2021, is likely to grow by 44 tb/d y-o-y in 2022, to average 0.46 mb/d. Other shale plays are expected to show marginal increases totalling 47 tb/d in 2022, given current drilling activities.

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

		Change		Change		Change
US tight oil	2020	2020/19	2021	2021/20	2022*	2022/21
Permian tight	3.91	0.17	4.11	0.20	4.85	0.74
Bakken shale	1.18	-0.23	1.11	-0.07	1.12	0.01
Eagle Ford shale	1.05	-0.18	0.97	-0.09	1.01	0.04
Niobrara shale	0.45	-0.06	0.41	-0.04	0.46	0.04
Other tight plays	0.73	-0.14	0.67	-0.06	0.72	0.05
Total	7.33	-0.45	7.28	-0.06	8.16	0.88

Note: * 2021 = Estimation and 2022 = Forecast. Source: OPEC.

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

Total US active drilling rigs increased by seven to Graph 5 - 11: US weekly rig count vs. US crude oil 705 rigs in the week ending 6 May, which is 257 more output and WTI price rigs than a year ago. The number of active offshore rigs was up by three w-o-w to 17, four rigs more than the same month in 2021. Moreover, 688 rigs (oil and gas) were active onshore, up by four w-o-w, with no rig in inland waters.

The US horizontal rig count rose by three rigs w-o-w to 646 rigs, compared with 408 horizontal rigs a year ago. The number of drilling rigs for oil climbed by five to 552, w-o-w.

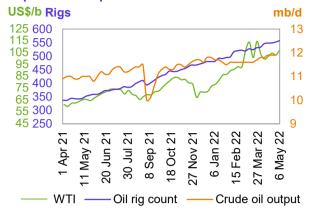
While the rig count in the Permian remained unchanged w-o-w at 335 rigs, the number of active rigs remains unchanged at 61 in the Eagle Ford, at 37 in Williston basin, and at 15 in the DJ-Niobrara basins. They declined by one in the Cana Woodford to 25. Three oil rigs have been operating in the Barnett basin

Drilling and completion (D&C) activities for Graph 5 - 12: Spudded, completed and started wells spudded, completed and started wells in all US shale in US shale plays plays, based on the EIA-DPR regions, saw 888 horizontal wells spudded in March 2022 (as per preliminary data), up by 273 m-o-m, and 61% higher than in March 2021.

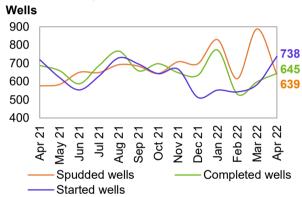
In March 2022, preliminary data indicates a higher number of completed wells at 599 m-o-m, but this is down by 5% y-o-y. Moreover, the number of started wells was estimated at 584, which is 6% lower than in March 2021. Preliminary data for April estimates 639 spudded, 645 completed and 738 started wells, according to Rystad Energy.

In terms of identified US oil and gas fracking Graph 5 - 13: Fracked wells count per month operations by region, Rystad Energy reported that after the highest number of fracked wells seen since March 2020, with 1,092 fracked in October 2021, 1,043 and 749 wells started to frack in March and April, respectively. This preliminary number is based on analysis of high-frequency satellite data.

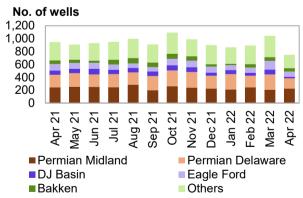
Preliminary data on fracking in March shows that 207 and 236 wells were fracked in the Permian Midland Tight and Permian Delaware Tight, respectively. In comparison with February, there was a drop of 36 wells fracked in the Midland and a jump of 55 wells fracked in the Delaware tight, according to preliminary data. Data also indicated that 78 wells were fracked in the DJ Basin, 133 in the Eagle Ford and 61 in the Bakken in March.



Sources: Baker Hughes, EIA and OPEC.



Note: Mar 22-Apr 22 = Preliminary data. Sources: Rystad Energy and OPEC.



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

Canada

to remain unchanged to average 5.6 mb/d.

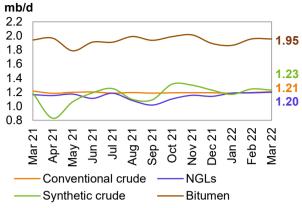
Crude bitumen production and synthetic crude output decreased by 17 tb/d and 1 tb/d, respectively. Taken together, crude bitumen and synthetic crude output declined by 18 tb/d to 3.2 mb/d. On the other hand, production of conventional crude and NGLs increased slightly to average 1.2 mb/d, each, offsetting the bitumen output decline.

Following freezing weather in previous months, most oil sands operators managed to continue to pump high volumes of crude bitumen and synthetic crude in March. However, upstream maintenance projects in 2Q22 in sand mine facilities are expected to affect 1H22 production rates.

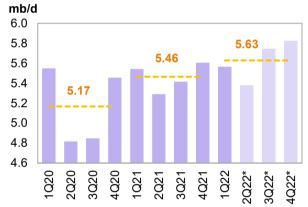
The growth of Canadian liquids supply for 2021 is Graph 5 - 15: Canada's quarterly liquids production estimated at 0.3 mb/d for a yearly average of and forecast 5.46 mb/d, unchanged from the previous assessment.

For 2022, Canada's liquids production is forecast to increase at a slower pace compared with 2021, rising by 0.17 mb/d to average 5.63 mb/d, showing a minor upward revision of 7 tb/d from last month's report due to a slight upward revision in 1Q22 output by Alberta Energy Regulator. Lower production in 1Q22 is projected to be compensated by the end of the year on the back of higher investment in oil sands basins. However, production in 2Q22 is expected to decline amid maintenance in the major oil sand plays.

Canada's liquids production in March is estimated Graph 5 - 14: Canada's monthly liquids production development by type



Sources: National Energy Board and OPEC.



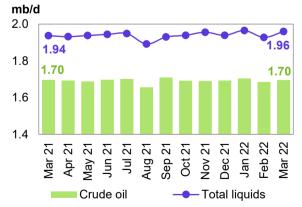
Note: * 2Q22-4Q22 = Forecast. Source: OPEC.

Mexico

Mexico's crude output increased slightly in March Graph 5 - 16: Mexico's monthly liquids and by 12 tb/d to average 1.7 mb/d. NGLs output rose by crude production development 20 tb/d. Therefore, Mexico's total liquids output in March increased by 32 tb/d m-o-m, to average 1.96 mb/d. The heavy Ku-Maloob-Zaap asset (KMZ) led the main loss in crude output.

For 2021, liquids production in Mexico is estimated to have grown by 0.01 mb/d to average 1.93 mb/d, unchanged from the previous assessment.

For 2022, growth is forecast at 0.03 mb/d to average 1.96 mb/d. Pemex's total crude production in mature fields continues to decline and new project output is not sufficient to offset the trend, while foreignoperated field production is expected to rise. No new field was reported to have started production in February.



Sources: PEMEX and OPEC.

OECD Europe

Norway

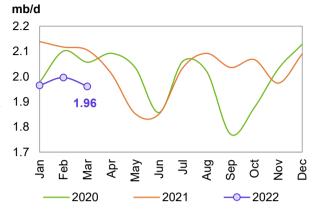
35 tb/d m-o-m to average 1.96 mb/d.

Following an 11-year high in December 2021 and a significant drop of 113 tb/d in January, Norway's crude production decreased again by 36 tb/d m-o-m in March to average 1.74 mb/d, down by 44 tb/d v-o-v. Oil production in March is 5.9% lower than the Norwegian Petroleum Directorate's (NPD) forecast. Production of NGLs and condensates marginally declined by 1 tb/d m-o-m to average 0.2 mb/d. according to NPD data.

For 2021, Norway's liquids supply growth is estimated to have expanded by 31 tb/d to average 2.0 mb/d.

For 2022, Norway's liquids production is expected to grow by 0.1 mb/d to average 2.1 mb/d, revised down

Norwegian liquids production in March declined by Graph 5 - 17: Norway's monthly liquids production development



Sources: NPD and OPEC.

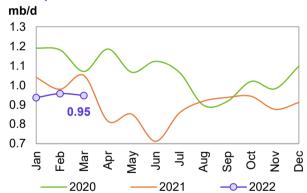
slightly by 10 tb/d from last month's assessment. This downward revision was mainly because of lower-thanexpected production in March. However, following the end of the maintenance season in 2Q22, the main boost is projected to be seen in 4Q22, when the second phase of the Johan Sverdrup field development starts production, adding around 220,000 b/d on top of the 535,000 b/d already being produced.

UK

UK liquids production decreased in March by Graph 5 - 18: UK monthly liquids production 10 tb/d m-o-m to average 0.95 mb/d. Crude oil output development decreased by 11 tb/d m-o-m to average 0.81 mb/d, according to official data, and was down by 104 tb/d y-o-y. NGLs output was broadly flat in March at 99 tb/d.

For 2021, UK liquids production is estimated to have contracted by 0.16 mb/d to average 0.91 mb/d.

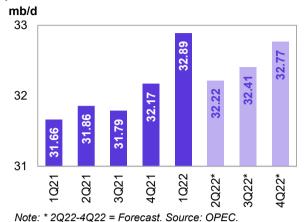
For **2022**, UK liquids production is forecast to grow by a minor 0.02 mb/d to average 0.93 mb/d, following two consecutive years of heavy declines, unchanged from the previous month. Low investment levels, COVID-19-related delays, and poor mature reservoir performance have been the cause of this weak growth forecast. Liquids production in 2022 is expected to be supported by new developments such as the Triton and Penguins fields.



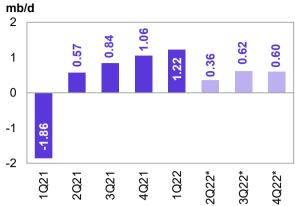
Sources: Department of Energy & Climate Change and

Non-OECD

Graph 5 - 19: Non-OECD quarterly liquids production and forecast



Graph 5 - 20: Non-OECD quarterly liquids supply, y-o-y changes

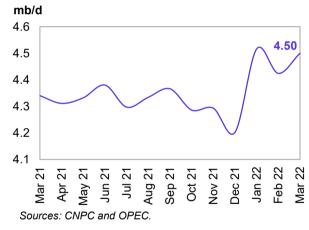


Note: * 2Q22-4Q22 = Forecast. Source: OPEC.

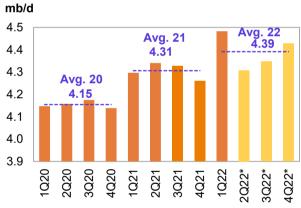
China

China's liquids production increased by 76 tb/d m-o-m in **March** to average 4.5 mb/d, which was up by 160 tb/d y-o-y, according to official data. Crude oil output in March rose by 76 tb/d to average 4.17 mb/d, higher by 146 tb/d y-o-y.

Graph 5 - 21: China's monthly liquids production development



Graph 5 - 22: China's quarterly liquids production and forecast



Note: * 2Q22-4Q22 = Forecast. Sources: CNPC and OPEC.

For 2021, China's liquids supply is estimated to have grown by 0.15 mb/d y-o-y, to average 4.31 mb/d.

For **2022**, growth of 0.08 mb/d is forecast for an average of 4.39 mb/d, revised up slightly by 7 tb/d on better-than-expected March production data.

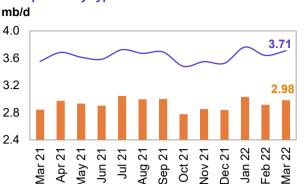
Natural decline rates are expected to be offset by Chinese companies' investment in new project start-ups, additional in-fill wells and EOR projects. Petro China increased its domestic crude production by 1.3% on the year to 2.06 mb/d in 2021, according to its senior vice president. Petro China's crude output growth is expected to be supported by its Changqing, Tarim, Xinjiang and Southwest fields.

Latin America

Brazil

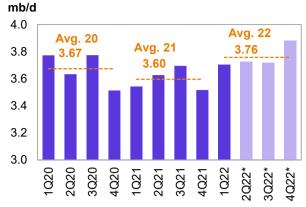
Brazil's crude output in **March** increased by 64 tb/d m-o-m to average 2.98 mb/d. NGLs production slightly increased by 5 tb/d to average 95 tb/d and is expected to remain flat in April. Biofuel output (mainly ethanol) remained unchanged in March to average 632 tb/d, with preliminary data showing a flat trend in April as well. Therefore, in March, total liquids production increased by 69 tb/d to average 3.71 mb/d, higher by 156 tb/d y-o-y, despite some maintenance events in Buzios and Tupi fields.

Graph 5 - 23: Brazil's monthly liquids production development by type



Crude oil output — Sources: ANP, Petrobras and OPEC.

Graph 5 - 24: Brazil's quarterly liquids production



Note: * 2Q22-4Q22 = Forecast. Sources: ANP and OPEC.

Liquids supply for **2021** is estimated to have averaged 3.60 m/d, a decline of 0.08 mb/d y-o-y, unchanged from the previous month's assessment.

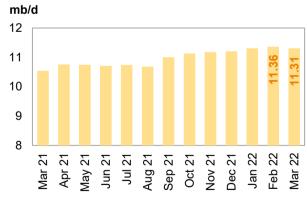
·Liquids supply

For **2022**, Brazil's liquids supply, including biofuels, is forecast to increase by 0.16 mb/d y-o-y to average 3.76 mb/d, unchanged from the previous assessment. Petrobras stated that it would need to scale back production at the Atapua field owing to gas flaring issues, which could affect production in the coming months. Equinor also announced that the Peregrino oil field might restart in 3Q22. The main growth in 2022 will be driven by the continued ramp-up of the Sepia field, which came online in August 2021, along with two startups of Mero 1 and Peregrino Phase 2 in the pre-salt Santos basin. Petrobras expects to start up the FPSO Guanabara in May at the Mero field in the deep water Libra block, according to Offshore Magazine. However, Brazil's March crude output rose mainly due to the ramp-up of the P-68 FPSO in the post-salt basin.

Russia

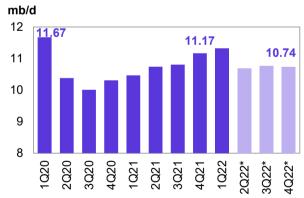
Russia's liquids production in March declined m-o-m by 52 tb/d to average 11.31 mb/d. This includes 10.01 mb/d of crude oil and condensate and 1.3 mb/d of NGLs. A preliminary estimate for Russia's crude and condensate production in April 2022 shows an expected decrease of 0.93 mb/d m-o-m for crude and condensate to average 9.08 mb/d, and around a 91 tb/d decline for NGLs.

Graph 5 - 25: Russia's monthly liquids production



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

Graph 5 - 26: Russia's quarterly liquids production



Note: * 2Q22-4Q22 = Forecast. Sources: Nefte Compass and OPEC.

Annual liquids production in 2021 is estimated to have increased by 0.2 mb/d y-o-y to average 10.80 mb/d.

For **2022**, Russian liquids output is expected to increase by 0.1 mb/d to average 10.88 mb/d, revised down by 0.36 mb/d, compared to the previous assessment. It should be noted that this forecast is subject to very high uncertainty.

Caspian

Kazakhstan & Azerbaijan

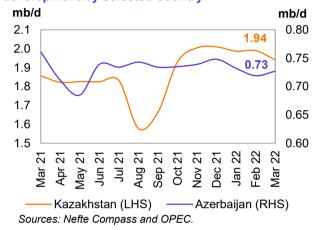
Liquids output in Kazakhstan decreased by 49 tb/d to average 1.9 mb/d in March. Crude production declined by 48 tb/d m-o-m to average 1.6 mb/d, still lower than December 2021, when the highest output since April 2020 was recorded. Production of NGLs declined marginally m-o-m in March to average 0.38 mb/d.

