Organization of the Petroleum Exporting Countries

OPEC Monthly Oil Market Report

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Feature article:
World oil market prospects for the second half of 2022

Organization of the Petroleum Exporting Countries

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Oil Market Highlights

Crude Oil Price Movements

Crude oil spot prices recorded solid gains in May, buoyed by strong physical crude market fundamentals. Tight oil product markets and high refining margins have prompted refineries to increase throughputs, boosting crude demand, specifically for light sweet crude. Planned and unplanned oil supply disruptions in several regions contributed to tightening fundamentals. The OPEC Reference Basket increased $8.23, or 7.8%, to settle at $113.87/b. Oil futures prices rallied in May driven by tightening oil products markets, near-term global oil supply risks amid continued geopolitical tensions in Europe, as well as the prospect of a firm recovery in demand after Chinese authorities started to gradually ease COVID-19-related lockdown measures. The start of the summer driving season in the Northern Hemisphere provided further support. The ICE Brent front-month contract rose $6.04, or 5.7%, in May to average $111.96/b and NYMEX WTI increased by $7.62, or 7.5%, to average $109.26/b. As a result, the Brent/WTI futures spread narrowed by $1.58 to average $2.70/b. Backwardation in the Brent, WTI and Dubai futures markets strengthened significantly in May and the near-month contract spreads moved into deep backwardation as the outlook for oil market fundamentals tightened. Hedge funds and other money managers turned bullish on crude prices in May, raising their total futures and options net-long positions in ICE Brent and NYMEX WTI by 18.2%.

World Economy

World economic growth in 2022 remains broadly unchanged at 3.5%, following growth of 5.8% in 2021. US GDP growth for 2022 is revised down to 3.0% from 3.2%, after growth was reported at 5.7% for 2021. Euro-zone economic growth for 2022 is revised down to 3.0% from 3.1%, following growth of 5.4% in 2021. Japan's economic growth for 2022 is revised down to 1.6% from 1.8%, after growth of 1.7% in 2021. China's 2022 growth remains unchanged at 5.1%, after growth of 8.1% in 2021. India's 2022 GDP growth remains at 7.1%, after 2021 growth of 8.3%. Brazil's economic growth forecast for 2022 is revised up to 1.2% from 0.7% in the previous assessment, following growth of 4.6% in 2021. For Russia, the 2022 GDP growth forecast is unchanged, showing a contraction of 6.0%, following reported growth of 4.7% in 2021. Consumption remains robust, especially in the advanced economies, with an expected continued recovery particularly evident in the contact-intensive services sector, which includes travel and transportation activity, leisure and hospitality. However, significant downside risks prevail, stemming from 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-zone.

World Oil Demand

World oil demand growth in 2021 remained unchanged at 5.7 mb/d. Oil demand in the OECD increased by 2.6 mb/d in 2021, while the non-OECD showed growth of 3.1 mb/d. For 2022, world oil demand growth is broadly unchanged to stand at 3.4 mb/d. Within the quarters, the 2Q22 is revised down, reflecting the lockdown in some part of China leading to lower-than-expected demand, while 2H22 is revised up on expectations of higher demand during the summer holiday and driving season. Oil demand growth in 2022 is forecast at 1.8 mb/d in the OECD and 1.6 mb/d in the non-OECD.

World Oil Supply

The estimate for non-OPEC liquids supply growth in 2021 remains broadly unchanged at 0.6 mb/d. Total US liquids production is estimated to have increased by 0.1 mb/d y-o-y in 2021. The forecast for non-OPEC supply growth in 2022 is revised down by 0.25 mb/d to 2.1 mb/d. Russia's liquids production for 2022 is revised down by 0.25 mb/d. The US liquids supply growth forecast for 2022 remains marginally unchanged at 1.3 mb/d. The main drivers of liquids supply growth in 2022 are expected to be the US, Brazil, Canada, Kazakhstan, Guyana and China, while declines are expected mainly in Russia, Indonesia and Thailand. OPEC NGLs and non-conventional liquids production in 2021 is revised up by 20 tb/d from last month's assessment, representing growth of 0.1 mb/d y-o-y to average 5.3 mb/d. Growth of 0.1 mb/d is also expected for 2022. In May, OPEC-13 crude oil production decreased by 176 tb/d m-o-m to average 28.51 mb/d, according to available secondary sources.

Product Markets and Refining Operations

Refinery margins on all main trading hubs continued to increase in May, albeit at a considerably lower rate than in the previous months. With the conclusion of the peak turnaround season, rising product output started to limit the contraction in global product balances. In the Western Hemisphere, gasoline was the sole positive performer and margin driver across the barrel. Gasoline inventories declined in the US, while gasoil stocks showed some recovery. In Asia, all product markets strengthened, with the exception of naphtha and fuel oil, as regional transport fuel consumption improved amid the roll back of COVID-19 lockdown measures in China. Going forward, refinery intakes are expected to rise further to accommodate a seasonal pickup in fuel consumption and to replenish stocks.

Tanker Market

Dirty tanker spot freight rates fell back from the sharp gains seen the previous month. Suezmax rates declined 37% m-o-m and Aframax fell 22% over the same period, as ample availability overwhelmed the upward pressure caused by trade dislocations. VLCC rates declined 20%, with losses both East and West of Suez. In contrast, clean rates continued to surge, up 37% on average amid tight product markets. Dirty spot freight rates are likely to remain capped by ample tanker supply, while clean rates could continue to benefit from trade shifts necessitating higher vessel demand in the summer driving season in the Northern Hemisphere.

Crude and Refined Products Trade

Preliminary data shows US crude imports averaged 6.4 mb/d in May, a gain of 6% m-o-m, while crude exports set a new record high of 3.7 mb/d in May. US product imports remained steady, averaging 2.2 mb/d, supported by an increase in gasoline flows ahead of the driving season. China's crude imports averaged 10.5 mb/d in April and preliminary data shows May imports at 10.8 mb/d, as inflows continued to pick up from the weak performance in February despite lower refinery throughputs. China's product exports edged lower in April, averaging 1.0 mb/d, as declines in gasoline, diesel and fuel oil exports offset increased jet fuel outflows. The anticipated lifting of lockdown measures should support China's crude imports in June, although this could be offset by refiners drawing from existing inventories. India's crude imports jumped 13% to a new record high of 5.1 mb/d in April, as refineries maximized run rates and snapped up discounted Russian crude. Japan's crude imports saw the fourth-consecutive m-o-m gain in April, edging up to average 2.9 mb/d amid expectations of improving product demand. Japan's product imports, including LPG, were broadly flat, while product exports fell 30% m-o-m, with declines across most major products amid lower flows to China. OECD Europe trade flows remain a key uncertainty due to sanctions and the challenges of sourcing crude and refined products from other suppliers.

Commercial Stock Movements

Preliminary April data sees total OECD commercial oil stocks up 1.8 mb m-o-m. At 2,628 mb, inventories were 287 mb less than in the same period a year ago, 332 mb lower than the latest five-year average, and 299 mb below the 2015–2019 average. Within components, crude stocks rose m-o-m by 9.3 mb, while product inventories fell m-o-m by 7.5 mb. At 1,293 mb, OECD crude stocks were 129 mb lower than the same time a year ago, 180 mb lower than the latest five-year average, and 179 mb below the 2015–2019 average. OECD product stocks stood at 1,335 mb, representing a deficit of 158 mb compared to the same time a year ago, 152 mb lower than the latest five-year average, and 120 mb below the 2015–2019 average. In terms of days of forward cover, OECD commercial stocks fell m-o-m by 0.6 days in April to stand at 57.4 days. This is 7.6 days below April 2021 levels, 8.0 days less than the latest five-year average and 4.8 days lower than the 2015–2019 average.

Balance of Supply and Demand

Demand for OPEC crude in 2021 is revised down by 0.2 mb/d from the previous month's assessment to stand at 28.0 mb/d, which is around 5.0 mb/d higher than in 2020. Demand for OPEC crude in 2022 is revised up by 0.1 mb/d from the previous month's assessment to stand at 29.2 mb/d, which is around 1.1 mb/d higher than in 2021.

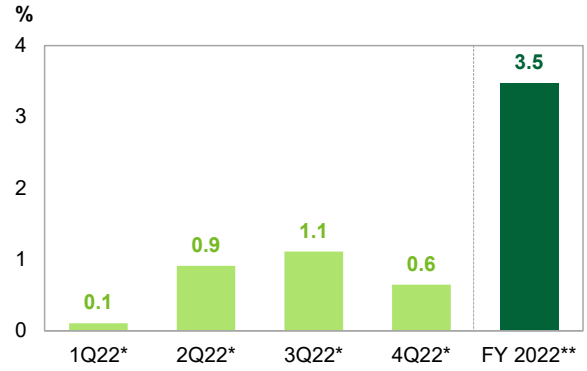
Feature Article

World oil market prospects for the second half of 2022

The global economy in 2022 continues to be fraught with uncertainty. The first quarter of the year showed a weakening growth trend amid strongly rising commodity prices and a surging Omicron wave, both of which dampened the economic dynamic, particularly in the advanced economies and China. Nevertheless, economic growth is forecast to pick up towards the end of 2Q22.

Recently, economic momentum has been building, especially in the contact-intensive services sector, which includes travel and transportation, leisure and hospitality. This renewed activity is expected to lead into the summer holiday season of the northern hemisphere, supported by still-sufficient savings in advanced economies to be spent on pent-up demand. A similar seasonal dynamic was observed during the summer months of pandemic years 2020 and 2021. However, once the summer holidays are over, it will remain to be seen to what extent inflation, i.e. rising cost of living, financial tightening and rising geopolitical uncertainty, dampen the growth dynamic towards the end of the year (***Graph 1***).