Kazakhstan's liquids supply forecast for 2021 is estimated to have averaged 1.84 mb/d, higher by 0.01 mb/d y-o-y. For 2022, liquids supply is forecast to grow by 0.14 mb/d to average 1.98 mb/d, revised up by 16 tb/d. The output disruption in the Caspian Pipeline Consortium (CPC) terminal in the Black Sea was less than the previous estimation for March and April production, which necessitated an upward revision to this month's assessment.

Azerbaijan's liquids production in March rose by a Graph 5 - 27: Caspian monthly liquids production slight 8 tb/d m-o-m to average 0.7 mb/d, down by 34 development by selected country tb/d y-o-y. Crude production increased by 8 tb/d m-o-m to average 575 tb/d, while NGL output held steady at 150 tb/d, according to official sources. No new project is expected to come online in 2022 and the main decline in the offshore ACG crude is expected to be partially offset by ramp-ups in other fields, such as Shah Deniz Phase 2.

Azerbaijan's liquids production is expected to increase in April 2022 to average 0.8 mb/d, according to preliminary data.

For 2021, liquids supply is estimated to have grown by 0.01 mb/d y-o-y to average 0.74 mb/d, while for 2022, y-o-y growth of 0.06 mb/d is forecast for an average of 0.8 mb/d, revised down by 6 tb/d on lowerthan-expected production in 1Q22.



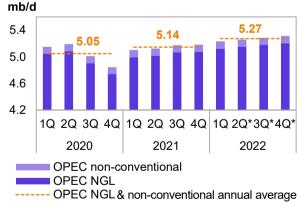
OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids in 2021 Graph 5 - 28: OPEC NGLs and non-conventional are estimated to have grown by 0.1 mb/d, to average liquids quarterly production and forecast 5 14 mb/d

Production of OPEC NGLs and non-conventional oils has declined from 5.35 mb/d in 2Q18. In 2021, output increased from 5.1 mb/d in 1Q21 to 5.18 mb/d in 4Q21.

Output of NGLs in 1Q22 is estimated to have averaged 5.12 mb/d, while OPEC non-conventionals remained steady at 0.11 mb/d.

For 2022, OPEC NGLs and non-conventional liquids production is forecast to grow by 0.13 mb/d to average 5.27 mb/d.



Note: * 2Q22-4Q22 = Forecast. Source: OPEC.

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

Table 3 - 0. Of EG NGE i non-conventional ons, mb/d										
OPEC NGL and	(Change		Change					(Change
non-coventional oils	2020	20/19	2021	21/20	1Q22	2Q22	3Q22	4Q22	2022	22/21
OPEC NGL	4.94	-0.18	5.04	0.09	5.12	5.15	5.18	5.20	5.16	0.13
OPEC non-conventional	0.10	0.01	0.11	0.00	0.11	0.11	0.11	0.11	0.11	0.00
Total	5.05	-0.17	5.14	0.10	5.23	5.26	5.29	5.31	5.27	0.13

Note: 2021 = Estimation and 2022 = Forecast. Source: OPEC.

OPEC crude oil production

According to secondary sources, total **OPEC-13 crude oil production** averaged 28.65 mb/d in April 2022, higher by 153 tb/d m-o-m. Crude oil output increased mainly in Saudi Arabia, Iraq and the UAE, while production in Libya declined.

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

Secondary									Change
sources	2020	2021	3Q21	4Q21	1Q22	Feb 22	Mar 22	Apr 22	Apr/Mar
Algeria	904	913	926	959	984	980	994	1,001	7
Angola	1,247	1,117	1,108	1,124	1,150	1,165	1,142	1,160	19
Congo	294	269	263	269	264	270	261	265	4
Equatorial Guinea	114	100	99	91	92	88	93	94	2
Gabon	194	186	184	188	200	200	209	194	-15
IR Iran	1,991	2,392	2,472	2,472	2,528	2,538	2,549	2,564	16
Iraq	4,076	4,049	4,078	4,240	4,286	4,302	4,302	4,405	103
Kuwait	2,439	2,419	2,448	2,532	2,614	2,615	2,641	2,662	21
Libya	366	1,143	1,146	1,111	1,062	1,112	1,074	913	-161
Nigeria	1,575	1,372	1,335	1,321	1,376	1,373	1,340	1,322	-17
Saudi Arabia	9,204	9,111	9,554	9,878	10,162	10,211	10,219	10,346	127
UAE	2,804	2,727	2,770	2,861	2,956	2,956	2,979	3,015	36
Venezuela	512	555	540	662	681	688	693	707	14
Total OPEC	25,721	26,354	26,923	27,708	28,356	28,499	28,495	28,648	153

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

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

									Change
Direct communication	2020	2021	3Q21	4Q21	1Q22	Feb 22	Mar 22	Apr 22	Apr/Mar
Algeria	899	911	924	958	984	978	996	1,006	10
Angola	1,271	1,124	1,114	1,122	1,161	1,158	1,133	1,183	50
Congo	300	267	266	260	267	260	264	261	-3
Equatorial Guinea	114	94	94	79	95	95	95	95	0
Gabon	207	181	180	183	197	195	198		
IR Iran									
Iraq	3,997	3,971	3,979	4,167	4,188	4,260	4,148	4,430	282
Kuwait	2,438	2,415	2,447	2,528	2,612	2,612	2,639	2,639	0
Libya	389	1,207	1,220	1,182	1,151	1,220	1,166		
Nigeria	1,493	1,312	1,270	1,233	1,299	1,258	1,238	1,219	-18
Saudi Arabia	9,213	9,125	9,565	9,905	10,224	10,225	10,300	10,441	141
UAE	2,779	2,718	2,758	2,854	2,949	2,954	2,970	3,011	41
Venezuela	569	636	635	817	756	788	728	775	47
Total OPEC									

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

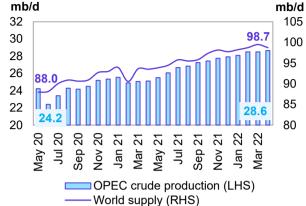
World oil supply

Preliminary data indicates that **global liquids production** in April decreased by 0.77 mb/d to average 98.74 mb/d compared with the previous month.

NGLs) is estimated to have decreased in April by supply development 0.92 mb/d m-o-m to average 70.1 mb/d, but higher by mb/d 1.69 mb/d y-o-y. Preliminary estimated decreases in 32 production during April were mainly driven by Russia and Kazakhstan by 1.2 mb/d, while the US and Norway are expected to have growth in liquids output 26 of 0.3 mb/d.

The share of OPEC crude oil in total global production increased by 0.4 pp to 29.0% in April compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, **OPEC** NGLs non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Non-OPEC liquids production (including OPEC Graph 5 - 29: OPEC crude production and world oil



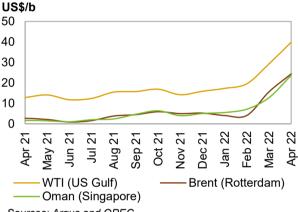
Source: OPEC.

Product Markets and Refinery Operations

Refinery margins on all main trading hubs continued to show enormous and uncommon gains in April, further extending their sharp upward trend in response to subdued fuel supplies while global product balances continued to tighten. At the same time, supportive product demand-side dynamics, as the overall negative impact of COVID-19 further diminishes on a global level, strengthened fuel markets in general. including that of jet fuel, despite some mobility restrictions in a few Asian countries. Middle distillates were the main margin contributor over the month, backed by firm industrial, agricultural and manufacturing requirements, while their margin spread widened further versus that of gasoline. Naphtha in most markets was the only product to show losses in profitability as the steam cracker maintenance season led the naphtha build-ups during the month. Going forward, refinery intakes are expected to rise, which could provide partial relief to the global product tightness and partially de-pressure product prices.

Refinery margins

US Gulf Coast (USGC) refining margins against Graph 6 - 1: Refining margins WTI soared, posting sizeable gains for the fifth consecutive month. Positive market performances were observed in all main products across the barrel, particularly in the middle section, with the exception of naphtha. The rare huge jump in refining economics, similarly to what was observed in the previous month, was largely impacted by a rise in product exports amid concerns over tightening product availability with changes in product flow patterns in Europe, due to geopolitical tensions, leading to an open arbitrage of product deliveries from the US, particularly that of diesel. In the USGC, gasoline represented the main margin driver, in line with strong improvement in domestic mobility indicators.



Sources: Argus and OPEC.

According to preliminary estimates, US refinery intakes showed a counter-seasonal rise of nearly 190 tb/d in April. This upward move is attributable to the conclusion of some refinery maintenance interventions while refineries likely pushed for a quick return from turnarounds to capitalize on the robust refining margins and product tightness in Europe and South America. However, US refinery intakes are expected to reverse recent trends and increase in the coming month as the peak of planned maintenance has already been reached and refiners, for the most part, are expected to conclude repair work and re-start normal operations. This could lead to continued upside potential in product outputs and likely place a cap on product prices in the near term. USGC margins against WTI averaged \$39.86/b in April, up by \$10.57 m-o-m and by \$24.38/b y-o-y.

Refinery margins in Rotterdam against Brent rose sharply, as robust performances at the middle of the barrel boosted margins to a new multi-year high. Concerns over purchases of Russian crude and product supplies triggered further concerns of a product shortage in the region, particularly that of diesel, as European refiners continue to seek alternative sources of products previously supplied by Russia. European refinery run rates in April increased slightly by 50 tb/d m-o-m, according to preliminary data, while strong diesel crack spreads continued to encourage a push for higher diesel yields to increase profits. Refinery margins against Brent in Europe averaged \$24.36/b in April, up by \$8.73 compared with a month earlier and up by \$20.55 y-o-y.

Singapore refining margins against Oman showed solid gains as seen in other regions, with robust performances manifested at the middle section of the barrel, as inventories in East of Suez for the corresponding products remained under pressure. Strong regional product demand mainly backed by the manufacturing, industrial and agricultural sectors boosted fuel markets. In addition, the overall improvement in mobility indicators in South Korea, Indonesia and India, as well as improvement in aviation activities within the region, further strengthened product crack spreads. However, gasoline lagged as it was affected by the latest COVID-19 measures in China and South Korea, while China continued to strictly enforce its lockdowns and mobility restrictions in line with its zero-COVID-19 policy.

Moreover, the onset of the heavy maintenance season in Asia led to significant decline in product availability within the region. This contributed to the bullish product market environment in Asia. The overall change in Asian refinery intakes was estimated to be 980 tb/d lower in April relative to the previous month, driven by maintenance in the region, amid reported unplanned shutdowns in Vietnam and South Korea, and run cuts in China due to COVID-19-related fuel demand contraction.

Going forward, the shift in product trade flows in Eastern Europe, as a result of the geopolitical tensions, is projected to further incentivize Asian, particularly Indian, refiners to increase processing rates to supply more products to Europe. Refinery margins against Oman in Asia gained \$10.90 m-o-m to average \$23.65/b in April, higher by \$21.28 y-o-y.

Refinery operations

US refinery utilization rates increased in April to average 92.1%, which corresponds to a throughput of 16.46 mb/d. This represented a rise of 1.1 pp and 190 tb/d. respectively, compared with the previous month. Y-o-y, the April refinery utilization rate was up by 5.9 pp, with throughput showing a rise of 825 tb/d.

European refinery utilization averaged 78.4%, Graph 6 - 2: Refinery utilization rates corresponding to a throughput of 9.24 mb/d. This is a m-o-m rise of 0.4 pp or 50 tb/d. On a y-o-y basis, utilization rates increased by 2.0 pp, while throughput was up by 149 tb/d.

In selected Asia - comprising Japan, China, India, Singapore and South Korea – refinery utilization rates dropped to average 88.33% in April, corresponding to a throughput of 25.48 mb/d. Compared with the previous month, utilization rates were down by 3.4 pp, while throughput was down by 980 tb/d. Meanwhile, utilization rates were lower by 0.1 pp y-o-y, and throughput was down by 45 tb/d.

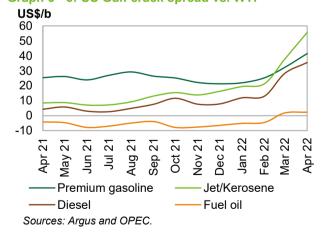
100 90 80 70 22 7 22 7 Jun Ang Sep Dec Feb May ٥ J Oct Jan Mar Apr US EU-14 Selected Asia* plus UK and Norway

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

Product markets

US market

USGC gasoline crack spreads rose further for the Graph 6 - 3: US Gulf crack spread vs. WTI fourth consecutive month and benefitted from favourable supply- and demand-side dynamics, as ongoing recovery in fuel requirements continue to compete with product output levels, keeping gasoline inventory levels at low levels. The improvement in US gasoline markets was largely attributed to strong gasoline exports to South America, namely Brazil and Mexico. Moreover, gasoline prices averaged \$143.25/b, a new multi-year record in April, which was higher by \$2.47 m-o-m, and by \$56.14 y-o-y. The end of the peak refinery maintenance season over the coming months should help limit gasoline inventory drawdowns in the US in the near term. The USGC gasoline crack spread gained \$9.28 m-o-m to average \$41.54/b in April, and was up by \$16.14 y-o-y.



USGC jet/kerosene crack spreads soared following the rally registered in the previous month and kept their position as the leading margin contributor across the barrel, as jet fuel requirements for air passenger travel were supportive. In addition, jet fuel markets strengthened as refiners maximized gasoil yields in partial detriment to those of jet fuel given the already tight balance that resulted from planned and unplanned refinery shutdowns in the recent months. This led to a sharp rise in jet fuel prices, which averaged \$157.39/b in April, and was up by 124% y-o-y, as jet fuel price premium versus gasoline, typically the highest priced product across the barrel, increased considerably to \$14.14 compared with \$5.52 in March. Going forward, jet fuel markets are expected 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 \$55.68/b, up by \$17.90 m-o-m and higher by \$47.20 y-o-y.

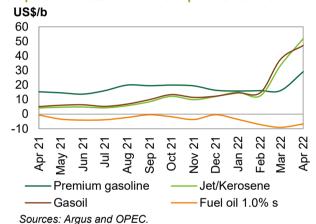
The USGC **gasoil crack spread** against WTI exhibited solid gains, although gasoil prices in Europe was the only key product across the barrel to show the lowest price change relative to the previous month, adding just 48¢ m-o-m compared with a m-o-m change of \$32.08 in March. Compared to the previous month, diesel versus gasoline price differentials widened significantly. Restricted refinery outputs and strong exports amid positive global manufacturing and industrial activities and worsening global diesel balance tightness exerted upward pressure on US gasoil margins. The US gasoil crack spread against WTI averaged \$35.50/b, up by \$7.29 m-o-m and \$31.25 y-o-y.

USGC **fuel oil crack spreads** against WTI moved higher after breaking into positive territory in the previous month, supported by healthy domestic demand for feedstock blending amid contracting volumetric availability in the region due to lower refinery output. Going forward, fuel oil markets are expected to benefit from the return of secondary and conversion processing units, which should boost the need for fuel oil to gasoil conversion to replenish gasoil stock levels. In April, the US fuel oil crack spread against WTI averaged \$2.31/b, higher by $50\phi/b$ m-o-m, and by \$6.55 y-o-y.

European market

Gasoline crack spreads showed improvement from their poor performance and nearly horizontal movement in the previous month. Relatively lower gasoline output levels, due to the onset of heavy refinery turnarounds, led to lower gasoline availability within the region. In addition, strong regional consumption levels in line with improvements in regional mobility indicators further backed gasoline markets in Europe. Expectations of higher refinery runs and stronger gasoline output going forward point to downward pressure on gasoline prices, which could weigh on gasoline profitability in the near term. The gasoline crack spread against Brent averaged \$29.07/b in April, up by \$12.87 m-o-m, and by \$13.73 y-o-y.

massive Graph 6 - 4: Rotterdam crack spreads vs. Brent



In April, **jet/kerosene crack spreads** soared and outperformed all other main products across the barrel, in continuation of the robust performance witnessed in the previous month. Supply-side restrictions in light of reduced refinery output and a rise in domestic jet fuel requirements, reflecting a considerable improvement European air traffic volumes, contributed to the notably stronger jet fuel market. The strongly supportive dynamics on the jet fuel demand side lifted jet fuel prices, while all other key product prices across the European barrel declined with the downturn in crude prices. The Rotterdam jet/kerosene crack spread against Brent averaged \$51.70/b, up by \$18.12 m-o-m and by \$47.52 y-o-y.

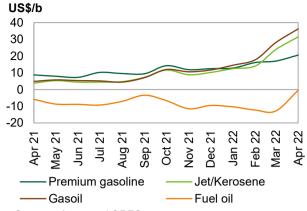
Gasoil 10 ppm crack spreads continued to trend upwards over the month, although in April gasoil profits were unable to match the stout performance seen in March, and were lower compared to a month earlier. The European diesel balance remained under heavy pressure over the month as some European countries halted purchases of Russian diesel. This led to a worsening of the regional diesel supply-demand imbalance, which was further exacerbated by the impact of the recent reductions in refinery output amid the onset of the heavy maintenance season, while gasoil requirements from the manufacturing and industrial sectors remained well sustained. Gasoil prices declined by \$5.02 m-o-m and averaged \$151.46/b in April, following a three-monthlong upward trajectory, a reflection of the downturn in crude prices. The gasoil crack spread against Brent averaged \$47.09/b, which was higher by \$9.36 m-o-m and by \$41.98 y-o-y.

At the bottom of the barrel, **fuel oil 1.0% crack spreads** rebounded following three consecutive months of losses, although they remained in negative territory. Reductions in maintenance volumes, as a growing number of refineries returned online and restarted operations at secondary and conversion units, likely supported fuel oil processing rates, and led to relatively lower volume availability of the residual fuel. In Europe, fuel oil cracks averaged minus \$6.77/b in April, having gained \$2.28 m-o-m but lost \$6.14 y-o-y.

Asian market

The Asian gasoline 92 crack spread gained Graph 6 - 5: Singapore crack spreads vs. Dubai momentum and showed significant improvement compared to the relatively flat performance seen in the previous month. Stronger regional mobility indicators - particularly in South Korea, Indonesia and India - provided support. However, the negative impact of the most recent COVID-19 outbreak and the strict lockdown and mobility restrictions, particularly in China, limited gains in Asian gasoline margins compared with the other products as gasoline was most affected. The Singapore gasoline crack spread against Oman in April averaged \$20.54/b, up by \$3.56 m-o-m and up by \$11.77 y-o-y.

Asian naphtha crack spreads continued to trend downwards and plummeted into negative territory, pressured by ample supply availability amid the heavy



Sources: Argus and OPEC.

steam cracker maintenance season. In addition, a growing interest in LNG components as the preferred steam cracker feedstock due to more viable economics, weighed further on Asian naphtha performance. The Singapore naphtha crack spread against Oman averaged minus \$5.16/b, having decreased by \$6.09 m-o-m and by \$4.64 y-o-y.

In the middle of the barrel, jet/kerosene crack spreads trended upwards as overall air travel activity continued to improve within the region, despite reports of China and Japan remaining closed for international travel. The uptick in aviation fuel requirements supported Asian jet fuel markets, while refinery outputs declined. The Singapore iet/kerosene crack spread against Oman averaged \$31.44/b, up by \$7.61 m-o-m and by \$27.62 y-o-y.

The Singapore gasoil crack spread soared to a new record high, backed by strong regional demand, particularly from India as well as stronger delivery requirements due to low gasoil inventories in East of Suez. Firm industrial, agricultural and manufacturing activity in the region remained supportive. Moreover, the heavy refinery maintenance works, as well as unplanned outages amid refinery run cuts in China due to COVID-19 restrictions, all led to a deeper contraction in gasoil availability in the region. The Singapore gasoil crack spread against Oman averaged \$36.27/b, up by \$8.25 m-o-m and up by \$31.46 y-o-y.

The Singapore fuel oil 3.5% crack spread rebounded sharply following a three-month downward trend. Continuous declines in high sulphur fuel oil (HSFO) inventories amid stronger incentives for fuel oil requirements as feedstock for power generation provided backing to HSFO markets. Going forward, an upside potential in fuel oil markets could be expected once the peak maintenance season in the region ends, and with the rise of utilization rates in conversion units amid projections of a pick-up in demand at the onset of the summer season. Singapore fuel oil cracks against Oman averaged minus 44¢/b, up by \$12.44 m-o-m and by \$5.40 y-o-y.

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

Event	Time frame	Asia	Europe	US	Observations
Shifts in product trade flows in Europe	May 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
End of heavy turnaround season	May 22 – Jul 22				The expected rise in product output after peak turnarounds should lead to recovery in global product inventory levels, and fuel price relief.
Summer season	May 22 – Sep 22	↑ Positive impact on product markets	↑ Positive impact on product markets	↑ Positive impact on product markets	Mobility is expected to increase further, which should boost transportation fuel recovery, which consequently points to product tightness over the summer months.

Source: OPEC.

Table 6 - 2: Refinery operations in selected OECD countries

	Re	finery thro	ughput, mb	/d	Refinery utilization, %			
				Change				Change
	Feb 22	Mar 22	Apr 22	Apr/Mar	Feb 22	Mar 22	Apr 22	Apr/Mar
US	15.72	16.27	16.46	0.19	86.74	91.01	92.09	1.1 pp
Euro-14, plus UK and								
Norway	9.47	9.19	9.24	0.05	80.42	78.06	78.45	0.4 pp
France	0.78	0.68	0.70	0.02	68.12	59.34	60.97	1.6 pp
Germany	1.83	1.74	1.76	0.02	89.20	84.79	85.63	0.8 pp
Italy	1.11	1.19	1.16	-0.03	58.47	62.58	61.14	-1.4 pp
UK	1.02	0.99	1.01	0.03	86.95	84.31	86.50	2.2 pp
Selected Asia*	26.61	26.46	25.48	-0.98	92.24	91.71	88.33	-3.4 pp

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

Product Markets and Refinery Operations

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

Refinery crude throughput	2019	2020	2021	2Q21	3Q21	4Q21	1Q22	2Q22
OECD Americas	19.04	16.59	17.79	18.20	18.42	18.20	18.34	19.23
of which US	16.99	14.72	15.65	16.17	16.22	16.02	15.97	17.17
OECD Europe	12.13	10.65	10.91	10.65	11.35	11.48	11.16	11.39
of which:								
France	1.00	0.67	0.69	0.65	0.79	0.76	0.76	0.79
Germany	1.78	1.72	1.72	1.66	1.75	1.90	1.76	1.76
Italy	1.35	1.11	1.23	1.24	1.27	1.34	1.14	1.41
UK	1.08	0.92	0.92	0.94	0.99	0.99	1.02	1.07
OECD Asia Pacific	6.79	5.89	5.78	5.49	5.78	6.01	6.26	5.47
of which Japan	3.02	2.48	2.49	2.22	2.51	2.69	2.89	2.91
Total OECD	37.96	33.14	34.47	34.33	35.55	35.69	35.76	36.09
Latin America	3.83	3.12	3.41	3.27	3.44	3.51	3.49	3.63
Middle East	6.97	6.09	6.73	6.47	6.75	7.23	7.29	7.83
Africa	1.97	1.79	1.97	2.00	1.97	1.98	1.99	1.95
India	5.04	4.42	4.73	4.55	4.40	5.02	5.18	5.13
China	13.02	13.48	14.07	14.38	13.76	14.03	13.96	13.41
Other Asia	5.13	4.74	4.80	4.85	4.84	4.91	5.11	5.23
Russia	5.70	5.39	5.61	5.52	5.63	5.75	5.63	5.21
Other Eurasia	1.21	1.03	1.18	1.16	1.28	1.20	1.18	0.92
Other Europe	0.55	0.43	0.41	0.48	0.43	0.33	0.39	0.41
Total Non-OECD	43.40	40.49	42.91	42.67	42.50	43.97	44.23	43.73
Total world	81.36	73.63	77.38	77.01	78.05	79.66	79.99	79.82

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

	· · · · · · · · · · · · · · · · · · ·					
				Change	Annual avg.	Year-to-date
		Mar 22	Apr 22	Apr/Mar	2021	2022
US Gulf (Cargoes FOB)						
Naphtha*		110.75	100.37	-10.38	70.70	98.32
Premium gasoline	(unleaded 93)	140.78	143.25	2.47	91.41	126.53
Regular gasoline	(unleaded 87)	134.74	133.51	-1.23	86.72	120.55
Jet/Kerosene		146.30	157.39	11.09	78.32	129.84
Gasoil	(0.2% S)	136.73	137.21	0.48	73.94	118.42
Fuel oil	(3.0% S)	93.44	89.41	-4.03	59.84	84.45
Rotterdam (Barges FoB)						
Naphtha		111.98	100.31	-11.67	70.15	98.39
Premium gasoline	(unleaded 98)	134.95	133.44	-1.51	85.89	121.25
Jet/Kerosene		152.33	156.07	3.74	77.17	130.13
Gasoil/Diesel	(10 ppm)	156.48	151.46	-5.02	78.31	130.47
Fuel oil	(1.0% S)	109.70	97.60	-12.10	69.12	95.28
Fuel oil	(3.5% S)	100.67	97.50	-3.17	61.38	88.25
Mediterranean (Cargoes	FOB)					
Naphtha		110.29	97.78	-12.51	69.40	96.72
Premium gasoline**		128.56	126.04	-2.52	80.46	114.83
Jet/Kerosene		148.12	150.30	2.18	75.06	126.42
Diesel		153.08	147.85	-5.23	77.73	127.72
Fuel oil	(1.0% S)	114.69	104.14	-10.55	70.51	99.18
Fuel oil	(3.5% S)	93.45	87.17	-6.28	58.98	82.44
Singapore (Cargoes FOB)					
Naphtha		111.42	97.75	-13.67	70.83	97.37
Premium gasoline	(unleaded 95)	131.07	126.73	-4.34	80.28	116.64
Regular gasoline	(unleaded 92)	127.47	123.45	-4.02	78.28	113.84
Jet/Kerosene		134.32	134.35	0.03	75.10	117.66
Gasoil/Diesel	(50 ppm)	142.08	148.36	6.28	77.36	124.94
Fuel oil	(180 cst)	136.25	137.21	0.96	75.71	120.03
Fuel oil	(380 cst 3.5% S)	97.61	102.47	4.86	62.07	88.21
N (+D ++O (:						· · · · · · · · · · · · · · · · · · ·

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

Sources: Argus and OPEC.

Tanker Market

Suezmax and Aframax rates in April continued to outperform those in the VLCC class, with gains of 61% and 28%, respectively. Suezmax was supported by a strong market in the Atlantic Basin, while Aframax was supported by both the East and West markets. After a sluggish start to the year, VLCC rates finally saw a pickup of 24% on average in April. However, gains were short-lived dissipating by the end of the month amid ample availability.

Clean rates continued to perform well in April, gaining 15%. The market has been supported by strength in the East, as well as rising tanker demand in the West of Suez, amid preparations for the driving season in the Northern Hemisphere.

Spot fixtures

The latest estimates show **global spot fixtures** declined in April, averaging 12.9 mb/d. Fixtures fell 2.4 mb/d, or around 16% m-o-m. Compared with the previous year, spot fixtures were down 3.2 mb/d, or about 20%.

Table 7 - 1: Spot fixtures, mb/d

				Change
Spot fixtures	Feb 22	Mar 22	Apr 22	Apr 22/Mar 22
All areas	15.07	15.26	12.85	-2.41
OPEC	9.37	10.07	8.48	-1.59
Middle East/East	5.30	5.72	5.04	-0.68
Middle East/West	1.14	1.10	0.63	-0.47
Outside Middle East	2.93	3.25	2.81	-0.44

Sources: Oil Movements and OPEC.

OPEC spot fixtures also declined m-o-m in April, averaging 8.5 mb/d. This represented a drop of 16%, or 1.6 mb/d. Compared with the same month in 2021, they were about 1.7 mb/d, or 17%, lower.

Middle East-to-East fixtures fell 0.7 mb/d, or 12%, to average 5.0 mb/d. Compared with the same month last year, eastward flows declined 0.2 mb/d, or almost 4%.

Spot fixtures from the **Middle East-to-West** declined m-o-m by about 0.5 mb/d, or 43%, in April, to average 0.6 mb/d. Y-o-y, rates were 0.6 mb/d, or 47%, lower.

Outside the Middle East, fixtures averaged 2.8 mb/d in April. This represents a m-o-m decline of 0.4 mb/d, or 14%, and 0.9 mb/d, or 25%, y-o-y.

Sailings and arrivals

OPEC sailings increased m-o-m by 0.6 mb/d, or over 2%, in April to average 23.7 mb/d. OPEC sailings were 2.4 mb/d, or over 11%, higher compared with the same month a year ago.

Middle East sailings edged up slightly in April to average 17.6 mb/d. Y-o-y, sailings from the region rose 2.3 mb/d, or around 15%, compared with April 2021.

Crude arrivals in April saw gains across all regions except Europe. Arrivals in the Far East increased m-o-m by 0.7 mb/d, or around 5%, to average 16.0 mb/d. Y-o-y, arrivals were 3.6 mb/d, or about 29%, higher. In West Asia, arrivals increased m-o-m by 0.5 mb/d, or 6%, in April to average 8.9 mb/d, representing a y-o-y increase of 2.4 mb/d, or 37%.

Meanwhile, arrivals in North America edged up slightly to average 8.8 mb/d, representing a y-o-y rise of 0.5 mb/d, or 6%. In contrast, European arrivals declined m-o-m by 0.2 mb/d, or 2%, to average 12.7 mb/d. However, this was 0.8 mb/d, or about 7%, higher than in the same month last year.

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

Sailings	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
OPEC	23.98	23.10	23.66	0.56
Middle East	18.04	17.54	17.63	0.09
Arrivals				
North America	8.65	8.75	8.82	0.07
Europe	12.92	12.91	12.65	-0.26
Far East	13.78	15.31	16.03	0.72
West Asia	8.45	8.37	8.85	0.48

Sources: Oil Movements and OPEC.

Dirty tanker freight rates

Very large crude carriers (VLCCs)

VLCC spot rates saw further gains in April, rising 24% on average m-o-m, with rates moving higher across all reported routes. However, with ample availability and tanker demand generally concentrated more in the Suezmax and Aframax classes, rates will be hard pressed to continue moving higher.

On the **Middle East-to-East** route, rates rose 14% m-o-m to average WS50 points and were 52% higher y-o-y. Rates on the **Middle East-to-West** route also increased, up 35% m-o-m to average WS31 points. This represented a y-o-y gain of 41%.

West Africa-to-East spot rates rose 30% m-o-m to average WS57 in April. Compared with the same month last year, rates were 63% higher.

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

, ,	Size	,	,		Change
VLCC	1,000 DWT	Feb 22	Mar 22	Apr 22	Apr 22/Mar 22
Middle East/East	230-280	35	44	50	6
Middle East/West	270-285	17	23	31	8
West Africa/East	260	36	44	57	13

Sources: Argus and OPEC.