Graph 1: World GDP growth



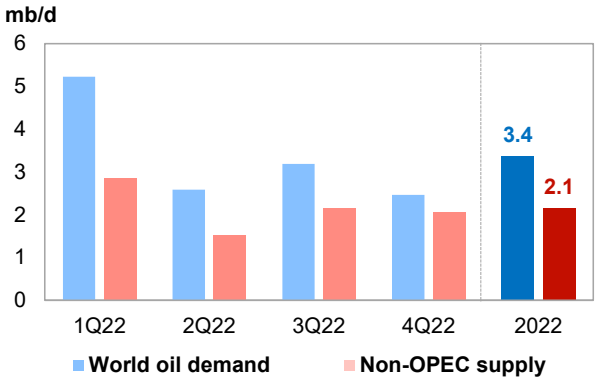
*Note: * q-o-q and ** y-o-y. Source: OPEC.*

Turning to the oil market, global oil demand is anticipated to average 101.8 mb/d in 2H22, up from 98.7 mb/d on average seen in 1H22. For the year, world oil demand is forecast to grow by 3.4 mb/d (*see* ***Graph 2***). Improving mobility in major economies, as well as seasonal containment of the pandemic is projected to support gasoline and distillate demand. Oil demand growth in the OECD is forecast to average 1.2 mb/d y-o-y in 2H22, with OECD Americas remaining the largest contributor to oil demand growth. In terms of main products, gasoline is expected to lead oil demand growth in the region, closely followed by LPG, middle distillates and naphtha. In the non-OECD, oil demand is estimated to increase by 1.6 mb/d in 2H22 y-o-y, driven mostly by China, India, Other Asia and the Middle East. The rapid containment of COVID-19 in China is expected to support a healthy rebound in economic momentum in the region. In terms of products, middle distillates are projected to be the main contributor to growth, followed by gasoline, LPG and naphtha.

Following estimated growth of 2.2 mb/d y-o-y in 1H22, non-OPEC liquids supply is forecast to grow by 2.1 mb/d y-o-y in 2H22. For the entire year, non-OPEC liquids supply is projected to grow by 2.1 mb/d y-o-y (***Graph 2***).

On a regional basis, OECD liquids supply is expected to grow by 1.7 mb/d y-o-y in 2H22, mainly in the US with a projected increase of 1.2 mb/d, and additional incremental production coming from Canada and Norway. However, liquids supply from the non-OECD region is forecast to increase only by 0.3 mb/d y-o-y in 2H22. Lower production from Russia is forecast to be offset by higher output in other regions like Latin America. However, the second half of the year remains highly uncertain due to geo-political developments in Eastern Europe.

Graph 2: World oil demand and Non-OPEC supply, y-o-y changes



Note: 2022 = Forecast. Source: OPEC.

Looking ahead, current geopolitical developments and the uncertain roll-out of the pandemic toward the end of the second half of the year continue to pose a considerable risk to the forecast recovery to pre-pandemic levels. Inflationary pressures are likely to persist and it remains highly uncertain as to when geopolitical issues may be resolved. Nevertheless, oil demand is forecast at healthy levels in the second half of this year. In order to meet this incremental demand, the countries participating in the Declaration of Cooperation (DoC) decided in their 29th Ministerial Meeting held on 2 June 2022 to advance the planned production adjustments of September 2022 in an ongoing endeavour to ensure market stability.

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Crude Oil Price Movements

Crude oil spot prices sharply increased in May, with North Sea Dated rebounding by 8.4% on a monthly average from April, supported by robust physical oil market fundamentals and a rally in futures markets. Strong crude demand from refiners, amid limited crude supply availability due to planned and unplanned supply outages and geopolitical developments in Eastern Europe pushed spot prices higher.

The ORB value rose firmly in May, increasing by $8.23 m-o-m, or 7.8%, to average at $113.87/b. This was on the back of higher ORB component-related crude benchmarks and sharp increases in official selling prices and crude differentials, amid strong physical crude market fundamentals.

The rally in oil futures markets resumed an upward trend in May after a stall in April. Oil futures prices were driven by tightening oil product markets, near-term global crude supply risks and the prospect of a demand recovery in China after authorities started to gradually ease COVID-19-related lockdown measures. Signs of tight global gasoline and diesel supply ahead of the summer driving season, along with a sharp decline in US gasoline and distillate stocks, amid firm demand and slow supply growth from refiners, have been supportive to the overall oil complex.

The ICE Brent front-month increased by $6.04 in May, or 5.7%, to average $111.96/b, while NYMEX WTI rose by $7.62, or 7.5%, to average $109.26/b. Y-t-d, ICE Brent was $38.81, or 61.1%, higher at $102.33/b, while NYMEX WTI was higher by $38.95, or 64.6%, at $99.20/b, compared with the same period a year earlier. DME Oman crude oil futures prices rose m-o-m in May by $4.68, or 4.6%, to settle at $107.39/b. Y-t-d, DME Oman was higher by $37.51, or 60.3%, at $99.70/b.

Hedge funds and other money managers turned more bullish on crude prices in May, raising their total futures and options net-long positions in ICE Brent and NYMEX WTI by 18.2% and were net buyers of about 76 mb in May. Speculators turned positive on the price outlook in light of the prospects for tightening supply and strengthening demand during the driving season. Growing signs of tightening oil product markets also contributed to encouraging speculators to raise their long positions.

The market structure of all three major oil benchmarks strengthened in May, and the near-month contract spreads moved into deeper backwardation as the outlook for oil market fundamentals tightened on expectations of lower supply due to geopolitical tensions and prospects for firming demand during the summer holiday driving season, particularly in the US and Europe.

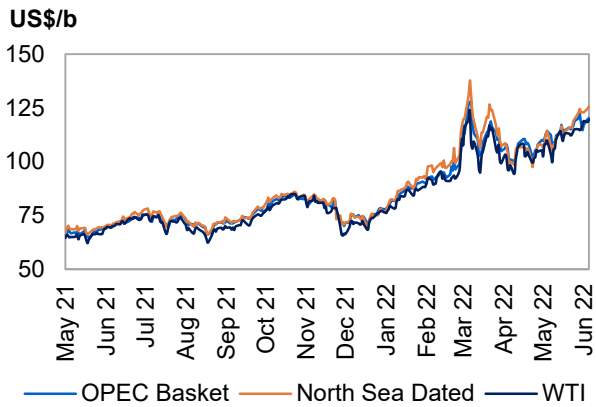
Sweet/sour crude differentials widened significantly in May in all major regions, specifically in the Atlantic Basin. A surge in refining margins of low sulphur products along with high desulphurisation costs raised demand for light sweet crude. Meanwhile, sour crude supply from the US strategic petroleum reserves (SPRs) continues to hit the market.

Crude spot prices

Robust physical oil market fundamentals and a rally in futures markets pushed **crude oil spot prices** to their highest since last March, with the North Sea Dated rebounding 8.4% on a monthly average from April. Spot prices were supported by strong crude demand from refiners, amid limited crude supply availability due to planned and unplanned supply outages and geopolitical developments in Eastern Europe that continued to impact oil supply in Europe.

Tight oil product markets and high refining margins at major refining hubs, specifically diesel, jet and gasoline, have prompted refineries to increase their throughputs and to increase demand for crude, specifically for light sweet crude, to produce more transportation fuel on expectations for higher demand during the summer driving season.

Graph 1 - 1: Crude oil price movement



Sources: Argus, OPEC and Platts.

According to Energy Information Administration (EIA) weekly data, US refiners' net input of crude oil rose above 16.1 mb/d in the second half of May, and in the week of 20 May, it hit 16.3 mb/d, the highest level since June 2021. European refiners also started to raise throughputs in April. The Europe 16 refineries' crude intake increased by 435 tb/d, or 4.8%, in April from March, to stand at 9.46 mb/d. Meanwhile, Asia-Pacific crude demand remained firm in May, and China's oil demand is expected to recover in the coming months on the back of easing COVID-19-related mobility restrictions. This came amid supply disruptions in Libya since April and market prospects for lower crude supply in the North Sea due to maintenance at the Ekofisk and Johan Sverdrup fields, as well as maintenance at the Kashagan field that would reduce CPC Blend supply in June.

In May, North Sea Dated increased by $8.76, or 8.4%, to reach an average of $113.13/b. The WTI and Dubai's first month rose by $8.09 and $4.92, respectively, or 7.9% and 4.8%, to settle at $109.86/b and $107.83/b.

One sign of a strong physical market was seen with the rise of North Sea Dated compared to futures benchmark ICE Brent by $2.72 in May m-o-m, settling at a premium of $1.17/b in May, compared to a discount of $1.55/b in April.

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

			Change		Year-to-date	
OPEC Reference Basket (ORB)	Apr 22	May 22	May 22/Apr 22	%	2021	2022
ORB	**105.64**	**113.87**	**8.23**	**7.8**	**62.16**	**102.80**
Arab Light	107.24	116.44	9.20	8.6	62.79	103.69
Basrah Medium	104.63	111.91	7.28	7.0	61.31	101.36
Bonny Light	106.39	115.07	8.68	8.2	63.05	105.98
Djeno	96.92	105.68	8.76	9.0	55.78	97.14
Es Sider	104.42	113.18	8.76	8.4	61.27	104.34
Girassol	105.28	113.95	8.67	8.2	63.58	106.40
Iran Heavy	106.28	115.48	9.20	8.7	61.94	102.92
Kuwait Export	107.46	116.82	9.36	8.7	62.59	103.90
Merey	83.40	88.07	4.67	5.6	44.53	79.13
Murban	104.48	109.97	5.49	5.3	62.21	101.58
Rabi Light	103.91	112.67	8.76	8.4	62.77	104.13
Sahara Blend	109.37	115.28	5.91	5.4	63.14	107.47
Zafiro	105.71	115.25	9.54	9.0	63.49	106.08
Other Crudes						
North Sea Dated	104.37	113.13	8.76	8.4	63.23	104.59
Dubai	102.91	107.83	4.92	4.8	61.99	99.66
Isthmus	100.40	108.32	7.92	7.9	59.77	97.41
LLS	103.45	111.47	8.02	7.8	62.33	101.37
Mars	100.72	106.71	5.99	5.9	60.59	97.38
Minas	103.44	109.79	6.35	6.1	61.21	100.28
Urals	72.55	81.18	8.63	11.9	62.30	85.63
WTI	101.77	109.86	8.09	7.9	60.22	99.33
Differentials						
North Sea Dated/WTI	2.60	3.27	0.67	-	3.01	5.26
North Sea Dated/LLS	0.92	1.66	0.74	-	0.90	3.22
North Sea Dated/Dubai	1.46	5.30	3.84	-	1.25	4.93

Sources: Argus, Direct Communication, OPEC and Platts.

The strength of the physical market was also reflected in a rise in crude differentials in almost all markets and for almost all crude qualities, including in the North Sea, Mediterranean, West Africa and East Suez crude markets.