Suezmax

Suezmax rates experienced further strong gains in April, rising 61% m-o-m. Y-o-y, rates were 165% higher. The increase was driven by ongoing momentum from market dislocations and security concerns in the Black Sea.

Rates on the **West Africa-to-US Gulf Coast (USGC)** route increased by 66% m-o-m in April to average WS136. Compared with the same month last year, rates were 157% higher.

Spot freight rates on the **USGC-to-Europe** route rose 53% over the previous month to average WS118 points. Y-o-y, rates were 168% higher.

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

	Size				Change
Suezmax	1,000 DWT	Feb 22	Mar 22	Apr 22	Apr 22/Mar 22
West Africa/US Gulf Coast	130-135	64	82	136	54
US Gulf Coast/ Europe	150	64	77	118	41

Sources: Argus and OPEC.

Aframax

Aframax spot freight rates also showed a strong performance in April. On average, spot Aframax rates were 28% higher m-o-m. Compared with the same month last year, rates were 128% higher.

Rates on the **Indonesia-to-East** route increased 16% m-o-m in April, averaging WS155. However, y-o-y, rates on the route rose 91%.

Spot rates on the Caribbean-to-US East Coast (USEC) route increased 41% m-o-m to average WS235. Y-o-y, rates were also 161% higher.

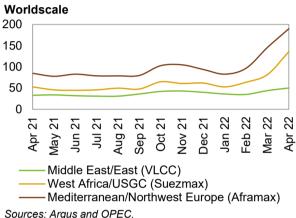
Table 7 - 5: Dirty Aframax spot tanker freight rates, WS

	Size				Change
Aframax	1,000 DWT	Feb 22	Mar 22	Apr 22	Apr 22/Mar 22
Indonesia/East	80-85	92	134	155	21
Caribbean/US East Coast	80-85	136	167	235	68
Mediterranean/Mediterranean	80-85	116	161	199	38
Mediterranean/Northwest Europe	80-85	97	146	190	44

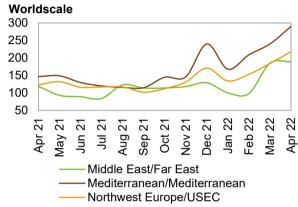
Sources: Argus and OPEC.

Cross-Med spot freight rates showed continued gains in April, increasing by a further 24% m-o-m to average WS199. Y-o-y, rates were 131% higher. On the **Mediterranean-to-NWE** route, rates gained another 30% m-o-m to average WS190. Compared with the same month last year, rates were 124% higher.

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



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



Sources: Argus and OPEC.

Clean tanker freight rates

Clean spot freight rates also showed gains across all monitored routes. On average, rates increased 15% m-o-m in April and were up by 77% compared with the levels seen in the same month last year. Gains were driven primarily by improvements West of Suez, which on average were 20% higher m-o-m.

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

·	Size				Change
East of Suez	1,000 DWT	Feb 22	Mar 22	Apr 22	Apr 22/Mar 22
Middle East/East	30-35	98	185	189	4
Singapore/East	30-35	128	208	223	15
West of Suez					
Northwest Europe/US East Coast	33-37	153	184	218	34
Mediterranean/Mediterranean	30-35	209	240	290	50
Mediterranean/Northwest Europe	30-35	218	248	300	52

Sources: Argus and OPEC.

Rates on the Middle East-to-East route edged up 2% m-o-m in April, building on the previous month's strong gains, to average WS189. Y-o-y, rates are up 59%. Freight rates on the Singapore-to-East route gained 7% m-o-m to average WS223 and were 52% higher compared with the same month last year.

In the West of Suez market, rates on the Northwest Europe (NWE)-to-USEC route rose 18% m-o-m to average WS218 points. They were 77% higher y-o-y. Rates in the Cross-Med and Med-to-NWE saw gains of 21% each to average WS290 and WS300 points, respectively. Compared with the same month last year, rates were 97% higher Cross-Med and up 91% on the Med-to-NWE route.

Crude and Refined Products Trade

Preliminary data shows US crude imports declined to an 11-month low of 5.9 mb/d in April, while exports averaged 3.4 mb/d for a gain of 5% m-o-m. US product imports were broadly stable while product exports strengthened for the seventh month in a row to average 6.4 mb/d, supported by strong flows to Latin American and increasing flows to Europe. Looking ahead, US crude and product exports are likely to remain supported by flows to Europe, and product flows to Latin America.

China's crude imports averaged 10.1 mb/d in March, recovering from the weak performance the month before. Recently released customs data shows China's crude imports increased to 10.5 mb/d in April, despite expectations that reduced demand due to COVID-19 lockdowns would weigh on imports. China's product imports in March declined 8%, while product exports rebounded, amid surprisingly strong gasoil outflows. With domestic demand impacted by lockdowns, China's product outflows are likely to be higher than previously expected in April, particularly for jet fuel.

India's crude imports dipped in March, but remained near the strong performance seen over the previous four months, averaging 4.5 mb/d for the month. Crude imports are expected rise in April, as refiners step up purchases particularly of heavily discounted Russian Urals. Product exports saw a robust increase of 26% or about 0.3 mb/d to average 1.7 mb/d in March, the highest since September 2013, as Europe sought alternatives to Russian oil product flows.

Japan's crude imports have risen steadily since the start of the year, to average 2.9 mb/d in March, amid healthy demand. Crude imports are expected to slow in April but remain higher y-o-y amid efforts to maintain an inventory buffer.

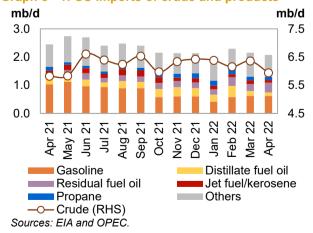
The latest data for OECD Europe shows that imports into the region remained relatively stable in January at 8.3 mb/d. Despite concerns for a shortfall in flows to Europe, crude and product imports have remained steady up through April. The need to ensure regional supply is likely to dampen crude and product exports in April and May, amid an EU proposal to enact an embargo on Russia crude and oil products.

US

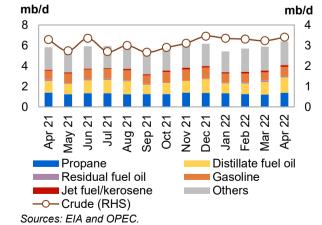
Preliminary data shows **US crude imports** declined 7% or 0.4 mb/d m-o-m in April to average 5.9 mb/d, representing an 11-month low. Compared with the same month of 2021, crude imports were around 0.1 mb/d, or about 2%, higher.

US crude exports rebounded from the previous month's decline, averaging 3.4 mb/d in April, a gain of 5% or 0.2 mb/d m-o-m. Exports rose 0.1 mb/d, or around 4%, compared with the same month last year. Gains were driven by higher flows to Europe, which outpaced exports to Asia for the second month in a row, amid shifting trade flows.

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 **February**, according to the latest monthly EIA data. Canada remained at the top spot with a share of 62%, despite declining 106 tb/d m-o-m. Mexico was second with a share of 9%, down 50 tb/d m-o-m. Saudi Arabia was third with a share of 7%, following a decline of 40 tb/d.

India remained the top **destination** for **US crude exports** in February, with a share of 12%. However, tanker tracking data points to a steep decline in US crude exports to India in March and April. In February, the UK was second with 10%, followed by China and Singapore with 9% each.

Based on weekly data, **US net crude imports** averaged 2.5 mb/d in **April**, compared with 3.1 mb/d the month before and 2.5 mb/d in the same month last year.

On the **products** side, **imports** slipped 4% or 77 tb/d m-o-m to average 2.1 mb/d. Lighter end products led losses, offset by higher inflows of residual fuels. Compared with the same month last year, product imports declined 15%, or about 0.4 mb/d.

Product exports strengthened for the seventh month in a row, up almost 9% or 0.5 mb/d m-o-m in April, to average 6.4 mb/d. Gains were seen across most major products, particularly distillates. Compared with April 2021, product exports were 0.6 mb/d, or about 10%, higher.

As a result, preliminary data shows **US net product exports** averaged 4.3 mb/d in April, compared with 3.7 mb/d in the previous month and 3.4 mb/d in the same month of 2021.

Preliminary data indicates that US **net crude and product exports** averaged 1.8 mb/d in April. This compares with net exports of 0.6 mb/d the month before and 0.8 tb/d in April 2021.

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

				Change
US	Feb 22	Mar 22	Apr 22	Apr 22/Mar 22
Crude oil	2.85	3.12	2.54	-0.59
Total products	-3.40	-3.73	-4.30	-0.58
Total crude and products	-0.55	-0.60	-1.77	-1.16

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

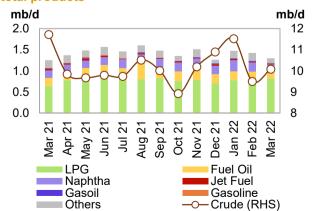
Sources: EIA and OPEC.

Looking ahead, US crude and product exports are likely to be supported by higher flows to Europe, and product flows to Latin America. Meanwhile, US crude imports are likely to remain steady amid preparations for the driving season in the Northern Hemisphere.

China

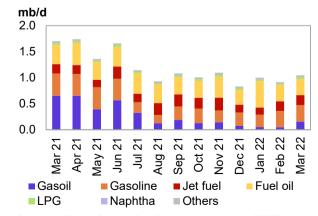
China's crude imports averaged 10.1 mb/d in March, recovering from the weak performance the month before. M-o-m, crude flows into China were 6% or 0.6 mb/d higher. Recently released customs data shows China's crude imports increased to 10.5 mb/d in April, despite expectations that reduced demand due to COVID-19 lockdowns would weigh on imports. Compared with the same months last year, crude imports declined 14% or 1.6 mb/d in March but were up 4% or 0.4 mb/d y-o-y compared with the preliminary April figure.

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**, Saudi Arabia remained the top supplier of crude to China in March, with a share of 16%, despite a decline in volumes. Russia remained in second place with 15%. Iraq saw a sharp jump in volumes to reach third place with an 11% share.

Product imports declined 8% or 0.1 mb/d to average 1.3 mb/d in March. Naphtha inflows slipped, outweighing the strength in LPG. Compared with the same month last year, product imports increased 4% or around 50 tb/d.

Product exports rebounded in March, averaging around 1.0 mb/d, amid unexpectedly strong gasoil outflows. M-o-m, product exports were about 15% or 0.1 mb/d higher. Y-o-y, product outflows declined 39% or 0.7 mb/d.

As a result, China's **net product imports** averaged 251 tb/d in March, compared with net imports of 501 tb/d the month before and net product exports of 450 tb/d in the same month of 2021.

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

·				Change
China	Jan 22	Feb 22	Mar 22	Mar 22/Feb 22
Crude oil	11.52	9.45	10.09	0.63
Total products	0.47	0.50	0.25	-0.25
Total crude and products	12.00	9.95	10.34	0.38

Note: Totals may not add up due to independent rounding. Sources: China, Oil and Gas Petrochemicals and OPEC.

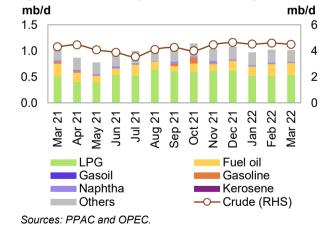
Looking ahead, lockdown measures are expected to cap crude and product imports in 2Q22, with some forecasts expecting China's crude imports to decline this year. Restricted product export quotas should limit outflows of transportation fuels, offset by higher fuel oil and jet fuel outflows. However, reduced consumption of transport fuels amid travel restrictions could lead to an uptick in exports for these products as a way of managing inventories.

India

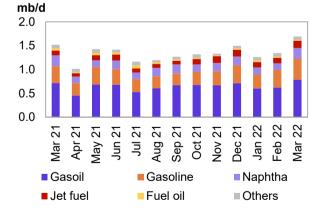
India's crude imports dipped in **March**, but remained near the strong performance seen over the previous four months. Crude inflows averaged 4.5 mb/d for the month, representing a 3% or 1 mb/d decline m-o-m but a gain of 4% or around 0.2 mb/d y-o-y.

In terms of **crude imports by source**, the latest data for **February** shows Saudi Arabia remaining in the top position, with a share of almost 20%. Iraq was second with just over 19%, followed by the US with 13%. While India imported zero crude from Russia in February, flows are expected to pick up in March and April, as domestic refiners are looking to bring in deeply discounted Urals crude, potentially reaching around a 10% share.

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



Graph 8 - 6: India's exports of products



Sources: PPAC and OPEC.

Regarding **products**, **imports** were broadly unchanged averaging 1.0 mb/d, with slight declines in transport fuels offset by gains in LPG. Compared with the same month in 2021, inflows were just under 0.1 mb/d or about 9% lower.

Product exports saw a robust increase of 26% or about 0.3 mb/d to average 1.7 mb/d in March, the highest since September 2013. Gains were driven by gasoline and gasoil, while fuel oil declined. The jump in exports was driven by European countries efforts to shift away from dependence on Russian oil product flows. As a result, revenues from exports of refined products hit a record high of \$6.95 billion in March, Energy Intelligence

quoted oil ministry data as showing. This was up 70% from the previous month and more than double March 2021 levels. Compared with the same month last year, product exports were 11% or 0.2 mb/d, higher.

As a result, **net product exports** averaged 671 tb/d in March, compared with 320 tb/d the month before and 397 tb/d in the same month of 2021.

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

				Change
India	Jan 22	Feb 22	Mar 22	Mar 22/Feb 22
Crude oil	4.51	4.60	4.49	-0.10
Total products	-0.29	-0.32	-0.67	-0.35
Total crude and products	4.22	4.28	3.82	-0.46

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.

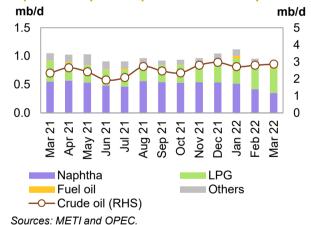
Looking ahead, crude imports are likely to rise further in April, as refiners keep run rates high to fill product supply gaps due in part to the ongoing dislocations. Product exports are also seen weakening in April from the strong showing the month before, amid reduced flows to Asia.

Japan

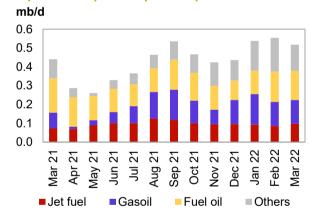
Japan's crude imports have risen steadily since the start of the year, to average 2.9 mb/d in **March** amid healthy demand. M-o-m, crude inflows were 3% or about 70 tb/d higher. Compared to the same month last year, crude imports were almost 23% or 527 tb/d higher.

In terms of **crude imports by source**, the UAE rose to the top spot in March with a share of over 38%. Saudi Arabia was second with 34%, followed by Qatar with around 9%. Russia supplied 104 tb/d, or around 4%, of Japan's crude imports in March, unchanged m-o-m.

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



Graph 8 - 8: Japan's exports of products



Sources: METI and OPEC.

Product imports, including LPG, slipped for the second month in a row, averaging 852 tb/d in March, with declines seen across all major products. In monthly terms, product inflows fell 11% or 105 tb/d. Y-o-y, imports declined 19% or 200 tb/d.

Product exports declined around 7% or about 40 tb/d to average 518 tb/d in March, remaining close to the relatively strong levels seen over the previous two months. Declines were led by gasoline. Product outflows were 78 tb/d, or around 18%, higher compared to the same month of 2021.

As a consequence, Japan's **net product imports** averaged 334 tb/d in March. This was down from 403 tb/d the month before and 612 tb/d in March 2021.

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

				Change
Japan	Jan 22	Feb 22	Mar 22	Mar 22/Feb 22
Crude oil	2.72	2.80	2.87	0.07
Total products	0.58	0.40	0.33	-0.07
Total crude and products	3.30	3.20	3.21	0.00

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

Sources: METI and OPEC.

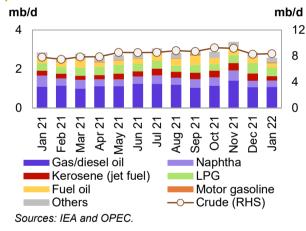
Looking ahead, crude imports are expected to slow in April but remain higher y-o-y amid efforts to maintain an inventory buffer. Product imports are seen higher in April, driven by naphtha inflows, while product exports were seen supported by outflow of motor fuels.

OECD Europe

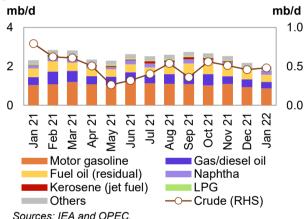
The latest data for **OECD Europe** show crude oil imports remained relatively stable at 8.3 mb/d in January, representing a gain of less than 1%. Y-o-y, imports increased by 0.5 mb/d, or almost 7%.

In terms of **import sources** from outside the region, Russia retained the top spot in January with almost 2.8 mb/d, followed by the US, which supplied close to 1.1 mb/d, and then Kazakhstan with 0.9 mb/d. The high share of Russian crude imports points to the challenge Europe is facing in reducing imports from Russia. In May, European Union President Ursula von der Leyen proposed to halt Russian crude imports in six months and end imports of Russian refined products by the end of the year. Approval of the proposal has been held up by countries such as Hungary, Slovakia and the Czech Republic with refinery systems that rely on pipeline deliveries of Russian crude.

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



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



Crude exports edged higher to average 480 tb/d, up 5% from the last month of 2021, but some 312 tb/d or 40% lower y-o-y.

In terms of **destination**, China remained the top buyer of OECD Europe crude exports outside the region, purchasing 323 tb/d in January.

Net crude imports averaged 7.9 mb/d in January, compared with 7.8 mb/d the month before and 7.0 mb/d in the same month last year.

On the **product** side, **product imports** declined for the second month in a row, falling 9% or 0.3 mb/d, to average 2.6 mb/d. Losses were spread across most major products, except motor fuels. Product imports declined around 10% or 0.3 mb/d compared with January 2021 levels.

Product exports declined for the fourth consecutive month, averaging just under 2 mb/d, with losses in all major products except diesel. Compared to the previous month, product outflows were over 8% or 0.2 mb/d lower. Y-o-y, exports were 14% or 0.3 mb/d lower than in the same month of 2021.

Net product imports averaged 589 tb/d at the start of the year, compared with 661 tb/d in December 2021 and 533 tb/d in January 2021.

Combined, **net crude and product imports** averaged 8.4 mb/d in January. This compares with 8.5 mb/d in December 2021, and 7.5 mb/d in January 2021.

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

				Change
OECD Europe	Nov 21	Dec 21	Jan 22	Jan 22/Dec 21
Crude oil	8.67	7.81	7.86	0.05
Total products	0.86	0.66	0.59	-0.07
Total crude and products	9.53	8.47	8.45	-0.02

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

Sources: IEA and OPEC.

Looking ahead, despite concerns for a shortfall in flows to Europe, crude and product imports have remained steady up through April. The need to ensure regional supply is likely to dampen crude and product exports.

Eurasia

Total crude oil exports from Russia and Central Asia rose in **March**, averaging 6.6 mb/d. M-o-m, crude exports from the region increased 157 tb/d, or about 3%. Compared with the same month of 2021, total crude exports from the region were about 595 tb/d, or 10%, higher. The increase was driven primarily by higher Russian flows from the Baltic and despite declines in outflows of Kazakhstan flows from the CPC terminal caused by storm damage. Far East exports also increased.

Crude exports through the **Transneft system** increased on all areas except the Druzhba in March. On the whole, outflows increased 158 tb/d, or around 4%, to average 3.9 mb/d. Compared with the same month last year, exports rose 607 tb/d, or 18%. From the **Baltic Sea**, exports rose 109 tb/d m-o-m, or about 9%, to average close to 1.4 mb/d. This was the result of higher flows from Ust-Luga, which increased by 114 tb/d m-o-m, or about 24%, to average 597 tb/d, while flows from Primorsk were marginally lower. Total shipments from the **Black Sea** rose 31 tb/d m-o-m, or about 8%, to average 435 tb/d. In contrast, shipments via the **Druzhba** pipeline slipped 19 tb/d or 2% m-o-m to average 808 tb/d. Meanwhile, Pacific flows were slightly higher with **Kozmino** shipments up 31 tb/d or about 5% m-o-m, to average 718 tb/d. Exports to China via the **ESPO pipeline** edged up by less than 1% m-o-m to average 592 tb/d in March.

In the **Lukoil system**, exports via the Varandey offshore platform in the Barents Sea remained halted in February, while those from the Baltic Sea were unchanged.

On other routes, **Russia's Far East** exports rose 63 tb/d m-o-m, or 23%, to average 344 tb/d in March. This was broadly in line with volumes in March 2021.

Central Asian exports averaged 221 tb/d in March, representing a marginal increase compared with the month before and a gain of 12%, y-o-y.

Black Sea total exports from the CPC terminal declined m-o-m in March, falling 121 tb/d m-o-m, or more than 8%, but were still 8% or 116 tb/d higher than the same month of 2021. Exports via the Supsa terminal declined sharply as flows were rerouted to avoid the Black Sea. Exports via the **Baku-Tbilisi-Ceyhan (BTC) pipeline** increased 64 tb/d, or about 13%, to 549 tb/d, representing a gain of 5% y-o-y.

Total product exports from Russia and Central Asia declined 556 tb/d, or 17% m-o-m, to average 2.6 mb/d in March. M-o-m, naphtha, fuel oil, VGO and gasoil saw declines, while gasoline jet fuel saw slight gains. Y-o-y, total product exports were 16% or 484 tb/d lower in February.

Looking ahead, amid announced sanctions and reports of self-sanctioning by some companies, as well as a proposed embargo by the EU, Russian crude exports are expected to be impacted, although this was not the case in the March data. Some preliminary estimates see a slowdown emerging in April while others expected declines to begin showing in mid-May. Efforts to shift flows eastward, with India emerging as a notable new buyer of heavily discounted Russian crude, further clouds expectations for Russian crude exports. Given the magnitude of Russian flows to the international market, representing around 12% of seaborne crude exports and 20% of fuel oil exports, developments warrant continued close monitoring.

Commercial Stock Movements

Preliminary March data sees total OECD commercial oil stocks up m-o-m by 10.1 mb. At 2,621 mb, they were 298 mb lower than the same time one year ago, 304 mb lower than the latest five-year average and 293 mb below the 2015-2019 average. Within the components, crude stocks rose m-o-m by 12.9 mb, while products stocks fell m-o-m by 2.8 mb.

At 1,265 mb, OECD crude stocks were 189 mb lower than the latest five-year average and 198 mb below the 2015-2019 average. OECD product stocks stood at 1,356 mb, representing a deficit of 115 mb compared with the latest five-year average and 95 mb below the 2015-2019 average.

In terms of days of forward cover, OECD commercial stocks fell m-o-m by 0.3 days in March to stand at 57.4 days. This is 8.8 days below March 2021 levels, 8.7 days less than the latest five-year average and 5.0 days lower than the 2015-2019 average.

Preliminary data for April showed that total US commercial oil stocks rose m-o-m by 2.6 mb to stand at 1,146 mb. This is 142.9 mb, lower than the same month in 2021 and 152.3 mb, below the latest five-year average. Crude stocks rose by 3.4 mb, while product stocks fell m-o-m by 0.8 mb.

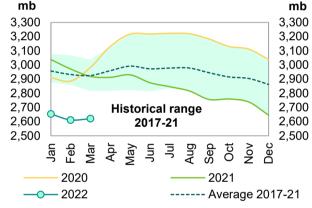
OECD

Preliminary March data sees **total OECD commercial oil stocks** up m-o-m by 10.1 mb. At 2,621 mb, they were 298 mb less than the same time one year ago, 304 mb lower than the latest five-year average and 293 mb below the 2015-2019 average.

Within the components, crude stocks rose m-o-m by 12.9 mb, while products stocks fell m-o-m by 2.8 mb. Total commercial oil stocks in March rose in OECD Europe, while they declined in OECD America and OECD Asia Pacific.

OECD **commercial crude stocks** stood at 1,265 mb in March. This is 173 mb lower than the same time a year ago and 189 mb below the latest five-year average. Compared with the previous month, OECD Americas saw a stock build of 3.2 mb, OECD Asia

OECD Graph 9 - 1: OECD commercial oil stocks



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

Pacific rose by 4.5 mb and OECD Europe increased by 5.1 mb.

Total product inventories stood at 1,356 mb in March. This is 125 mb less than the same time a year ago, and 115 mb lower than the latest five-year average. Product stocks in OECD Americas and OECD Asia Pacific fell m-o-m by 9.5 mb and 6.4 mb, respectively, while product stocks rose m-o-m by 13.1 mb in OECD Europe.

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

					Change
OECD stocks	Mar 21	Jan 22	Feb 22	Mar 22	Mar 22/Feb 22
Crude oil	1,438	1,252	1,252	1,265	12.9
Products	1,481	1,401	1,359	1,356	-2.8
Total	2,919	2,653	2,611	2,621	10.1
Days of forward cover	66.3	58.7	57.7	57.4	-0.3

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 fell m-o-m by 0.3 days in March to stand at 57.4 days. This is 8.8 days below March 2021 levels, 8.7 days less than the latest five-year average and 5.0 days lower than the 2015-2019 average. All three OECD regions were below the latest five-year average: the Americas by 8.6 days at 56.4 days, Asia Pacific by 8.3 days at 43.0 days and Europe by 9.0 days at 67.4 days.

OECD Americas

OECD Americas total commercial stocks fell by 6.2 mb m-o-m in March to settle at 1,424 mb. This is 146 mb less than the same month in 2021 and 122 mb lower than the latest five-year average.

Commercial crude oil stocks in OECD Americas rose m-o-m by 3.2 mb in March to stand at 734 mb, which is 94 mb lower than in March 2021 and 72 mb less than the latest five-year average. The stock build came on the back of higher crude imports.

Total product stocks in OECD Americas fell m-o-m by 9.5 mb in March to stand at 690 mb. This was 52 mb lower than in the same month of 2021 and 50 mb below the latest five-year average. Higher total consumption in the region was behind the stock draw.

OECD Europe

OECD Europe total commercial stocks rose m-o-m by 18.3 mb in March to settle at 887 mb. This is 115 mb less than the same month in 2021 and 117 mb below the latest five-year average.

OECD Europe's commercial crude stocks in March rose m-o-m by 5.1 mb to end the month at 377 mb, which is 53 mb lower than one year ago and 61 mb below the latest five-year average. The build in crude oil inventories came on the back of lower m-o-m refinery throughputs in the EU-14, plus UK and Norway, which decreased by 0.28 mb/d to stand at 9.19 mb.

Europe's product stocks also rose m-o-m by 13.1 mb to end March at 510 mb. This is 62 mb lower than a year ago and 56 mb below the latest five-year average.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks fell m-o-m by 1.9 mb in March to stand at 310 mb. This is 36 mb lower than a year ago and 65 mb below the latest five-year average.

OECD Asia Pacific's crude inventories rose by 4.5 mb m-o-m to end March at 155 mb, which is 26 mb lower than one year ago and 56 mb below the latest five-year average.

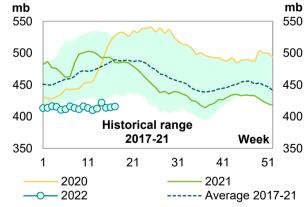
OECD Asia Pacific's total product inventories fell m-o-m by 6.4 mb to end March at 156 mb. This is 10.4 mb lower than the same time a year ago and 8.9 mb below the latest five-year average.

US

Preliminary data for April showed that total US Graph 9 - 2: US weekly commercial crude oil commercial oil stocks rose m-o-m by 2.6 mb to stand inventories at 1,146 mb. This is 142.9 mb, or 11.1%, lower than the same month in 2021 and 152.3 mb, or 11.7%, below the latest five-year average. Crude stocks rose by 3.4 mb, while product stocks fell m-o-m by 0.8 mb.

US commercial crude stocks in April stood at 415.7 mb. This is 74.0 mb, or 15.1%, lower than the same month of the previous year, and 74.2 mb, or 15.1%, below the latest five-year average. The monthly build in crude oil stocks can be attributed to additions from the SPR release.

Total product stocks in April stood at 730.7 mb. This is 68.9 mb, or 8.6%, below April 2021 levels, and 78.2 mb, or 9.7%, lower than the latest five-year average. The stock draw was mainly driven by higher US consumption.

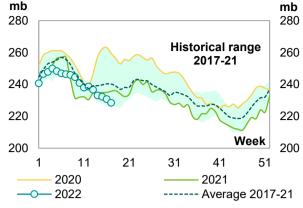


Sources: EIA and OPEC.

Gasoline stocks in April fell m-o-m by 8.2 mb to settle Graph 9 - 3: US weekly gasoline inventories at 228.6 mb. This is 9.8 mb, or 4.1 % lower than in the same month in 2021, and 13.7 mb, or 5.7%, lower than the latest five-year average. The monthly stock draw came mainly on the back of higher gasoline consumption.

Distillate stocks also fell m-o-m in April by 9.4 mb to stand at 104.9 mb. This is 31.1 mb, or 22.8%, lower than the same month of the previous year, and 33.3 mb, or 24.1%, below the latest five-year average.

Residual fuel oil stocks fell by 0.6 mb m-o-m in April. At 28.2 mb, this was 3.0 mb, or 9.7%, lower than a year earlier, and 4.8 mb, or 14.6%, below the latest five-year average.



Sources: EIA and OPEC.

By contrast, jet fuel stocks rose m-o-m by 0.8 mb, ending April at 36.2 mb. This is 4.3 mb, or 10.7%, lower than the same month of 2021, and 5.2 mb, or 12.7%, below the latest five-year average.

Table 9 - 2: US commercial petroleum stocks, mb

					Change
US stocks	Apr 21	Feb 22	Mar 22	Apr 22	Apr 22/Mar 22
Crude oil	489.7	409.1	412.4	415.7	3.4
Gasoline	238.4	250.4	236.8	228.6	-8.2
Distillate fuel	136.0	120.8	114.3	104.9	-9.4
Residual fuel oil	31.3	27.5	28.8	28.2	-0.6
Jet fuel	40.5	39.9	35.4	36.2	0.8
Total products	799.6	756.3	731.5	730.7	-0.8
Total	1,289.4	1,165.5	1,143.8	1,146.4	2.6
SPR	633.4	578.9	564.6	550.0	-14.6

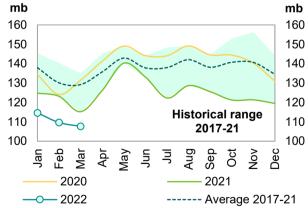
Sources: EIA and OPEC.

Japan

In Japan, total commercial oil stocks in March Graph 9 - 4: Japan's commercial oil stocks fell m-o-m by 1.9 mb to settle at 107.7 mb. This is 7.5 mb, or 6.5%, lower than the same month in 2021, and 21.5 mb, or 16.6%, below the latest five-year average. Crude stocks rose by 4.5 mb, while product stocks fell by 6.4 mb.