In the North Sea, crude differentials rebounded last month and rallied to multi-month highs on strong crude demand from European refiners as they try to substitute Urals crude, amid limited supply availability in the Atlantic Basin due to planned and unplanned supply outages. Surging European margins, specifically middle distillate margins, and rising demand for transportation fuels raised buying interest for light sweet crude in the North Sea, Mediterranean and West Africa markets. The Forties and Ekofisk crude differentials rose in May by $1.09 and $1.10 on average m-o-m, respectively, to settle at premiums of 89¢/b and $4.08/b. In late May, the

Ekofisk crude differential to North Sea Dated hit $5.60/b premiums, a record high level, according to the Argus assessment.

West African crude differentials also rose in May, supported by firm demand from European refiners and high middle distillate margins. On a monthly average, crude differentials to the North Sea Dated benchmark of Bonny Light, Forcados and Qua Iboe rose respectively by $1.25, $2.28, and $1.92 m-o-m in May, to settle at premiums of $2.83/b, $4.35/b, and $3.70/b. Angolan crude differentials also rose. The crude differential of medium-heavy sweet crude Cabinda rose in May by 19¢ m-o-m on average to a premium of 93¢/b. In the Mediterranean, Saharan Blend and Azeri light saw their crude differentials to the North Sea Dated increasing respectively by $1.07 and $1.72 m-o-m to stand at premiums of $2.84/b and $6.73. CPC Blend crude differentials also rose in May m-o-m by $1.18 to average at a discount of $4.97/b to North Sea Dated.

In the Middle East, sustained demand from Asia Pacific refiners and unfavourable west-to-east arbitrage amid a wide Brent-Dubai spread continued to support the market. The value of the Oman crude differential to Dubai rose by $1.65 in May to average at a premium of $4.87/b.

In the USGC, however, crude differentials were mixed. The crude differential of light sweet crude Light Louisiana Sweet (LLS) eased slightly in May amid a stronger NYMEX WTI compared to Brent futures, while Mars sour crude differentials dipped to their lowest discount against WTI futures since March 2022 on a higher supply of sour crude from the US SPRs in the USGC. Softening demand from Asia Pacific refiners added downward pressure.

OPEC Reference Basket (ORB)

The **ORB** value rose firmly in May, increasing by $8.23 m-o-m, or 7.8%, to average at $113.87/b. This was on the back of higher ORB component-related crude benchmarks and a sharp increase in official selling prices and crude differentials, amid strong physical crude market fundamentals. Compared to the previous year, the ORB was up 56.8% from $39.65/b in 2020 to reach an average of $62.16/b so far this year. All ORB components' values rose over the last month alongside their respective crude oil benchmarks. West and North African Basket components – Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro – increased $8.44 m-o-m in May, or 8.1% on average, to $113.01/b. The multiple regions' destination grades – Arab Light, Basrah Medium, Iran Heavy and Kuwait Export – settled $8.76 higher m-o-m or 8.2% on average, to stand at $115.16/b. Murban crude rose by $5.49 m-o-m, or 5.3% on average, to settle at $109.97/b, while the Merey crude component rose by $4.67 m-o-m, or 5.6% on average, to settle at $88.07/b.

The oil futures market

The rally in **oil futures markets** resumed an upward trend in May after a stall in April, with major futures contracts ICE Brent and NYMEX WTI rising four times in the last five months. The NYMEX WTI front month increased 7.5% on average m-o-m, while the ICE Brent first month contract rose 5.7% m-o-m to its highest since last March.

Oil futures prices were mainly driven by tightening oil product markets, near-term global crude supply risks amid continued geopolitical tensions in Europe, and the prospect of demand recovery in China after authorities started to gradually ease COVID-19-related lockdown measures, which could boost the country's oil demand. Signs of tight global gasoline and diesel supply ahead of the summer driving season along with a sharp decline in US gasoline and distillate stocks amid firm demand and slow supply growth from refiners have been supportive to the overall oil complex.

Worries about further supply squeezing as the European Union banned Russian oil products imports added concerns about the potential for further tightening of middle distillate market fundamentals. Meanwhile, gasoline, gasoil and jet fuel exports from China were low in January–April as the country cut the first export quota for 2022, compared to the first 2021 quota.

US gasoline stocks declined 16 times in the last 17 weeks, prior to the week of 27 May. Between the weeks of 25 March and 27 May, US gasoline stocks fell by nearly 20 mb, according to EIA weekly data. US distillate stocks dropped in the week of May 6 to their lowest level since May 2005, exacerbating concerns about a tight market ahead of the summer traveling season, although stocks rose slightly later in the month. Data from Euroilstock also showed a draw in Europe-16 middle distillate stocks in April to 378 mb, compared to 390 mb in March.

However, volatility in the oil market remained elevated, specifically in the first half of the month, oscillating in the $10 range, as investors remained uncertain earlier in May about the extent of EU sanctions against Russian oil

imports, and they sought to anticipate the EU's decision. Selling pressure in global equity markets amid concerns over aggressive US monetary policy tightening, a jump in the US dollar's value against a basket of other major currencies and overall concerns about an economic slowdown weighed on market sentiment and fuelled market volatility.

Oil futures prices extended their rally in late May and early June with ICE Brent's first-month contract hitting nearly $123/b on 31 May, as the EU decided to gradually ban Russia's crude oil and petroleum product imports amid an already tight global oil market. However, the rise in prices has been curbed by the prospects of rising crude oil supply from other producers in the coming months and the US Department of Energy's announcement offering to sell 40.1 mb of crude as part of the US administration's announcement to release 1 mb/d of oil for six months.

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

			Change		Year-to-date	
Crude oil futures	Apr 22	May 22	May 22/Apr 22	%	2021	2022
NYMEX WTI	101.64	109.26	7.62	7.5	60.25	99.20
ICE Brent	105.92	111.96	6.04	5.7	63.52	102.33
DME Oman	102.71	107.39	4.68	4.6	62.19	99.70
Spread						
ICE Brent-NYMEX WTI	4.28	2.70	-1.58	-36.9	3.27	3.13

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

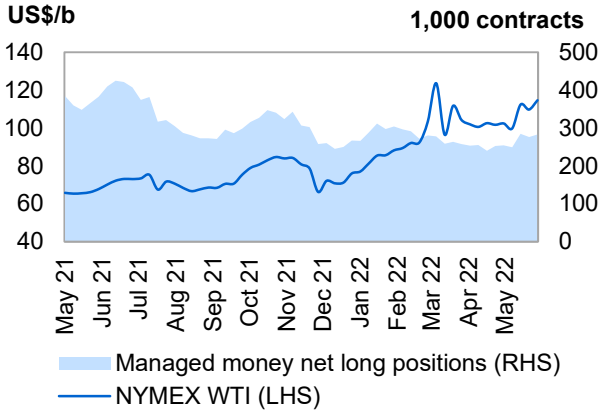
The ICE Brent front-month increased by $6.04 in May, or 5.7%, to average $111.96/b, while the NYMEX WTI rose by $7.62, or 7.5%, to average $109.26/b. Y-t-d, ICE Brent was $38.81, or 61.1%, higher at $102.33/b, while NYMEX WTI was higher by $38.95, or 64.6%, at $99.20/b, compared with the same period a year earlier. DME Oman crude oil futures prices rose m-o-m in May by $4.68, or 4.6%, to settle at $107.39/b. Y-t-d, DME Oman was higher by $37.51, or 60.3%, at $99.70/b.

The **spread between ICE Brent and NYMEX WTI** narrowed significantly in May as the NYMEX WTI benchmark at Cushing performed better than ICE Brent. The value of US futures benchmark NYMEX WTI settled above the ICE Brent value in four sessions in May for the first time since May 2020. The front-month ICE Brent/NYMEX WTI spread narrowed by $1.58 m-o-m to average at $2.70/b in May, compared to $4.28/b in April. The NYMEX WTI was supported by declining Cushing crude stocks for three consecutive weeks to the week of 20 May, and stocks remained at about 25 mb in the week of 27 May. Accelerating gasoline and distillate stock declines in the US, along with the increase in US refinery intakes, firmly supported the value of the WTI futures contract. However, the North Sea Dated premium to WTI Houston widened in May by 89¢ m-o-m to average at $2.33/b, but it remained well below the March level. North Sea crude values were strongly supported by the prospect of lower supply due to field maintenance in the North Sea, supply disruptions in Libya and lower crude imports from Russia. Meanwhile, the release of crude oil from SPRs in the USGC weighed slightly on US coastal crude values. However, large US export volumes in the second part of May that remained above 4 mb/d, according to the EIA weekly data, contributed to keeping the North Sea Dated-WTI Houston spread relatively narrow.

Hedge funds and other money managers turned more bullish on crude prices in May, raising their total futures and options net-long positions in ICE Brent and NYMEX WTI by 18.2% and were net buyers of about 76 mb between the weeks of 3 May and 31 May. Speculators turned positive on the outlook for crude prices in light of the prospects for tightening supply and strengthening demand during the driving season. Moreover, they were betting on EU sanctions against Russian crude and oil product imports that would further tighten global oil market fundamentals, specifically in Europe. Growing signs of tightening oil product markets also contributed to encouraging speculators to raise their long positions. The increase in net long positions was mainly in the ICE Brent contract, which saw a rise of 29.0%.

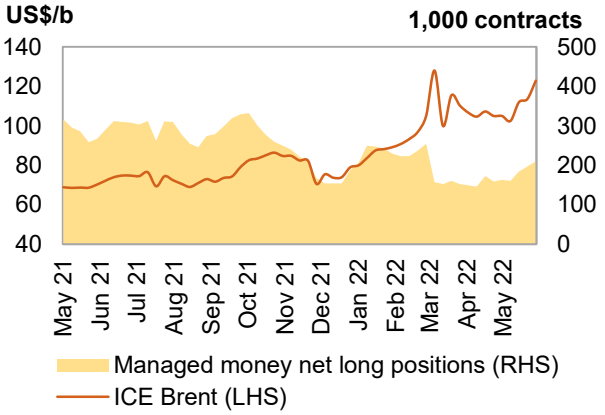
Speculators were net buyers of about 47 mb in the **ICE Brent** contract in May, and combined futures and options net long positions related to Brent fell by 47,346 contracts, or 29.0% higher, to reach 210,437 lots in the week to 31 May, the highest level since early March 2022, according to the ICE Exchange. This is a combination of a rise in long positions and a drop in short positions. In the week ending 31 May, gross short positions declined by 17,889 lots, or 25.7%, to stand at 51,704 contracts, the lowest level since February 2021, while gross long positions rose by 29,457 lots, or 12.7% higher, to 262,141 contracts during the same period.