Japanese commercial crude oil stocks rose in March to stand at 60.5 mb. This is 0.6 mb, or 0.9%, higher than the same month of the previous year, but 13.8 mb. or 18.6%. lower than the latest five-year average. The build came on the back of higher crude imports.

By contrast, Japan's total product inventories fell m-o-m by 6.4 mb to end March at 47.2 mb. This is 8.1 mb, or 14.6%, lower than the same month in 2021 and 7.7 mb, or 14.0%, below the latest five-year average.



Sources: METI and OPEC.

Gasoline stocks fell m-o-m by 1.2 mb to stand at 9.9 mb in March. This was 2.7 mb, or 21.2% lower than a year earlier, and 1.3 mb, or 11.5%, lower than the latest five-year average. Higher gasoline sales, which rose by 14.9%, were behind the gasoline stock draw.

Distillate stocks also fell m-o-m by 3.1 mb to end March at 19.3 mb. This is 3.7 mb, or 16.1%, lower than the same month in 2021, and 3.1 mb, or 13.9%, below the latest five-year average. Within the distillate components, jet fuel rose by 1.6%, while kerosene and gasoil stocks fell m-o-m by 8.8% and 7.2%, respectively.

Total residual fuel oil stocks fell m-o-m by 1.2 mb to end March at 10.1 mb. This is 1.2 mb, or 10.5%, lower than in the same month of the previous year, and 2.1 mb, or 17.3%, below the latest five-year average. Within the components, fuel oil A and fuel oil B.C stocks fell by 7.1% and 12.4%, respectively.

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

					Change
Japan's stocks	Mar 21	Jan 22	Feb 22	Mar 22	Mar 22/Feb 22
Crude oil	60.0	55.9	56.0	60.5	4.5
Gasoline	12.5	11.4	11.1	9.9	-1.2
Naphtha	8.6	9.1	9.0	8.0	-1.0
Middle distillates	23.0	26.3	22.4	19.3	-3.1
Residual fuel oil	11.3	11.9	11.2	10.1	-1.2
Total products	55.3	58.7	53.6	47.2	-6.4
Total**	115.2	114.6	109.6	107.7	-1.9

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

Sources: METI and OPEC.

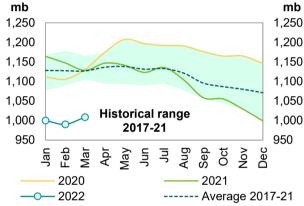
EU-14 plus UK and Norway

Preliminary data for March showed that **Graph total European commercial oil stocks** rose m-o-m by 18.3 mb to stand at 1,009 mb. At this level, they were 119.9 mb, or 10.6%, below the same month a year earlier, and 118.4 mb, or 10.5%, lower than the latest five-year average. Crude and product stocks rose by 5.1 mb and 13.1 mb respectively. **Graph stocks****The commercial oil stocks rose m-o-m stocks are stocks are showed that Graph stocks are sho

European **crude inventories** rose in March to stand at 424.9 mb. This is 45.1 mb, or 9.6% lower than the same month in 2021, and 59.0 mb, or 12.2%, below the latest five-year average. The build in crude oil inventories came on the back of lower m-o-m refinery throughputs in the EU-14, plus UK and Norway, which decrease by 0015 mb/d to stand at 9.37 mb.

Total European product stocks also rose m-o-m by 13.1 mb to end March at 583.7 mb. This is 74.7 mb,

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



Sources: Argus, Euroilstock and OPEC.

or 11.4%, lower than the same month of the previous year, and 59.4 mb, or 9.2%, below the latest five-year average.

Gasoline stocks declined m-o-m by 1.3 mb in March to stand at 108.7 mb. At this level, they were 3.2 mb, or 2.8%, lower than the same time a year earlier, and 10.5 mb/d, or 8.8%, less than the latest five-year average.

In contrast, **distillate stocks** rose m-o-m by 12.4 mb in March to stand at 391.7 mb. This is 55.9 mb, or 12.5%, below the same month in 2021, and 33.4 mb, or 7.9%, less than the latest five-year average.

Residual fuel stocks also rose m-o-m by 2.0 mb in March to stand at 59.2 mb. This is 7.6 mb, or 11.4%, lower than the same month in 2021, and 8.8 mb, or 12.9%, below the latest five-year average.

Naphtha stocks also rose slightly by 0.1 mb in March, ending the month at 24.0 mb. This is 8.2 mb, or 25.4%, below March 2021 levels, and 6.8 mb, or 22.0%, below the latest five-year average.

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

					Change
EU stocks	Mar 21	Jan 22	Feb 22	Mar 22	Mar 22/Feb 22
Crude oil	469.9	417.7	419.8	424.9	5.1
Gasoline	111.9	113.2	110.0	108.7	-1.3
Naphtha	32.2	24.1	23.9	24.0	0.1
Middle distillates	447.6	384.7	379.4	391.7	12.4
Fuel oils	66.8	60.3	57.3	59.2	2.0
Total products	658.5	582.3	570.6	583.7	13.1
Total	1,128.4	1,000.0	990.3	1,008.6	18.3

Sources: Argus, Euroilstock and OPEC.

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

Singapore

In March, **total product stocks in Singapore** fell m-o-m by 1.8 mb to 41.5 mb. This is 9.1 mb, or 18.0%, lower than the same month in 2021.

Light distillate stocks fell m-o-m by 0.4 mb in March to stand at 13.6 mb. This is 0.6 mb, or 4.2%, lower than the same month of the previous year.

Middle distillate stocks also fell m-o-m by 0.7 mb in March to stand at 7.0 mb. This is 6.3 mb, or 47.3%, lower than a year earlier.

Residual fuel oil stocks fell m-o-m by 0.7 mb, ending March at 20.9 mb. This is 2.3 mb, or 9.8%, lower than in March 2021.

ARA

Total product stocks in ARA rose m-o-m in March by 1.5 mb, reversing the draw of last month. At 39.2 mb, they are 10.6 mb, or 21.3%, lower than the same month in 2021.

Gasoline stocks in March rose m-o-m by 1.6 mb to stand at 11.8 mb, which is 0.7 mb, or 6.6%, lower than the same month of the previous year.

Jet oil stocks also rose m-o-m by 0.8 mb to end March at 7.5 mb. This is 0.5 mb, or 6.4%, higher than the level registered one year earlier.

By contrast, gasoil stocks fell by 0.4 mb to end March at 11.8 mb. This is 5.8 mb, or 33.1%, lower than the level seen in March 2021.

Fuel oil stocks also fell m-o-m by 1.0 mb in March to stand at 5.6 mb, which is 6.0 mb, or 51.6%, lower than in March 2021.

Fujairah

During the week ending 2 May 2022, **total oil product stocks in Fujairah** rose w-o-w by 0.8 mb to stand at 16.89 mb, according to data from Fed Com and S&P Global Platts. At this level, total oil stocks were 7.16 mb lower than the same time a year ago.

Light distillate stocks rose by 0.31 mb w-o-w to stand at 4.06 mb in the week to 2 May 2022, which is 1.27 mb lower than the same period a year ago. **Middle distillate stocks** also rose by 0.29 mb to stand at 1.56 mb, which is 2.30 mb lower than a year ago. **Heavy distillate stocks** rose w-o-w by 0.20 mb to stand at 11.27 mb, which is 3.59 mb lower than the same time last year.

Balance of Supply and Demand

Demand for OPEC crude in 2021 was revised up by 0.1 mb/d from the previous MOMR to stand at 28.2 mb/d. This is around 5.0 mb/d higher than in 2020.

According to secondary sources, OPEC crude production averaged 25.2 mb/d in 1Q21, which is 1.3 mb/d lower than demand for OPEC crude in the same period. In 2Q21, OPEC crude production averaged 25.6 mb/d, which is 1.7 mb/d lower than demand for OPEC crude. In 3Q21, OPEC crude oil production averaged 26.9 mb/d, which is 2.0 mb/d lower than demand for OPEC crude. In 4Q21, OPEC crude oil production averaged 27.7 mb/d, which is 2.5 mb/d lower than demand for OPEC crude.

For 2021, OPEC crude production averaged 26.4 mb/d, which was 1.9 mb/d below demand for OPEC

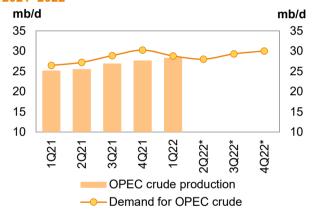
Demand for OPEC crude in 2022 was revised up by 0.1 mb/d from the previous month to stand at 29.0 mb/d, which is around 0.8 mb/d higher than in 2021. According to secondary sources, OPEC crude production averaged 28.4 mb/d in 1Q22, which is 0.4 mb/d lower than demand for OPEC crude during the same period.

Balance of supply and demand in 2021

Demand for OPEC crude in 2021 was revised up by Graph 10 - 1: Balance of supply and demand, 0.1 mb/d from the previous MOMR to stand at 2021-2022* 28.2 mb/d. This is around 5.0 mb/d higher than in 2020. Compared with the previous assessment, the first three guarters were revised up by 0.1 mb/d, while 4Q21 was revised up by 0.2 mb/d.

When compared with the same quarters in 2020, demand for OPEC crude in 1Q21 and 2Q21 was higher by 3.9 mb/d and 9.6 mb/d, respectively. The 3Q21 and 4Q21 are estimated to show y-o-y increases of 3.8 mb/d and 3.0 mb/d, respectively.

According to secondary sources, OPEC crude production averaged 25.2 mb/d in 1Q21, which is 1.3 mb/d lower than demand for OPEC crude in the same period. In 2Q21, OPEC crude production averaged 25.6 mb/d, which is 1.7 mb/d lower than



Note: * 2Q22-4Q22 = Forecast. Source: OPEC.

demand for OPEC crude. In 3Q21, OPEC crude oil production averaged 26.9 mb/d, which is 2.0 mb/d lower than demand for OPEC crude. In 4Q21, OPEC crude oil production averaged 27.7 mb/d, which is 2.5 mb/d lower than demand for OPEC crude.

For 2021, OPEC crude production averaged 26.4 mb/d, which was 1.9 mb/d below the demand for OPEC crude.

Table 10 - 1: Supply/demand balance for 2021*, mb/d

							Change
	2020	1Q21	2Q21	3Q21	4Q21	2021	2021/20
(a) World oil demand	91.19	94.05	95.60	97.66	100.30	96.92	5.74
Non-OPEC liquids production	62.97	62.50	63.26	63.60	64.87	63.56	0.59
OPEC NGL and non-conventionals	5.05	5.10	5.12	5.17	5.18	5.14	0.10
(b) Total non-OPEC liquids production and OPEC NGLs	68.02	67.60	68.39	68.77	70.05	68.71	0.69
Difference (a-b)	23.17	26.45	27.22	28.88	30.25	28.21	5.05
OPEC crude oil production	25.72	25.18	25.57	26.92	27.71	26.35	0.63
Balance	2.55	-1.27	-1.65	-1.96	-2.55	-1.86	-4.41

Note: * 2021 = Estimation. Totals may not add up due to independent rounding. Source: OPEC.

Balance of supply and demand in 2022

Demand for OPEC crude in 2022 was revised up by 0.1 mb/d from the previous month to stand at 29.0 mb/d, which is around 0.8 mb/d higher than in 2021.

Compared with the previous assessment, 1Q22 was revised up by 0.6 mb/d, while both 3Q22 and 4Q22 remained unchanged. The 2Q22 was revised down by around 0.2 mb/d from the previous assessment

Compared with the same quarters in 2021, demand for OPEC crude in 1Q22, 2Q22 and 3Q22 is forecast to be higher by 2.4 mb/d, 0.8 mb/d and 0.4 mb/d, respectively, while 4Q22 is forecast to be lower at 0.2 mb/d.

According to secondary sources, OPEC crude production averaged 28.4 mb/d in 1Q22, which is 0.4 mb/d lower than demand for OPEC crude.

Table 10 - 2: Supply/demand balance for 2022*, mb/d

Change 2021 1Q22 2Q22 3Q22 4Q22 2022 2022/21 (a) World oil demand 96.92 99.28 98.44 100.74 102.64 100.29 3.36 Non-OPEC liquids production 63.56 65.24 65.17 66.14 67.28 65.97 2.40 5.23 5.26 5.29 5.31 5.27 0.13 **OPEC NGL and non-conventionals** 5.14 (b) Total non-OPEC liquids production and OPEC NGLs 68.71 70.47 70.43 71.42 72.60 71.24 2.53 Difference (a-b) 28.21 28.80 28.01 29.32 30.05 29.05 0.83 **OPEC** crude oil production 26.35 28.36 Balance -1.86 -0.45

Note: * 2021 = Estimation and 2022 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

Appendix

Appendix

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

World oil demand and supply													
balance	2018	2019	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2Q22	3Q22	4Q22	2022
World demand													
Americas	25.41	25.53	22.56	22.82	24.38	24.83	25.05	24.28	24.78	25.09	25.67	25.72	25.32
of which US	20.60	20.58	18.35	18.60	20.17	20.35	20.56	19.93	20.10	20.67	21.17	21.18	20.78
Europe	14.31	14.31	12.43	11.91	12.64	13.85	13.90	13.08	12.98	13.06	14.29	14.14	13.62
Asia Pacific	8.01	7.93	7.14	7.67	7.04	7.11	7.82	7.41	7.96	7.22	7.25	7.93	7.59
Total OECD	47.73	47.78	42.13	42.40	44.05	45.79	46.76	44.76	45.71	45.36	47.21	47.79	46.53
China	13.16	13.71	13.76	14.08	14.98	14.85	15.44	14.84	14.57	15.26	15.28	15.83	15.24
India	4.93	4.99	4.51	4.98	4.50	4.59	5.02	4.77	5.18	4.82	4.97	5.35	5.08
Other Asia	8.91	9.06	8.13	8.56	8.98	8.34	8.62	8.63	9.13	9.59	8.93	8.95	9.15
Latin America	6.53	6.59	5.90	6.17	6.08	6.38	6.26	6.23	6.32	6.25	6.53	6.42	6.38
Middle East	8.13	8.20	7.55	7.85	7.62	8.16	7.95	7.89	8.16	7.86	8.41	8.18	8.15
Africa	4.32	4.34	4.05	4.35	4.01	4.11	4.42	4.22	4.51	4.14	4.23	4.55	4.36
Russia	3.55	3.57	3.39	3.65	3.42	3.63	3.76	3.61	3.67	3.28	3.45	3.54	3.48
Other Eurasia	1.21	1.19	1.07	1.23	1.24	1.09	1.28	1.21	1.22	1.15	1.01	1.24	1.15
Other Europe	0.74	0.76	0.70	0.78	0.72	0.73	0.79	0.75	0.81	0.71	0.73	0.80	0.76
Total Non-OECD	51.47	52.42	49.06	51.65	51.55	51.87	53.54	52.16	53.57	53.08	53.53	54.85	53.76
(a) Total world demand	99.20	100.20	91.19	94.05	95.60	97.66	100.30	96.92	99.28	98.44	100.74		100.29
Y-o-y change	1.34	1.00	-9.01	-0.69	11.75	6.04	5.82	5.74	5.23	2.84	3.08	2.34	3.36
Non-OPEC liquids production	1.0-7	7.00	-3.01	-0.03	11.10	0.04	0.02	0.14	0.20	2.04	0.00	2.04	0.00
Americas	24.03	25.81	24.70	24.10	25.17	25.20	26.13	25.15	25.74	26.29	27.01	27.47	26.63
of which US	16.66	18.47	17.61	16.63	17.93	17.85	18.58	17.75	18.22	18.94	19.29	19.69	19.04
Europe	3.84	3.70	3.89	3.95	3.51	3.81	3.78	3.76	3.73	3.74	3.80	4.12	3.85
Asia Pacific	0.41	0.52	0.52	0.50	0.45	0.53	0.51	0.50	0.49	0.54	0.53	0.53	0.52
Total OECD	28.27	30.03	29.11	28.55	29.13	29.53	30.42	29.41	29.96	30.56	31.34	32.13	31.00
China	3.98	4.05	4.15	4.30	4.34	4.33	4.26	4.31	4.48	4.31	4.35	4.43	4.39
India	0.86	0.82	0.78	0.78	0.77	0.77	0.77	0.77	0.77	0.78	0.80	0.83	0.79
Other Asia	2.76	2.72	2.51	2.51	2.45	2.33	2.35	2.41	2.38	2.39	2.37	2.36	2.38
Latin America	5.79						5.83						6.23
		6.08	6.03	5.94	5.97	6.09 3.24		5.96 3.24	6.15	6.21	6.17	6.40	
Middle East	3.19	3.19	3.19 1.41	3.22 1.37	3.23		3.27 1.32	-	3.30	3.36	3.38 1.30	3.38	3.35 1.31
Africa	1.49	1.51			1.35	1.32		1.34	1.32	1.31		1.31	
Russia	11.52	11.61	10.59	10.47	10.74	10.81	11.17	10.80	11.33	10.68	10.76	10.74	10.88
Other Eurasia	3.08 0.12	3.07	2.92	2.96	2.89	2.79	3.08	2.93	3.06	3.06	3.17	3.22	3.13
Other Europe		0.12	0.12 31.71	0.12	0.11	0.11	0.11 32.17	0.11	0.11	0.11 32.22	0.10 32.41	0.10	0.10
Total Non-OECD	32.80 61.07	33.18 63.22	-	31.66 60.22	31.86	31.79 61.32	62.59	31.87 61.28	32.89 62.85	62.78	63.75	32.77 64.89	32.57
Total Non-OPEC production			60.82		60.98								63.57
Processing gains	2.34	2.36	2.15	2.28	2.28	2.28	2.28	2.28	2.39	2.39	2.39	2.39	2.39
Total Non-OPEC liquids	00.44	05.50	00.07	00.50	00.00	00.00	04.07	00.50	05.04	05.47	00.44	07.00	05.07
production	63.41	65.58	62.97	62.50	63.26	63.60	64.87	63.56	65.24	65.17	66.14	67.28	65.97
OPEC NGL +	F 00	E 04	F 0.F	F 40	5 40	C 47	5 40	- 44	F 00	F 00	F 00	E 04	F 07
non-conventional oils	5.29	5.21	5.05	5.10	5.12	5.17	5.18	5.14	5.23	5.26	5.29	5.31	5.27
(b) Total non-OPEC liquids	00 =0	=0 =0		o= 00			=	00 =4	=0.4=	=0.40	=4.40	=0.00	=4.04
production and OPEC NGLs	68.70	70.79	68.02	67.60	68.39	68.77	70.05	68.71	70.47	70.43	71.42	72.60	71.24
Y-o-y change	3.08	2.09	-2.78	-4.55	2.19	2.20	2.87	0.69	2.88	2.04	2.65	2.55	2.53
OPEC crude oil production		~~ ~=		0= 40									
(secondary sources)	31.34	29.37	25.72	25.18	25.57	26.92	27.71	26.35					
Total liquids production	100.05	100.16	93.74	92.78	93.95	95.70	97.76	95.06	98.83				
Balance (stock change and	001	001	<u> </u>	4.0-	4.0-	4.00	0	4	o				
miscellaneous)	0.84	-0.04	2.55	-1.27	-1.65	-1.96	-2.55	-1.86	-0.45				
OECD closing stock levels,													
mb													
Commercial	2,873	2,894	3,038	2,919	2,874	2,755	2,645	2,645	2,621				
SPR	1,552	1,535	1,541	1,546	1,524	1,513	1,484	1,484	1,453				
Total	4,425	4,429	4,579	4,464	4,398	4,268	4,129	4,129	4,074				
Oil-on-water	1,058	1,033	1,148	1,138	1,131	1,169	1,202	1,202	1,225				
Days of forward consumption in OECD, days													
Commercial onland stocks	60	69	68	66	63	59	58	57	58				
SPR	32	36	34	35	33	32	32	32	32				
Total	93	105	102	101	96	91	90	89	90				
Memo items													
(a) - (b)	30.50	29.41	23.17	26.45	27.22	28.88	30.25	28.21	28.80	28.01	29.32	30.05	29.05

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	2018	2019	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2Q22	3Q22	4Q22	2022
World demand	2016	2019	2020	IQZI	2421	3621	4Q21	2021	IQZZ	26,22	3622	40,22	2022
Americas	_	_			_	_	0.04	0.01	0.40	-0.35	-0.15	-0.06	-0.04
of which US		-	_		-	-	0.04	0.01	0.40	-0.33	-0.13	-0.08	-0.04
Europe	_	-	_	_	_	_	0.02	-	0.15	-0.11	-0.11	-0.10	-0.04
Asia Pacific	-		-	-	-	-	0.02	-	0.15				-0.04
Total OECD	-	-	-	_			0.06	0.01	0.55	-0.46	-0.26	-0.15	-0.08
	-	-	0.20	0.00		0.00							
China India	-	-	0.20	0.23	0.37	0.28	0.23	0.28	0.23	0.17	0.23	0.18	0.20
Other Asia	-	-	-	0.04	-	-	-	0.01	-0.10	-	-	-	-0.03
	-	-	0 11			-	-	- 0.00	-0.07			-	-0.02
Latin America	-	-	-0.11	-0.08	-0.08	-0.08	-0.08	-0.08	-0.11	-0.08	-0.08	-0.08	-0.08
Middle East	- 0.01	- 0.01	- 0.00	-0.11	-0.15	-0.08	-0.01	-0.09	-0.12	-0.15	-0.08	-0.01	-0.09
Africa	-0.01	-0.01	-0.03	-0.01	-0.07	-0.04	-0.01	-0.03	-0.01	-0.07	-0.04	-0.01	-0.03
Russia	-	-	-	-	-	-	-	-	-0.04	-0.05	-0.05	-0.05	-0.05
Other Eurasia	-	-	-	-	-	-	-	-	-0.02	-0.04	-0.04	-0.04	-0.03
Other Europe	-	-	-	-	-	-	-	-	0.01	-	-	-	-
Total Non-OECD	-0.01	-0.01	0.06	0.07	0.07	0.07	0.13	0.08	-0.22	-0.22	-0.07	-0.01	-0.13
(a) Total world demand	-0.01	-0.01	0.06	0.07	0.07	0.07	0.18	0.10	0.33	-0.67	-0.32	-0.16	-0.21
Y-o-y change	-	-	0.07	0.01	0.01	0.01	0.12	0.04	0.26	-0.74	-0.40	-0.34	-0.31
Non-OPEC liquids production													
Americas	-	-	-	-	-	-	-	-	-0.18	-0.01	0.06	0.15	0.01
of which US	-	-	-	-	-	-	-	-	-0.20	-0.01	0.06	0.15	-
Europe	-	-	-	-	-	-	-	-	-0.04	-	-	-	-0.01
Asia Pacific	-	-	-	-	-	-	-	-	-0.01	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-0.23	-0.01	0.06	0.15	-0.01
China	-	-	-	-	-	-	=	-	0.03	-	-	-	0.01
India	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-0.03	-	-	-	-0.01
Latin America	-	-	-	-	-	-	-	-	-0.01	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	0.01	0.01	0.01	0.01
Africa	-	-	-	-	-	-	-	-	0.01	0.04	0.05	0.09	0.05
Russia	-	-	-	-	-	-	-	-	-0.01	-0.55	-0.40	-0.47	-0.35
Other Eurasia	-	-	-	-	-	-	-	-	0.01	0.03	-	-	0.01
Other Europe	-	-	-	-	-	-	-	-	-	-	-	_	-
Total Non-OECD	-	_	-	-	-	-	-	-	-	-0.46	-0.34	-0.37	-0.29
Total Non-OPEC production	-	-	-	-	-	-	-	-	-0.23	-0.48	-0.28	-0.21	-0.30
Processing gains	-	-	-	-	-	-	-	-	_	-	-	-	-
Total Non-OPEC liquids													
production	-	-	-	-	-	-	-	-	-0.23	-0.48	-0.28	-0.21	-0.30
OPEC NGL + non-conventional													
oils	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC liquids													
production and OPEC NGLs	-	-	-	-	-	-	-	-	-0.23	-0.48	-0.28	-0.21	-0.30
Y-o-y change	-	-	-	-	-	-	-	-	-0.23	-0.48	-0.28	-0.21	-0.30
OPEC crude oil production													
(secondary sources)	-	-	-	-	-	-	-	-	-0.02				
Total liquids production	-	-	-	-	-	-	-	-	-0.24				
Balance (stock change and													
miscellaneous)	0.01	0.01	-0.06	-0.07	-0.07	-0.07	-0.18	-0.10	-0.57				
mb													
Commercial	-	-	-	-	-	-	2	2					
SPR	-	-	-	-	-	-	-	-					
Total	-	-	-	-	-	-	2	2					
Oil-on-water	-	_	-	-	-	_	-	-					
Days of forward consumption in OECD, days													
Commercial onland stocks	-	-	-	-	-	-	-1	-					
SPR	-	-	-	-	-	-	-	-					
Total	-	-	-	-	-	-	-1	-					
Memo items													
(a) - (b)	-0.01	-0.01	0.06	0.07	0.07	0.07	0.18	0.10	0.55	-0.20	-0.04	0.05	0.09

Note: * This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the April 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	2019	2020	2021	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22
Closing stock levels, mb												
OECD onland commercial	2,894	3,038	2,645	2,982	3,217	3,182	3,038	2,919	2,874	2,755	2,645	2,621
Americas	1,522	1,615	1,466	1,583	1,719	1,691	1,615	1,570	1,543	1,508	1,466	1,424
Europe	978	1,043	855	1,033	1,099	1,079	1,043	1,002	973	892	855	887
Asia Pacific	394	380	324	366	400	411	380	346	358	355	324	310
OECD SPR	1,535	1,541	1,484	1,537	1,561	1,551	1,541	1,546	1,524	1,513	1,484	1,453
Americas	637	640	596	637	658	644	640	640	623	620	596	567
Europe	482	488	479	484	487	490	488	493	487	485	479	478
Asia Pacific	416	414	409	416	416	417	414	413	413	408	409	408
OECD total	4,429	4,579	4,129	4,519	4,779	4,733	4,579	4,464	4,398	4,268	4,129	4,074
Oil-on-water		1,148	1,202	1,187	1,329	1,174	1,148	1,138	1,131	1,169	1,202	1,225
Oil-on-water Days of forward consumption in OECD, days	1,033		1,202	1,187	1,329	1,174	1,148	1,138	1,131	1,169	1,202	1,225
Days of forward	1,033		1,202 57	1,187 79	1,329 76	1,174 74	1,148 72	1,138 66	1,131 63	1,169 59	1,202 58	1,225 57
Days of forward consumption in OECD, days	1,033	1,148	ĺ							59		
Days of forward consumption in OECD, days OECD onland commercial	1,033	1,148 68	57	79	76	74	72	66	63	59	58	57
Days of forward consumption in OECD, days OECD onland commercial Americas	1,033 69 67	1,148 68 67	57 58	79 79	76 76	74 73	72 71	66 64	63	59	58 59	57 56
Days of forward consumption in OECD, days OECD onland commercial Americas Europe	1,033 69 67 79	68 67 80	57 58 62	79 79 94	76 76 85	74 73 86	72 71 88	66 64 79	63 62 70	59 60 64	58 59 66	57 56 67
Days of forward consumption in OECD, days OECD onland commercial Americas Europe Asia Pacific	1,033 69 67 79 55	68 67 80 51	57 58 62 43	79 79 94 55	76 76 85 59	74 73 86 56	72 71 88 50	66 64 79 49	63 62 70 50	59 60 64 45	58 59 66 41	57 56 67 43
Days of forward consumption in OECD, days OECD onland commercial Americas Europe Asia Pacific OECD SPR	1,033 69 67 79 55 37	68 67 80 51 35	57 58 62 43 34	79 79 94 55 41	76 76 85 59 37	74 73 86 56 36	72 71 88 50 36	66 64 79 49 35	63 62 70 50 33	59 60 64 45 32	58 59 66 41 32	57 56 67 43 32
Days of forward consumption in OECD, days OECD onland commercial Americas Europe Asia Pacific OECD SPR Americas	1,033 69 67 79 55 37 28	68 67 80 51 35	57 58 62 43 34 23	79 79 94 55 41	76 76 85 59 37 29	74 73 86 56 36 28	72 71 88 50 36 28	66 64 79 49 35 26	63 62 70 50 33 25	59 60 64 45 32 25	58 59 66 41 32 24	57 56 67 43 32 22