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.

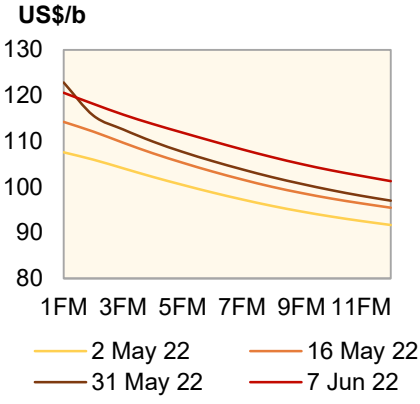
Hedge funds and other money managers also raised their positions related to **NYMEX WTI** in May but at a slower rate. Combined futures and options net long positions in NYMEX WTI increased by 28,820 contracts, or 11.3%, to 283,203 lots in the week to 31 May. This was due to a decline in short positions by 4,279 lots, or 20.7%, to 16,355 contracts, while long positions rose by 28,820 contracts, or 11.3%, to 283,203 contracts, according to the US Commodity Futures Trading Commission (CFTC).

The **long-to-short ratio of speculative positions** in the ICE Brent contract rose to 5:1 in the week of 31 May, compared to 3:1 in the week of 3 May. The NYMEX WTI long-to-short ratio jumped to about 18:1 in the week to 31 May, compared to 13:1 in the week to 3 May. **Total futures and options open interest volumes** on the two exchanges decreased again in May, falling by 46,810 lots, or 0.9%, to stand at 5.1 million contracts in the week ending 31 May.

The futures market structure

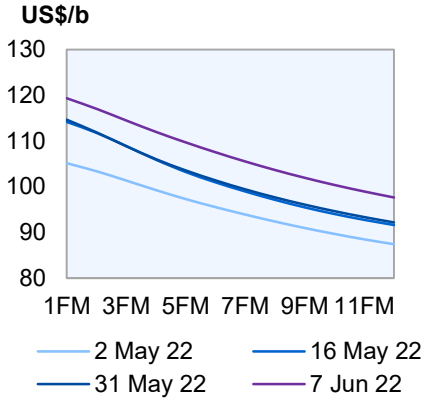
The **market structure** of all three major oil benchmarks strengthened in May, and the near-month contract spreads moved into deeper backwardation as the outlook for oil market fundamentals tightened on expectations for lower supply due to geopolitical tensions, and firming demand during the summer holiday driving season, particularly in the US and Europe. The gradual lift of COVID-19-related lockdowns in China also raised demand outlooks. First-month contracts rose more than forward contracts, boosted by surging gasoline and distillate prices and a sharp drop in their respective inventories. The futures forward curves steepened further later in the week as investors were pricing a supply disruption after the EU agreed to gradually impose sanctions on Russian oil imports.

Graph 1 - 4: ICE Brent forward curves



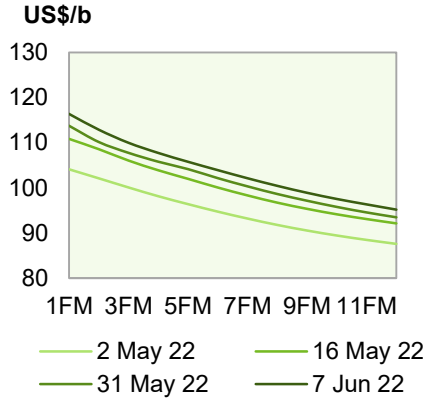
Sources: ICE and OPEC.

Graph 1 - 5: NYMEX WTI forward curves



Sources: CME and OPEC.

Graph 1 - 6: DME Oman forward curves



Sources: DME and OPEC.

The backwardation in Brent firmed significantly in May compared to the previous month, with the **ICE Brent** M1/M3 rising to $10 in late May, evidence that investors were pricing in again, like in March, a severe tightening of the global market in the short term due to geopolitical tension in Europe and its impact on oil supply. Expectations of further increasing refinery intakes in coming months and strong demand for North Sea prompt loading amid a tighter light sweet crude market in the Atlantic Basin, compared to the recent months, also contributed to strengthening the Brent backwardation structure. On a monthly average, the ICE Brent M1-M3 spread widened by $2.71, from a backwardation of $1.92/b in April to a backwardation of $4.63/b in May. The ICE Brent's first to the sixth month also widened in May by $4.47 to a $10.23 backwardation.

In the US, the backwardation structure of **NYMEX WTI** also strengthened over the last month, and the forward curve steepened on prospects for tightening supply/demand fundamentals in the US oil market amid the expectation of rising demand for transportation fuels during the summer holiday driving season. The tightening market in the Atlantic Basin and the prospect of strong demand for US crude exports also added support to the US benchmark backwardation structure. Furthermore, low crude stocks in the US in May, including in Cushing, Oklahoma, a trading hub, also added support to the front-month NYMEX WTI contract compared to forward month contracts. The NYMEX WTI first-to-third month spread widened by $2.53 to a backwardation of $4.57/b on average in May, compared to a backwardation of $2.04/b one month earlier.

The market structure of **DME Oman** and **Dubai** steepened in May on firm buying interest from Asia Pacific refiners and a wide Brent/Dubai spread that made Atlantic Basin crude shipments to Asia Pacific less favourable, which buoyed the value of prompt contracts. On a monthly average, the DME Oman M1-M3 spread widened by $2.03 to a backwardation of $4.52/b in May, from a backwardation of $2.49/b in April.

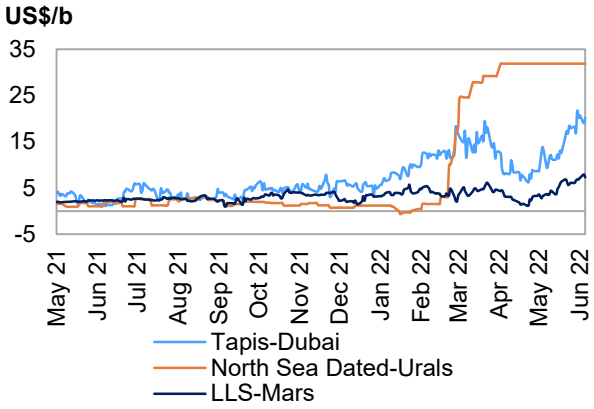
Regarding the M1/M3 structure, the North Sea Brent **M1/M3 spread** widened in May on a monthly average by $3.67 to a backwardation of $4.70/b, compared to $1.03/b in April. In the US, the WTI M1/M3 backwardation also widened in May by $2.60 to $4.59/b, compared to a backwardation of $1.98/b in April. The Dubai M1/M3 backwardation widened on average in May by $1.23 to a backwardation of $4.95/b.

Crude spreads

The value of **light sweet crude** in May rose significantly, increasing more than the value of **medium and heavy sour crude** in all major regions, specifically in the Atlantic Basin. A surge in refining margins of low sulphur products like diesel, jet kerosene and gasoline, along with high desulphurisation costs, raised demand for light sweet crude. Supply disruptions of light sweet crude in the Mediterranean and the prospects for lower supply in the North Sea in June due to maintenance also played a role in widening the sweet-sour crude spread. Meanwhile, sour crude supply from the SPR continues to hit the market.

In **Europe**, the sweet-sour crude spread represented by the North Sea Dated-Urals differential remained at a significantly high level in May as the assessment of the Urals crude value stayed at a deep discount against its related benchmark North Sea Dated amid export challenges. During the same month, the value of North Sea crude benchmarks – Brent, Forties, Oseberg and Ekofisk (BFOE) – surged to multi-month highs, while the Ekofisk value hit a record high premium against the Brent benchmark, buoyed by strong European demand and high refining margins of light distillate products. Supply disruptions in the Mediterranean and field maintenance reduced the supply outlook for light sweet crude in northwest Europe. North Sea Dated, the benchmark of light sweet crude, also remained supported by a high-risk premium.

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



Sources: Argus, OPEC and Platts.

The North Sea Dated-Urals spread rose to a premium of $31.95 in May, widening by 13¢ m-o-m from a premium of $31.82/b in April. At the same time, Urals crude differentials in northwest Europe fell by 18¢ to a discount of $34.85/b in May to North Sea Dated.

In **Asia**, sweet-sour crude differentials widened sharply in May as the value of light sweet crude in the Asia Pacific was strongly supported by a rise in similar crude qualities in the Atlantic Basin and Brent-related crudes. The Tapis-Dubai spread widened by $4.62 m-o-m in May to settle at an average of $13.23/b. Unfavourable west-to-east arbitrage amid a wider Brent-Dubai spread limited flows of light sweet crude from the Atlantic Basin to Asia, which supported the value of light sweet crude in the East Suez market. In May, the Brent-Dubai spread widened by $3.84 to an average of $5.30/b. Meanwhile, the Brent-Dubai front-month exchange of futures-for-swaps
(EFS Dubai), a barometer of west-to-east arbitrage, remained significantly high in May, averaging $9.28/b in May, an increase of $2.83/b m-o-m.

In the **USGC**, sweet-sour crude differentials also widened as the value of sour crude came under pressure due to higher supply coming from the US SPR and soft demand from the Asia Pacific as some refiners raised intake of Urals crude. 39 mb of the 40.1 mb SPR release announced in May from the US Department of Energy are sour crude. In March, the LLS-Mars sour crude differential widened by $2.03 m-o-m to stand at $4.76/b.

Commodity Markets

Movement around commodity price indices was mixed m-o-m. The energy price index recovered from its decline the previous month, while the non-energy index price fell m-o-m after four consecutive months of gains. Base and precious metal indices declined for the second consecutive month.

In the paper market, despite elevated commodity prices, total open interest and money managers' net length declined for the third consecutive month, amid high volatility in commodity prices and profit-taking. Tighter financial conditions in the market and the prospects of lower global economic growth weighed on investors.

China eased mobility restrictions in some regions, in addition to providing monetary and fiscal support during the month of May. These measures have increased the supply of some commodities, particularly base metals, while demand remains soft, thus supporting the decline in prices. The upside is that these measures will increase energy demand in the region. Furthermore, the memorial weekend in the US, which marks the unofficial beginning of the summer driving season, has boosted market sentiment and strengthened oil demand. An improvement in the commodity demand outlook, in addition to ongoing geopolitical developments in Eastern Europe, will continue to exercise upward pressure across commodity prices in the months to come.