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

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

production and OPEC NGLs 2018 2019 2020 3Q21 4Q21 2021 21/20 1Q22 2Q22 3Q22 4Q22 US 16.7 18.5 17.6 17.8 18.6 17.8 0.1 18.2 18.9 19.3 19.7 Canada 5.3 5.4 5.2 5.4 5.6 5.5 0.3 5.6 5.4 5.7 5.8 Mexico 2.1 1.9 1.9 1.9 1.9 0.0 2.0 2.0 2.0 2.0 Chile 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2022 19.0 5.6 2.0 0.0 26.6 2.1 0.9 0.1 0.7 3.8 0.5 0.1 0.5 31.0 4.4 0.8	22/21 1.3 0.2 0.0 0.0 1.5 0.1 0.0 0.0 0.0 0.1 0.0 0.0 1.6 0.1 0.0
US 16.7 18.5 17.6 17.8 18.6 17.8 0.1 18.2 18.9 19.3 19.7 Canada 5.3 5.4 5.2 5.4 5.6 5.5 0.3 5.6 5.4 5.7 5.8 Mexico 2.1 1.9 1.9 1.9 1.9 1.9 0.0 2.0 2.0 2.0 2.0 Chile 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	19.0 5.6 2.0 0.0 26.6 2.1 0.9 0.1 0.7 3.8 0.5 0.1 0.5 31.0 4.4 0.8 0.1	1.3 0.2 0.0 0.0 1.5 0.1 0.0 0.0 0.0 0.0 0.0 0.0
Canada 5.3 5.4 5.2 5.4 5.6 5.5 0.3 5.6 5.4 5.7 5.8 Mexico 2.1 1.9 1.9 1.9 1.9 1.9 0.0 2.0 2.0 2.0 2.0 Chile 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	5.6 2.0 0.0 26.6 2.1 0.9 0.1 0.7 3.8 0.5 0.1 0.5 31.0 4.4 0.8	0.2 0.0 0.0 1.5 0.1 0.0 0.0 0.1 0.0 0.0 0.0
Chile 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.7 26.3 27.0 27.5 Norway 1.9 1.7 2.0 2.1 2.0 2.0 0.0 2.0 2.1 2.1 2.3 UK 1.1 1.1 1.1 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.0 0.0 0.0 0.0 0.0<	0.0 26.6 2.1 0.9 0.1 0.7 3.8 0.5 0.1 0.5 31.0 4.4 0.8 0.1	0.0 1.5 0.1 0.0 0.0 0.0 0.1 0.0 0.0 1.6
OECD Americas 24.0 25.8 24.7 25.2 26.1 25.2 0.5 25.7 26.3 27.0 27.5 Norway 1.9 1.7 2.0 2.1 2.0 2.0 0.0 2.0 2.1 2.1 2.3 UK 1.1 1.1 1.1 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26.6 2.1 0.9 0.1 0.7 3.8 0.5 0.1 0.5 31.0 4.4 0.8 0.1	1.5 0.1 0.0 0.0 0.0 0.1 0.0 0.0 0.0
Norway 1.9 1.7 2.0 2.1 2.0 2.0 0.0 2.0 2.1 2.1 2.3 UK 1.1 1.1 1.1 0.9 0.9 0.9 -0.2 0.9 0.9 0.9 1.0 Denmark 0.1 0.1 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1 0.1 Other OECD 0.7 0.7 0.7 0.8 0.7 0.7 0.0 0.7 0.7 0.7 0.7 0.0 0.7 0.7 0.7 0.0 0.7 0.7 0.7 0.7 0.0 0.7 0.7 0.7 0.7 0.0 0.7 0.7 0.7 0.7 0.7 0.7 0.0 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 <th< th=""><td>2.1 0.9 0.1 0.7 3.8 0.5 0.1 0.5 31.0 4.4 0.8</td><td>0.1 0.0 0.0 0.0 0.1 0.0 0.0 0.0</td></th<>	2.1 0.9 0.1 0.7 3.8 0.5 0.1 0.5 31.0 4.4 0.8	0.1 0.0 0.0 0.0 0.1 0.0 0.0 0.0
UK 1.1 1.1 1.1 0.9 0.9 0.9 -0.2 0.9 0.9 0.9 1.0 Denmark 0.1 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1 0.1 Other OECD 0.7 0.7 0.7 0.8 0.7 0.7 0.0 0.7 0.7 0.7 OECD Europe 3.8 3.7 3.9 3.8 3.8 3.8 -0.1 3.7 3.7 3.8 4.1 Australia 0.3 0.4 0.5 0.5 0.4 0.4 0.0 0.4 0.5 0.5 0.5 Other Asia Pacific 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 <	0.9 0.1 0.7 3.8 0.5 0.1 0.5 31.0 4.4 0.8	0.0 0.0 0.1 0.0 0.0 0.0 1.6
Denmark 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1 0.1 Other OECD 0.7 0.7 0.7 0.8 0.7 0.7 0.0 0.7 0.7 0.7 0.7 OECD Europe 3.8 3.7 3.9 3.8 3.8 3.8 -0.1 3.7 3.7 3.8 4.1 Australia 0.3 0.4 0.5 0.5 0.4 0.4 0.0 0.4 0.5 0.5 0.5 Other Asia Pacific 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.1 0.7 3.8 0.5 0.1 0.5 31.0 4.4 0.8 0.1	0.0 0.0 0.1 0.0 0.0 0.0 1.6
Other OECD 0.7 0.7 0.7 0.8 0.7 0.7 0.0 0.7 0.7 0.7 0.7 OECD Europe 3.8 3.7 3.9 3.8 3.8 3.8 -0.1 3.7 3.7 3.8 4.1 Australia 0.3 0.4 0.5 0.5 0.4 0.4 0.0 0.4 0.5 0.5 0.5 Other Asia Pacific 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 <	0.7 3.8 0.5 0.1 0.5 31.0 4.4 0.8 0.1	0.0 0.1 0.0 0.0 0.0 1.6 0.1
OECD Europe 3.8 3.7 3.9 3.8 3.8 3.8 -0.1 3.7 3.7 3.8 4.1 Australia 0.3 0.4 0.5 0.5 0.4 0.4 0.0 0.4 0.5 0.5 0.5 Other Asia Pacific 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2 4.5 4.3 4.3 4.4 4.4 4.4 4.3 4.3 4.2 4.5 4.3 4.3 4.	3.8 0.5 0.1 0.5 31.0 4.4 0.8 0.1	0.1 0.0 0.0 0.0 1.6 0.1
Australia 0.3 0.4 0.5 0.5 0.4 0.4 0.0 0.4 0.5 0.5 0.5 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 OECD Asia Pacific 0.4 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 <	0.5 0.1 0.5 31.0 4.4 0.8 0.1	0.0 0.0 0.0 1.6 0.1
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 OECD Asia Pacific 0.4 0.5 0.5 0.5 0.5 0.5 0.0 0.5 0.5 0.5 0.5 Total OECD 28.3 30.0 29.1 29.5 30.4 29.4 0.3 30.0 30.6 31.3 32.1 China 4.0 4.1 4.2 4.3 4.3 4.3 0.2 4.5 4.3 4.3 4.4 India 0.9 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 <th>0.1 0.5 31.0 4.4 0.8 0.1</th> <th>0.0 0.0 1.6 0.1</th>	0.1 0.5 31.0 4.4 0.8 0.1	0.0 0.0 1.6 0.1
OECD Asia Pacific 0.4 0.5 0.5 0.5 0.5 0.0 0.5 0.5 0.5 0.5 Total OECD 28.3 30.0 29.1 29.5 30.4 29.4 0.3 30.0 30.6 31.3 32.1 China 4.0 4.1 4.2 4.3 4.3 4.3 0.2 4.5 4.3 4.3 4.4 India 0.9 0.8 0.8 0.8 0.8 0.0 0.8 0.8 0.8 Brunei 0.1 0.1 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1 Indonesia 0.9 0.9 0.9 0.8 0.8 0.9 0.0 0.8 0.8 0.8	0.5 31.0 4.4 0.8 0.1	0.0 1.6 0.1
Total OECD 28.3 30.0 29.1 29.5 30.4 29.4 0.3 30.0 30.6 31.3 32.1 China 4.0 4.1 4.2 4.3 4.3 4.3 0.2 4.5 4.3 4.3 4.4 India 0.9 0.8 0.8 0.8 0.8 0.0 0.8 0.8 0.8 0.8 Brunei 0.1 0.1 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1 Indonesia 0.9 0.9 0.9 0.8 0.8 0.9 0.0 0.8 0.8 0.8	4.4 0.8 0.1	0.1
China 4.0 4.1 4.2 4.3 4.3 4.3 0.2 4.5 4.3 4.3 4.4 India 0.9 0.8 0.8 0.8 0.8 0.0 0.8 0.8 0.8 0.8 Brunei 0.1 0.1 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1 Indonesia 0.9 0.9 0.9 0.8 0.8 0.9 0.0 0.8 0.8 0.8	0.8 0.1	0.1
Brunei 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1<	0.1	0.0
Indonesia 0.9 0.9 0.9 0.8 0.8 0.9 0.0 0.8 0.8 0.8 0.8		
	0.0	0.0
	0.8	0.0
Malaysia 0.7 0.7 0.6 0.6 0.6 0.0 0.6 0.6 0.7	0.6	0.0
Thailand 0.5 0.5 0.5 0.4 0.4 0.4 0.0 0.4 0.4 0.4 0.4 0.4 0.4	0.4	0.0
Vietnam 0.3 0.3 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 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 2.4	0.0 0.0
Argentina 0.7 0.7 0.7 0.7 0.7 0.7 0.0 0.7 0.7 0.7	0.7	0.0
Brazil 3.3 3.6 3.7 3.7 3.5 3.6 -0.1 3.7 3.7 3.9	3.8	0.0
Colombia 0.9 0.9 0.8 0.8 0.8 0.8 0.0 0.8 0.8 0.7 0.7	0.7	0.0
Ecuador 0.5 0.5 0.5 0.4 0.5 0.0 0.5 0.5 0.5 0.5	0.5	0.0
Guyana 0.0 0.0 0.1 0.1 0.1 0.1 0.0 0.1 0.2 0.2 0.3	0.2	0.1
Latin America 0.4 0.4 0.3 0.3 0.3 0.0 0.3 0.3 0.3 0.3 0.3	0.3	0.0
Latin America 5.8 6.1 6.0 6.1 5.8 6.0 -0.1 6.1 6.2 6.2 6.4	6.2	0.3
Bahrain 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 1.0 1.0 1.0 0.0 1.0 1.0 1.1 1.1	1.0	0.1
Qatar 1.9 1.9 1.9 2.0 2.0 2.0 0.0 2.0 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	0.0
Yemen 0.0 0.0 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1 0.0 Middle East 3.2 3.2 3.2 3.3 3.2 0.0 3.3 3.4 3.4 3.4	0.1 3.4	0.0 0.1
Cameroon 0.1 0.1 0.1 0.1 0.1 0.1 0.0 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	0.0
Egypt 0.7 0.7 0.6 0.6 0.6 0.0 0.6 0.6 0.6 0.6 0.6	0.6	0.0
Ghana 0.2 0.2 0.2 0.2 0.2 0.0 0.2 0.1 0.1 0.2	0.2	0.0
South Africa 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 0.0 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 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 <t< th=""><th>0.1</th><th>0.0</th></t<>	0.1	0.0
Africa 1.5 1.5 1.4 1.3 1.3 1.3 -0.1 1.3 1.3 1.3 1.3	1.3	0.0
Russia 11.5 11.6 10.6 10.8 11.2 10.8 0.2 11.3 10.7 10.8 10.7	10.9	0.1
Kazakhstan 1.9 1.9 1.8 1.7 2.0 1.8 0.0 2.0 1.9 2.0 2.0 Azerbaijan 0.8 0.8 0.7 0.7 0.7 0.7 0.0 0.7 0.8 0.8 0.8	2.0 0.8	0.1
Azerbaijan 0.8 0.8 0.7 0.7 0.7 0.0 0.7 0.8 0.8 0.8 Eurasia others 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.0 0.4 0.3 0.3 0.3	0.8	0.1
Other Eurasia 3.1 3.1 2.9 2.8 3.1 2.9 0.0 3.1 3.1 3.2 3.2	3.1	0.0
Other Europe 0.1 0.1 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1	0.1	0.0
Total Non-OECD 32.8 33.2 31.7 31.8 32.2 31.9 0.2 32.9 32.2 32.4 32.8	32.6	0.7
Non-OPEC 61.1 63.2 60.8 61.3 62.6 61.3 0.5 62.9 62.8 63.7 64.9	63.6	2.3
Processing gains 2.3 2.4 2.2 2.3 2.3 2.3 0.1 2.4 2.4 2.4 2.4	2.4	0.1
Non-OPEC liquids		
production 63.4 65.6 63.0 63.6 64.9 63.6 0.6 65.2 65.2 66.1 67.3	66.0	2.4
OPEC NGL 5.2 5.1 4.9 5.1 5.0 0.1 5.1 5.2 5.2 5.2	5.2	0.1
OPEC Non-		
conventional 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.1	0.0
OPEC (NGL+NCF) 5.3 5.2 5.0 5.2 5.2 5.1 0.1 5.2 5.3 5.3 5.3	5.3	0.1
Non-OPEC &		
OPEC (NGL+NCF) 68.7 70.8 68.0 68.8 70.1 68.7 0.7 70.5 70.4 71.4 72.6	71.2	2.5

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

Table 11 - 5: World rig count, units

				Change							Change
World rig count	2019	2020	2021	2021/20	2Q21	3Q21	4Q21	1Q22	Mar 22	Apr 22	Apr/Mar
US	944	436	475	39	452	498	559	634	664	694	30
Canada	134	90	133	43	73	151	161	195	173	103	-70
Mexico	37	41	45	4	42	43	48	44	44	44	0
OECD Americas	1,116	567	654	87	568	694	770	874	883	843	-40
Norway	17	16	17	1	18	17	18	16	16	19	3
UK	15	6	8	2	8	9	8	7	7	8	1
OECD Europe	74	59	58	-1	59	59	61	58	57	63	6
OECD Asia Pacific	29	22	23	1	21	28	25	22	21	20	-1
Total OECD	1,219	648	735	87	648	781	856	954	961	926	-35
Other Asia*	221	187	174	-13	170	181	182	185	183	180	-3
Latin America	128	58	91	33	89	93	105	111	114	117	3
Middle East	68	57	57	0	56	57	59	60	62	60	-2
Africa	55	43	42	-1	39	47	49	57	57	55	-2
Other Europe	14	12	9	-3	7	9	9	9	8	8	0
Total Non-OECD	486	357	373	16	362	385	404	422	424	420	-4
Non-OPEC rig count	1,705	1,005	1,108	103	1,010	1,166	1,260	1,376	1,385	1,346	-39
Algeria	45	31	26	-5	27	24	31	30	30	28	-2
Angola	4	3	4	1	4	4	5	6	6	6	0
Congo	3	1	0	-1	0	0	1	1	1	1	0
Equatorial Guinea**	1	0	0	0	0	0	1	1	1	1	0
Gabon	7	3	2	-1	1	3	4	2	2	3	1
Iran**	117	117	117	0	117	117	117	117	117	117	0
Iraq	74	47	39	-8	36	42	45	46	47	46	-1
Kuwait	46	45	25	-20	23	25	23	27	27	27	0
Libya	14	12	13	1	12	14	14	15	15	7	-8
Nigeria	16	11	7	-4	5	10	7	8	10	11	1
Saudi Arabia	115	93	62	-31	62	59	64	70	74	70	-4
Variation	62	54	42	-12	44	39	42	38	41	47	6
Venezuela	25	24	25	1	25	25	25	25	25	25	0
OPEC rig count	529	441	362	-79	356	361	380	386	396	389	-7
World rig count***	2,234	1,446	1,470	24	1,366	1,527	1,640	1,762	1,781	1,735	-46
of which:								=			
Oil	1,788	1,125	1,162	37	1,076	1,212	1,316	1,405	1,413	1,379	-34
Gas	415	275	275	0	257	281	293	329	338	328	-10
Others	31	46	33	-13	33	34	31	28	30	28	-2

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

Totals may not add up due to independent rounding.

Sources: Baker Hughes and OPEC.

^{**} Estimated data when Baker Hughes Incorporated did not reported the data.

^{***} Data excludes onshore China as well as Russia and other Eurasia.

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 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

return on investment ROI

seasonally-adjusted annualized rate SAAR

Society of Indian Automobile Manufacturers SIAM

SRFO straight-run fuel oil sports utility vehicle SUV

ultra-large crude carrier ultra-low sulphur diesel ULCC ULSD

USEC US East Coast **USGC US Gulf Coast USWC US West Coast**

VGO vacuum gasoil

very large crude carriers **VLCC**

WPI wholesale price index

WS Worldscale

West Texas Intermediate WTI

WTS West Texas Sour

A	7
	7

down 7.84 in April April 2022 105.64

March 2022 113.48

Year-to-date 99.90

April OPEC crude production

mb/d, according to secondary sources



up 0.15 in April April 2022 28.65

March 2022 28.49

Economic growth rate							per cent
	World	OECD	US	Euro-zone	Japan	China	India
2021	5.8	5.4	5.7	5.4	1.7	8.1	8.1
2022	3.5	3.0	3.2	3.1	1.8	5.1	7.1

Supply and demand					mb/d
2021		21/20	2022		22/21
World demand	96.9	5.7	World demand	100.3	3.4
Non-OPEC liquids production	63.6	0.6	Non-OPEC liquids production	66.0	2.4
OPEC NGLs	5.1	0.1	OPEC NGLs	5.3	0.1
Difference	28.2	5.0	Difference	29.0	8.0

OECD commercial stocks mb							
	Mar 21	Jan 22	Feb 22	Mar 22	Mar 22/Feb 22		
Crude oil	1,438	1,252	1,252	1,265	12.9		
Products	1,481	1,401	1,359	1,356	-2.8		
Total	2,919	2,653	2,611	2,621	10.1		
Days of forward cover	66.3	58.7	57.7	57.4	-0.3		