Trends in selected commodity markets

The energy price index rose m-o-m by 5.0%, following a price rally across all the index components, except European natural gas prices, which declined for the second consecutive month. The index continues to trend upwards; it has risen by 83.3% y-o-y, a slower rate compared with the previous month.

The non-energy index fell by 4.6% m-o-m, supported by Indonesia's decision to lift its ban on edible oils and Russia's announcement that it will allow safe passage for Ukrainian wheat exports under certain conditions. The index is up by 23.6% y-o-y, a slower rate compared with last month. Despite this decline, India's decision to ban wheat exports earlier in May underscores an emerging trend of export restrictions that is adding supply uncertainty to agricultural commodities and could potentially add more pressure to prices in the coming months.

Table 2 - 1: Commodity prices

Commodity	Unit	*Monthly averages*			*% Change*	*Year-to-date*	
		Mar 22	Apr 22	May 22	May 22/Apr 22	2021	2022
Energy*	Index	**163.2**	**153.2**	**160.9**	**5.0**	**79.6**	**145.9**
Coal, Australia	US$/mt	324.4	288.2	366.8	27.3	93.6	279.7
Crude oil, average	US$/b	112.4	103.4	110.1	6.5	61.4	100.7
Natural gas, US	US$/mbtu	4.9	6.5	8.1	24.6	3.2	5.7
Natural gas, Europe	US$/mbtu	42.4	32.2	29.8	-7.3	7.1	32.0
Non-energy*	Index	**139.1**	**139.9**	**133.4**	**-4.6**	**107.6**	**133.0**
Base metal*	Index	**149.9**	**146.1**	**130.0**	**-11.0**	**109.8**	**139.6**
Precious metals*	Index	**149.6**	**148.1**	**139.9**	**-5.5**	**141.6**	**143.8**

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

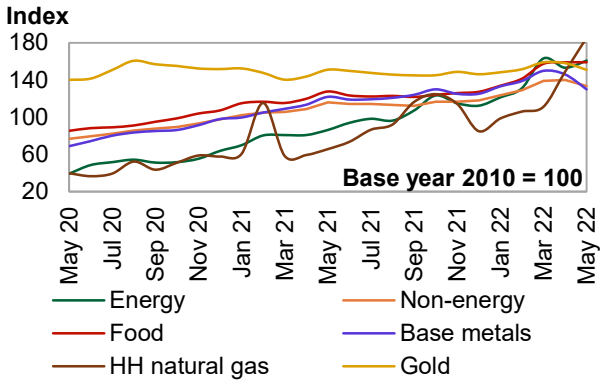
Average crude oil prices rebounded from their decline the previous month, rising by 6.5% m-o-m, supported by self-imposed embargos of Russian crude oil imports by EU and Japan, which is adding more supply uncertainty, compounded by strong seasonal demand; and an improved demand outlook following China's decision to lift COVID-19 restrictions in some regions.

Henry Hub natural gas prices continued their upward trajectory, advancing for the fifth consecutive month. Prices jumped by 24.6% m-o-m as high temperatures across the US increased demand for residential cooling. Furthermore, data from the US Energy Information Administration (EIA) shows that, although total working gas storage is now within the five-year historical range (2017-2021), stocks are 397 Bcf less than last year at this time. Meanwhile, US LNG exports remain strong amid increasing demand from Europe. These factors continued to sustain upward pressure on Henry Hub prices, which are up by 80.7% y-o-y.

Natural gas prices in Europe fell for the second consecutive month; the average **Title Transfer Facility (TTF)** price went from $32.2/mmbtu in April to $29.8/mmbtu in May, 7.3% m-o-m decline. A combination of ongoing supplies from Russia, declining demand amid warmer weather and increased LNG inflows have helped bring Europe's stocks within seasonal range, thus easing pressure on prices. Y-o-y, prices are up by 349.1%, underscoring the uncertainty around supply amid geopolitical developments in the region.

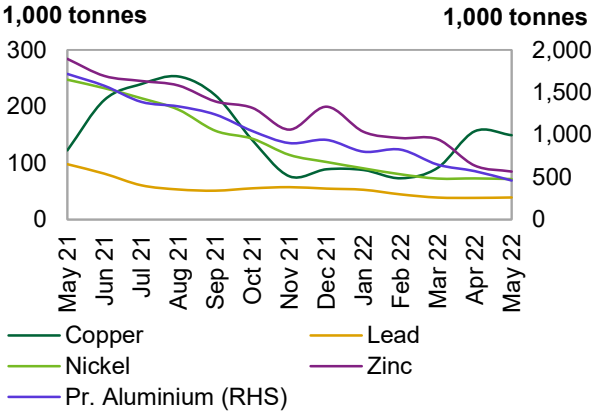
Australian thermal coal prices recovered from their decline the previous month, increasing by 27.3%. High temperatures in the Asia Pacific region have increased electricity generation demand for residential cooling. Furthermore, EU and Japanese demand for Asian Pacific coal has increased amid a ban on Russian coal imports, while China eased COVID-19 restrictions in some regions. These factors are supporting upward pressure on coal prices. Y-o-y, prices are up by 198.9%.

Graph 2 - 1: Major commodity price indices



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

Graph 2 - 2: Inventories at the LME



Sources: LME, Thomson Reuters and OPEC.

The **base metal index** fell for the second consecutive month, declining by 11.0% m-o-m. Prices for all the index components fell m-o-m as increased supply, softer demand from China and weaker economic outlooks in key consumer nations weighed on demand for base metals. According to data from Haver Analytics, the Purchasing Managers Index (PMI) in Europe declined by 1.6% m-o-m, while in China the PMI improved to 4.6% in the same period, though it remained below the 50 threshold. The improvement in China's PMI underscores the impact of monetary and fiscal stimulus, though lockdowns continued to weigh on industrial activity. Y-o-y, the index trended up to (by) 27.1%.

Aluminium prices declined for the second consecutive month, falling by 12.8% m-o-m, following the lifting of COVID-19 restrictions in some regions, China increased aluminium output, thus providing relief to prices. However, global aluminium production remained constrained, with the exception of China. According to data from London Metal Exchange (LME), aluminium inventories declined by 19.5% m-o-m. Despite declining inventories, weaker manufacturing activity in Europe amid high-energy costs continued to subdue aluminium demand, putting downward pressure on prices. Y-o-y, prices are up by 43.5%, a slower rate compared with the previous month.

Average monthly copper prices also declined for the second consecutive month, down by 7.7% m-o-m. LME data shows that inventories declined by 4.4% m-o-m, however, softer demand in China and ongoing robust output by China's copper refiners, with production rising over 6.0% in 1Q22 compared with the same period last year, have contributed to the downward trend in copper prices. Prices are up by 10.2% y-o-y.

Lead prices receded m-o-m by 10.0%, supported by an increase in inventories and low demand. LME data shows that inventory levels went from 38,125 mt in April to 38,850 mt in May, a 1.9% increase m-o-m. Prices are up by 12.3% y-o-y.

Prices for both nickel and zinc declined m-o-m by 15.3%, and 14.0% respectively. According to LME data, inventories for nickel and zinc declined m-o-m by 1.6% and 11.2%, respectively. Despite declining inventories, falling iron ore prices weighed on both metals amid China's economic slowdown. Y-o-y, both nickel and zinc were up by 62.7% and 37.5%, respectively.

The **precious metals index** fell for the second consecutive month, declining by 5.5% m-o-m. Precious metal prices rose earlier in May as investors were shifting towards safe haven assets amid equity market selloffs and mounting inflationary pressure. However, the release of the Fed's latest meeting minutes showed an increasingly hawkish US Federal Reserve Bank (Fed) anticipating additional rate hikes in the coming months, thus shifting investors' safe heaven demand to US Dollars. Gold prices fell by 4.6% m-o-m followed by price declines in silver and platinum by 10.8% and 0.7%, respectively, in the same period. The underperformance of silver and platinum also underscores the impact of weaker manufacturing activity, as both metals have

industrial properties. The precious metals index continued its y-o-y upward trajectory, up by 1.6%. The upward trajectory is supported mainly by gold (up by 4.5% y-o-y), as silver (down by 10.3% y-o-y) and platinum (down by 15.1% y-o-y) continued their downward trends.

Investment flows into commodities

Money managers' net length positions fell for the second consecutive month, declining by 19.8% m-o-m, the highest drop y-t-d. Copper led the decline, followed by natural gas and gold, which was partially offset by an increase in crude oil net length. Meanwhile, total open interest fell for the third consecutive month, declining by 4.5% m-o-m. Open interest fell across the all commodities, with copper leading the decline, followed by crude oil, gold, and natural gas.

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

Selected commodity	*Open interest*		*Net length*			
	Apr 22	May 22	Apr 22	%OI	May 22	%OI
Crude oil	2,662	2,524	250	9	266	11
Natural gas	1,175	1,142	22	2	12	1
Gold	762	730	123	16	72	10
Copper	216	202	25	11	-14	-7

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

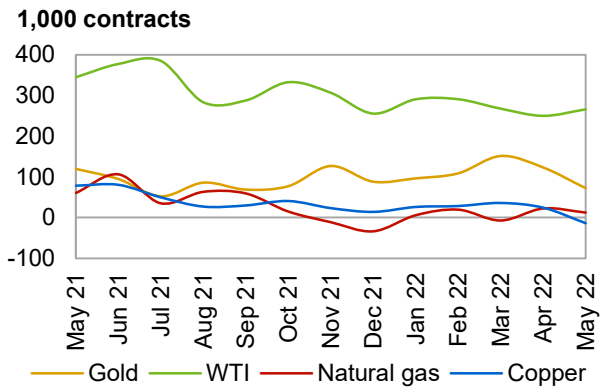
Total crude oil (WTI) open interest (OI) fell for the third consecutive month decreasing m-o-m by 5.2%, while money managers' net length rose by 6.3% in the same period. Prospect of firm demand for oil in the coming months supports the bullishness of money managers towards crude oil.

The total Henry Hub natural gas OI declined m-o-m by 2.8%, in addition to money managers' net length declining by 45.5% in the same period. Money manager sell-offs are supported by profit-taking amid high natural gas prices.

Gold's OI fell for the second consecutive month, declining by 4.2% m-o-m. Money managers' net length also declined in the same period by 41.4%. Expectations of interest rate increases by the Fed have dampened investors' bullishness towards gold.

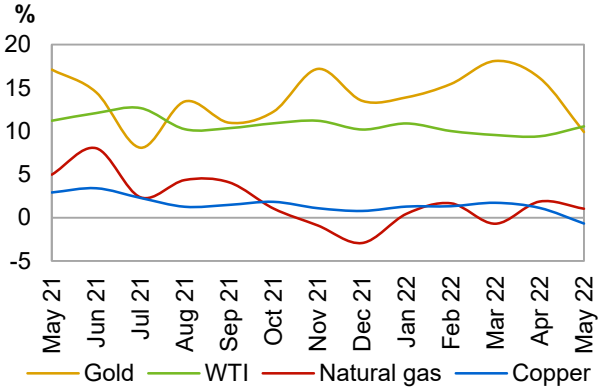
Copper's OI fell by 6.6% m-o-m, in addition to money managers' net length declining by 155.6% in the same period. The bearish outlook for the commodity is supported by market fundamentals, as supply continued to improve while demand remained subdued.

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 is facing ongoing and potentially impactful challenges, and while the downside remains significant, the global economic growth forecast remained unchanged at 3.5%, following a growth estimate of 5.8% for 2021.

The current global economic growth forecast, unchanged from last month, considers a gradually recovering global economy towards the end of 2Q22 and beyond. It is assumed that the situation in Eastern Europe will not worsen, and that it will not cause further major spill over into other economies, beyond its current impact. However, it will be important to monitor how consumers deal with a shortfall in supply of agricultural products from Ukraine and Russia, and what consequences a potential decline in Russian fossil fuel exports to G7 economies could have for energy supplies, energy prices and consequently global economic growth. These factors will need close monitoring, especially in 2H22.

Among the numerous global economic challenges, the fallout from the conflict between Russia and the Ukraine and the pandemic could materially dampen global economic growth towards the end of the year, leading to lower growth than currently anticipated.

These issues and their outcomes have already been partly reflected in a 1Q22 contraction in the US and Japan, as well as a relatively low growth dynamic in the Euro-zone and China, among others — a lacklustre dynamic that has continued into the beginning of 2Q22. However, a pick-up towards the end of 2Q22 is likely. This will be fuelled by pent-up demand, buoyed by ongoing solid underlying spending power by households, supported by sufficient savings. This dynamic is to some extent forecast to carry over into 3Q22, and is associated with a significant pick-up in the contact-intensive services industry, including travel and transportation, leisure and hospitality. Uncertainties then may increasingly become visible in 4Q22, with a potentially ongoing rise in inflation and global response by major central banks via monetary tightening. Moreover, the pandemic may re-emerge in a more forceful way than currently anticipated. Also, challenges in the energy sphere may become more severe in 4Q22, when the northern hemisphere enters the heating season. These factors, including potential strain in the debt market due to globally rising interest rates, will need close monitoring and are among factors that could very powerfully derail global economic growth.

The upside potential to the current forecast is quite limited. However, it may come from a solution to the Russia and Ukraine conflict, fiscal stimulus, where possible, and a fading pandemic, in combination with a strong rise in service sector activity. These factors could potentially, albeit with limited capacity, lift global economic growth beyond the current base case.

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

	World	OECD	US	Euro-zone	UK	Japan	China	India	Brazil	Russia
2021	**5.8**	**5.4**	**5.7**	**5.4**	**7.4**	**1.7**	**8.1**	**8.3**	**4.6**	**4.7**
Change from previous month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
2022	**3.5**	**2.9**	**3.0**	**3.0**	**3.5**	**1.6**	**5.1**	**7.1**	**1.2**	**-6.0**
Change from previous month	0.0	-0.1	-0.2	-0.1	0.0	-0.2	0.0	0.0	0.5	0.0

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

Source: OPEC.

Update on the latest global developments

Uncertainties in the global economy, especially regarding geopolitical tension in Eastern Europe and its impact on the global economy, have continued. Global inflation as a consequence of this conflict, among other drivers, has risen further, and hence financial tightening has accelerated. In addition, 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 may also be an 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 make refinancing more challenging. This is not only difficult for vulnerable low-income countries, but could also become a more pressing issue for selective Euro-zone economies, especially Italy and Greece. In addition, COVID-19 infection rates have started rising again in some Euro-zone economies

and selective parts of the US. The pandemic had led to severe lockdown measures in China, which in the meantime have been lifted to some extent.

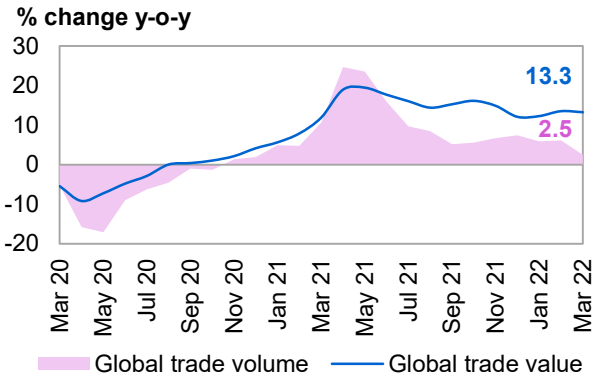
Inflation has become an ongoing concern, and while some factors are indeed temporary and may slow down in the next year, it is currently a dominant force, possibly dampening global growth. In the US, inflation has risen again, to stand at 8.6% y-o-y in May. The Euro-zone is facing a similar trend, with inflation at 8.1% y-o-y in May, while the UK faced inflation of 7.8% y-o-y in April, the latest available month. This has caused the US Federal Reserve (the Fed) to hike interest rates in May again by 50 basis points, with key policy rates now standing at 1%. The European Central bank has been more reluctant to lift interest rates, but announced a likely rate hike of 25 basis points in July, with another potential increase of 50 basis points in September. Additionally, the trend is on the rise in the two major low-inflation economies of China and Japan. Inflation in Japan reached 2.5% in April, a level that not seen since 2014, when it was artificially lifted through a sales tax increase. Inflation in China also stood at 2% in May and in April, and while this is very much in line with pre-pandemic levels, it compares with much lower rates in 2021, when average annual inflation stood at 0.8%. These developments will need careful monitoring as rising interest rates may turn out to be stress factors for many highly indebted economies.

With the support of a booming commodities market and acceleration in inflation, global trade has seen positive developments, particularly in value terms.

World trade values increased by 13.3% y-o-y in March, compared with 13.5% y-o-y in February, based on the CPB World Trade Monitor Index provided by the CPB Netherlands Bureau for Economic Policy Analysis.

Trade in volume terms rose by 2.5% y-o-y in March, after a rise of 6.2% y-o-y was seen in February.

Graph 3 - 1: Global trade



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

Near-term global expectations

After slow or even negative growth in numerous key economies in 1Q22, the global growth dynamic is forecast to again gain pace towards the end of 2Q22, with an expected continued recovery carrying over into 3Q22. The momentum is anticipated to be driven by pent-up demand, especially in the contact-intensive services sector, and in particular the sectors of travel and transportation, leisure and hospitality. The still solid situation regarding disposable income, in combination with sufficient savings, will provide the base for this robust dynamic. However, the inflationary trend, in combination with the pandemic, the enduring armed conflict between Russia and the Ukraine and hence likely challenges in global food supply, are all factors that may lift uncertainties towards the end of the year.

Global growth in 1Q22 was much lower than expected at the start of the year, with US growth now anticipated to decline by 1.5% q-o-q SAAR and Japanese growth by 1% q-o-q SAAR, and Euro-zone growth standing at only 1.1% q-o-q SAAR. Moreover, China — as an major contributor to global growth — is expected to see its economy expand by only 4.8%, well below its growth target of around 5.5% on a yearly average.

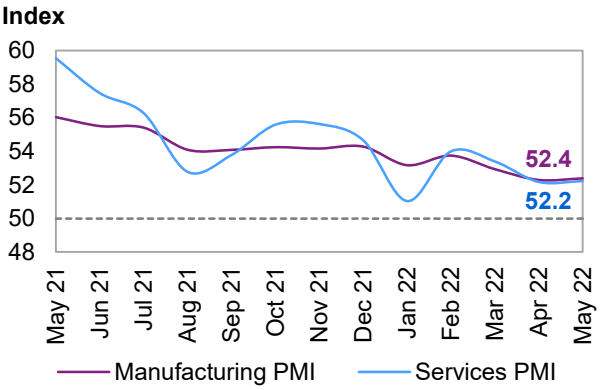
With these base numbers, global GDP is forecast at 0.1% q-o-q in 1Q22. Growth is forecast to accelerate to stand at 0.9% q-o-q in 2Q22. In 3Q22, growth is forecast to see its annual peak in the growth dynamic at a quarterly growth level of 1.1% q-o-q. In 4Q22, there may be a slowdown due to the potential seasonal rise in COVID-19 infections possibly leading to associated social distancing measures, so that growth is forecast at 0.6% q-o-q. However, mounting uncertainties, beyond the seasonality of the pandemic, could lead to an even more accentuated slowdown.

The forecast also 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 better manage 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. 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 outcomes of this conflict 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 logjams in China and elsewhere, which are further fuelling global inflation. 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 extended inflation trend. Price pressure will guide central banks across the world to act further to rein in inflation.

Global purchasing managers' indices (PMIs) have so far continued to hold up relatively well, despite the numerous challenges that the global economic growth dynamic has been facing. The global manufacturing PMI rose slightly to stand at 52.4 in May, compared with 52.3 in April. The global services sector PMI remained unchanged, standing at 52.2 in May.

Graph 3 - 2: Global PMI



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

While downside risks prevails and the growth dynamic will require close monitoring, **global economic growth** for 2022 remained unchanged at 3.5%. This comes after a 2021 growth level of 5.8% was seen.

Table 3 - 2: World economic growth rate and revision, 2021–2022*, %

	World
2021	**5.8**
Change from previous month	0.0
2022	**3.5**
Change from previous month	0.0

*Note: * 2022 = Forecast.*

Source: OPEC.

OECD

OECD Americas

US

Update on the latest developments

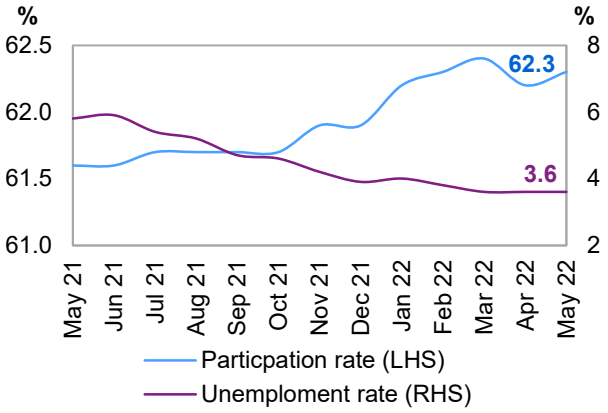
US GDP growth for 1Q22 was slightly revised down, based on data provided by the Bureau of Economic Analysis (BEA). The latest data by the BEA suggests that the US economy declined by 1.5% q-o-q SAAR in 1Q22, compared with a previous estimate of -1.4% q-o-q SAAR. The data confirmed that growth was likely 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 started to unfold at the end of February, such as rising import prices, led to a severe negative contribution in net trade. Early economic indicators for the current quarter point to some recovery, though the extent of the rebound remains to be seen. The Fed has continued its monetary tightening efforts and lifted its key policy rate further by 50 basis points amid rising inflation at its most recent rate-setting meeting in May, and its key policy rate is now at around 1%. Monetary policy actions are very much guided by **inflation** numbers. Inflation in May rose again, reaching 8.6% y-o-y, following 8.3% y-o-y in April and 8.5% y-o-y in March, i.e. the highest level in the past three months and therefore also the highest level since the 1980s. The strongest appreciation came once again from transportation, pointing to the possibility of some transitory effects in this sub-sector. Transportation prices rose by 19.4% y-o-y in May, compared with 19.9% y-o-y in April and 22.6% y-o-y in March. Excluding the volatile components of energy and food, inflation stood at 6% y-o-y in May, following 6.2% y-o-y in April and 6.5% y-o-y in March.

Consumer confidence dropped again, compared with previous months. The index provided by the Conference Board retracted to 106.4 in May, compared with 108.6 in April.

The **unemployment rate** remained at a low level of 3.6% in May. The **participation rate** rose again slightly to stand at 62.3% in May, compared with 62.2% in April.

Non-farm payrolls continued to rise, with an increase of 396,000 jobs in May, after a slightly upwardly revised figure of 436,000 jobs was recorded in April. Ongoing labour market tightness and corresponding wage developments need to be closely monitored, as they could materially lift inflation. Hourly earnings rose by 5.2% y-o-y in May, after a rise of 5.5% y-o-y was seen in April and 5.6% y-o-y in March, an ongoing rising trend that sees earnings substantially above annual pre-COVID-19 growth of between 2% and 3%.

Graph 3 - 3: US monthly labour market



Sources: Bureau of Labor Statistics and Haver Analytics.

Near-term expectations

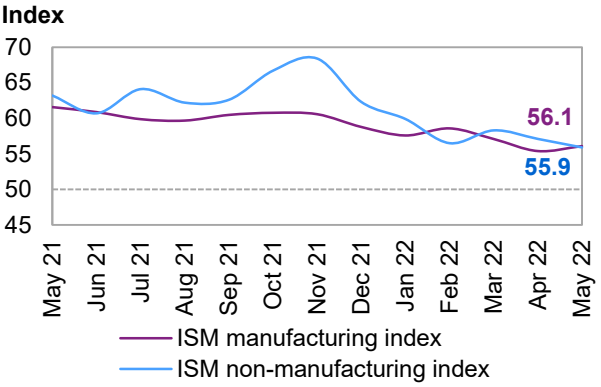
After the decline seen in 1Q22, the US economy is forecast to rebound in 2Q22 and beyond. In line with most advanced economies, it is anticipated that pent-up demand, particularly in the contact-intensive services sector, will support US economic growth. With a lessening in COVID-19 infections, an important factor in the 1Q22 decline, the services sector is forecast to recover considerably in 2Q22 and beyond, particularly with support of the travel and tourism sector and an expected recovery in leisure and hospitality. Some uncertainties may, however, cloud this development. Among the most pressing issues is inflation in combination with rising interest rates as an outcome of monetary tightening. Swiftly rising inflation eats into the disposable spending ability of households, while monetary tightening is forecast to gradually cool the economy. While it is currently foreseen that these developments will lead to a measured and steady slowdown in the coming quarters, uncertainties remain, especially around rising energy prices, which may lead to a more significant reduction in consumption than currently anticipated, especially towards the end of the year. This potential inflationary spending reduction may come when the pandemic re-emerges and social distancing measures are being pursued again, constituting an additional dampening effect.

The Fed's monetary policy actions will remain an influential factor. To a large extent, this will certainly depend on the Fed's inflation expectations. Some moderation in inflation is forecast to materialise in 2H22, leading to a full-year inflation level of around 7.5%. However, the continuing rise in wages and salaries, as well as rents and rent equivalents, which accounts for around 40% of core US inflation, may keep inflation at high levels, beyond the expected temporary factors of transportation, food and energy prices.

In terms of **quarterly growth** developments, a GDP decline of 1.5% q-o-q growth in 1Q22 is forecast to be followed by 2Q22 growth of 4.5% q-o-q SAAR. In 3Q22, growth is forecast to reach 3.5% q-o-q SAAR, followed by a slowdown to 2.9% q-o-q SAAR in 4Q22.

May **PMI** levels, as provided by the Institute for Supply Management (ISM), point to an ongoing positive dynamic, albeit at a slowing rate in the services sector amid the latest inflationary developments, continued labour market tightness and ongoing supply chain bottlenecks. The index level for the services sector, representing around 70% of the US economy, retracted to stand at 55.9 in May, following 57.1 in April and 58.3 in March. The manufacturing PMI rose in May to stand at 56.1, compared with 55.4 in April and 57.1 in March.

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



Sources: Institute for Supply Management and Haver Analytics.

By taking into consideration actual 1Q22 data, and at the same time considering a solid rebound for the remainder of the year, the **2022 US GDP growth** estimate has been revised down to 3.0% in May, compared with 3.2% in April. This follows estimated growth of 5.7% in 2021.

Table 3 - 3: US economic growth rate and revision, 2021–2022*, %

	US
2021	**5.7**
Change from previous month	0.0
2022	**3.0**
Change from previous month	-0.2

*Note: * 2022 = Forecast.*

Source: OPEC.

OECD Europe

Euro-zone

Update on the latest developments

The **Euro-zone's growth** was reported to be much better than previously expected. GDP also grew by a stronger rate than expected compared with other major OECD economies. The Euro-zone's 1Q22 growth was reported at 2.5% q-o-q SAAR, providing a good starting point to the year, despite the numerous ongoing challenges that the economic region is facing due to the ongoing conflict between Ukraine and Russia and associated consequences. This data point, as provided by Eurostat, the statistical office of the EU, compares with initially reported growth of 1.1% q-o-q SAAR; hence the growth rate is at a much higher level. However, a large part of this is due to an upward revision in Ireland. Thus, underlying growth patterns in various key Euro-zone economies remained largely unchanged. Additionally, contrary to other major OECD economies, growth was driven by a build in inventories and other potentially temporary factors. However, consumption declined, probably also driven by implied social distancing measures connected to Omicron. Private consumption fell by an annualised rate of 2.7% q-o-q.

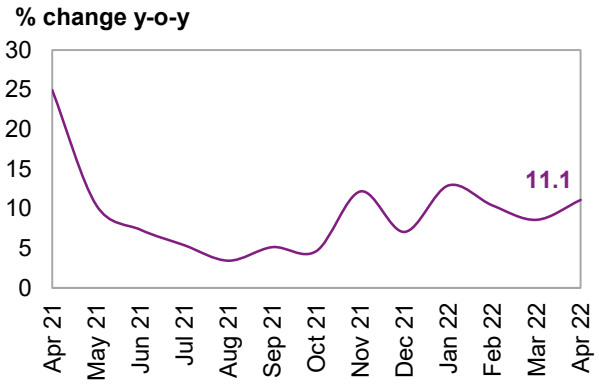
Rising **inflation** may have also had a dampening impact on private household consumption, and it remains to be seen how the trend will evolve during the remainder of 2022, given the latest developments in Ukraine, as well as the ongoing pandemic. Inflation continued to rise strongly in May on a yearly basis, to stand at 8.1% y-o-y for the month in the Euro-zone, compared with a 7.5% rise in March and April. When excluding volatile items such as food and energy, inflation stood at 4.9% y-o-y in May, 3.9% y-o-y in April and 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 April, rising by a strong 4.9% y-o-y after reaching 4.2% y-o-y in March and 4.2% y-o-y in February. In the meantime, the ECB shifted towards monetary tapering and higher interest rates and made announcements on tightening monetary policy via a likely hike of 25 bp in July. Moreover, the ECB intends to increase the key policy rate by a further 50 bp in September. While its monetary tightening policies are still significantly behind the schedules of the Fed and the Bank of England (BoE), an even higher rate hike over summer should not be ruled out.

The **labour market** continued to experience a stabilising trend. According to the latest numbers from Eurostat, the unemployment rate stood at 6.8% in April, the same level as in March and February.

Retail sales continued to rise on a yearly basis in value terms, with growth of 11.1% y-o-y seen in April, compared with 8.6% y-o-y in March. However, that translates into a monthly decline of 0.9% m-o-m in April, compared with a rise of 1.8% m-o-m in March.

Industrial production fell in March, with the latest available data showing a decline of 0.9% y-o-y, compared with a rise of 1.3% y-o-y in January. This translates into a monthly decline of 1.8% m-o-m in March, compared with a monthly rise of 0.5% m-o-m in February.

Graph 3 - 5: Euro-zone retail sales



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

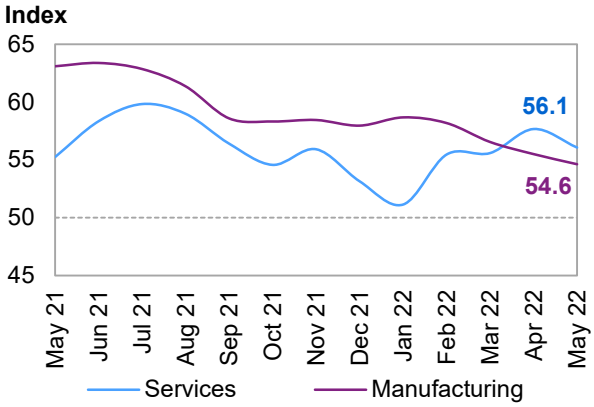
Near-term expectations

Following better-than-expected 1Q22 GDP growth, the 2022 GDP growth forecast sees a gradual continuation of the recovery for the remainder of the year. However, this is dependent on the development of numerous uncertainties. Social distancing measures at the beginning of the year had a considerable negative impact on consumer spending dynamics. Furthermore, the start of the armed conflict in Ukraine at the end of February, together with a strong rise in inflation, may have further 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.

Ongoing 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. Particularly, the energy supply issue will need to be carefully monitored, given the implementation of an embargo on Russian oil imports by the EU and its plan to phase out a majority of Russian gas imports by the end of the year. In addition, the pandemic is ongoing in the Euro-zone, and infections have risen again, due to a highly infectious variant. Moreover, the seasonality of COVID-19 over the past two years suggests it may 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, and is forecast to lift its key policy rate by at least 75 bp by September, with help of further quantitative tightening measures. This may somewhat strengthen the Euro and lower imported inflation.

The Euro-zone's May **PMI** pointed to ongoing momentum in the manufacturing and services sector, while both indices retracted slightly from high levels. The PMI for services, the largest sector in the Euro-zone, fell to 56.1, compared with 57.7 in April and 55.6 in March. The manufacturing PMI retracted slightly to stand at 54.6 in May, compared with 55.5 in April, after reaching 56.5 in March.

Graph 3 - 6: Euro-zone PMIs



Sources: IHS Markit and Haver Analytics.

By taking into consideration the lower-than-expected consumption dynamic in 1Q22, in combination with mounting uncertainties for the remainder of the year, the **GDP growth** estimate for 2022 was revised down to 3.0% in May, from 3.1% the previous month. However, this growth forecast considers strong support from the services sector leading to a sound recovery for the remainder of the year. The forecast compares with growth of 5.4% seen in 2021.

Table 3 - 4: Euro-zone economic growth rate and revision, 2021–2022*, %

	Euro-zone
2021	**5.4**
Change from previous month	0.0
2022	**3.0**
Change from previous month	-0.1

*Note: * 2022 = Forecast.*

Source: OPEC.

OECD Asia Pacific

Japan

Update on latest developments

Japan's 1Q22 growth dynamic was negatively impacted once again by a severe rise in COVID-19 infections, with associated voluntary and governmentally implemented social distancing measures. In addition, a rise in import prices negatively impacted GDP growth in 1Q22. A third impact came from a slowdown in external trading activity with its two major trading partners, the US and China, with both witnessing slowing growth momentum in 1Q22. These factors led to an overall GDP growth decline of 1% q-o-q SAAR in 1Q22. In the

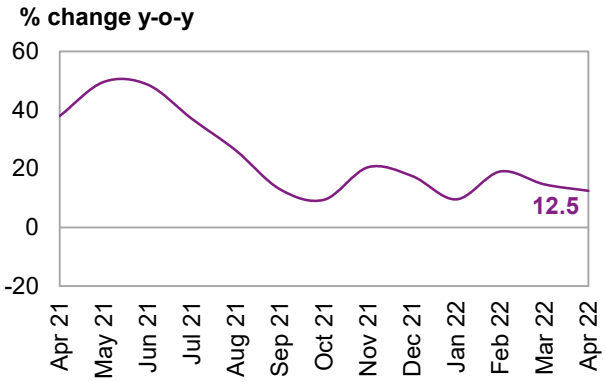
meantime, consumer sentiment and business sentiment indices point to a rebound in 2Q22, supported by pent-up demand and a rebound within important trading partners.

While the Bank of Japan (BoJ) has so far been reluctant to significantly tighten its monetary policy, inflation has risen strongly, despite it being low for a very long time. Consumer inflation stood at 2.5% in April, more than double March's rate, when inflation stood at 1.2% y-o-y. This marks the highest rate since 2014. However, inflation at that time was artificially lifted due to a sales tax increase from 5% to 8%. So far, limited monetary tightening has led to an ongoing weakening of the yen. The currency has been trading at around 130 yen compared with the US dollar, very much following the differences in US-Japan interest rates. While weakness in the yen may persist, the likelihood of further depreciation is limited, given that currency markets have priced in aggressive rate hikes by the Fed already.

Industrial production (IP) declined further in April, falling by 3% y-o-y, compared with a decline of 0.6% y-o-y in March, a significant drop when compared with February's growth level of 1%. Closely correlated to IP, **exports** in April retracted, albeit rising by 12.5% y-o-y, compared with 14.7% y-o-y in March and 19.1% in February. **Retail sales** rose strongly in April at a rate of 2.9% y-o-y, compared with a rise of 0.7% y-o-y in March.

Consumer confidence recovered slightly, rebounding to a level of 32.9 in May, compared with 32.0 in April, following a level of 32.7 in March and 35.0 in February. Given the re-opening of most parts of the economy, it should be expected that consumer confidence will recover further in the coming months.

Graph 3 - 7: Japan's exports



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

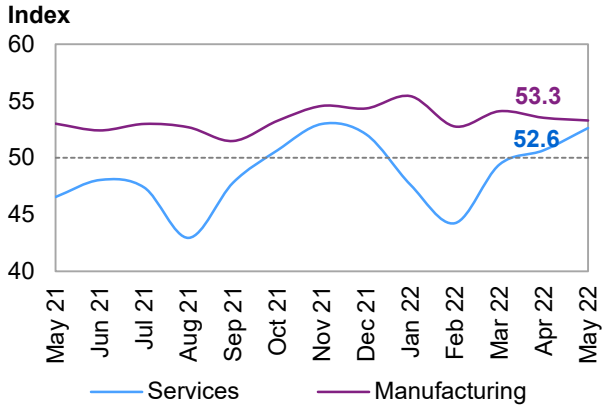
Near-term expectations

It is forecast that the **Japanese economy will rebound in 2Q22**, after a decline was seen in 1Q22. This rebound is likely to be primarily supported by domestic demand and exports, which were negatively impacted in 1Q22 among important trading partner economies, like the US and China. While a strong rebound is anticipated, China's ongoing lockdown measures — which were held far into 2Q22 — may keep exports at a lower level than currently anticipated. Though inflation has risen considerably, it is forecast to remain controlled, especially as wages and salaries have not risen as significantly as in other high-inflation economies. It is also not expected that income will rise strongly in the near term. This will lead the BoJ to keep its monetary policies relatively more accommodative, compared with the other G4 central banks. This may keep the yen at a relatively weak level for some time, which on one side is positive for exports, but currently seems to have a net-negative impact, as import prices have risen significantly.

On a quarterly basis, **GDP** in 1Q22 was estimated to have declined by 1% q-o-q SAAR. Growth is forecast to rebound to stand at 4.3% q-o-q SAAR in 2Q22 and move towards 3% q-o-q SAAR entering 3Q22, while reaching 2.5% q-o-q SAAR in the final quarter of the year.

While a continuing slowdown in manufacturing activity is reflected in May's **PMI** numbers, the services sector index points to a strong recovery. The services sector PMI, which constitutes around two-thirds of the Japanese economy, rose considerably to stand at 52.6, compared with 50.7 in April. The manufacturing PMI fell slightly to 53.3 in May, compared with 53.5 in April, although this still indicates sound underlying momentum in the manufacturing sector.

Graph 3 - 8: Japan's PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

GDP growth for 2022 was lowered slightly to stand at 1.6%. This compares with a growth forecast level of 1.8% in last month's report. It anticipates a sound recovery in 2Q22 and 3Q22, but takes into account a 1Q22 decline. 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 fiscal stimulus measures are also expected to support a recovery in private household consumption and investment.

Table 3 - 5: Japan's economic growth rate and revision, 2021–2022*, %

	Japan
2021	**1.7**
Change from previous month	0.0
2022	**1.6**
Change from previous month	-0.2

*Note: * 2022 = Forecast.*

Source: OPEC.

Non-OECD

China

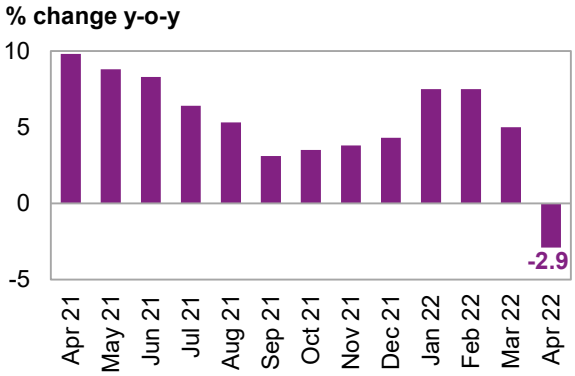
Update on the latest developments

The recent COVID-19 lockdowns battered China's economic activity, especially in the month of April. Supply chains were severely affected by the Shanghai lockdown and logistics delays in parts of China. Nevertheless, with the economy reopening, the bottom of this cycle has most likely been hit, considering that main producing cities are nearly back to their usual operating levels.

In April, cautious household spending led **retail sales** to drop by 11.1% y-o-y, marking the second straight month of falling retail trade and the steepest decline since March 2020, following a deterioration in household consumption. For the first four months of the year **retail sales were down 0.2%.**

Similarly, April **industrial production** contracted by an unexpected 2.9% y-o-y following a gain of 5% y-o-y in March and 7.5% y-o-y in January–February, combined as both manufacturing and utility production slowed amid a further rise in mining output. COVID-19 lockdown measures have snarled supply chains and paralyzed distribution. For the first three months of 2022, industrial output advanced by 6.5% y-o-y.

Graph 3 - 9: China's industrial production



Sources: China National Bureau of Statistics and Haver Analytics.

There were signs of rising joblessness in the labour market. According to China's surveyed urban unemployment, the jobless rate jumped to 6.1% in April from 5.8% the previous month, the highest reading since February 2020 and exceeding the government's 2022 target rate of 5.5%. This increase was driven by COVID-19 restrictions following widespread outbreaks in some key cities, which suggests it could be a short-lived increase, depending on the trajectory of the outbreak.

Regarding external demand, China's **trade surplus** jumped to $78.8 billion in May 2022 from $43.3 billion in May 2021 amid relaxed COVID-19 control measures in Shanghai and Beijing. Exports expanded by 16.9% y-o-y on the back of a resumption in factory production and an easing of logistical issues. Similarly, imports increased by 4.1%, following stagnation in April. The trade surplus with the US widened to $153 billion.

On the inflationary front, China's **consumer price index (CPI)** accelerated to 2.1% in April from 1.5% in March. April saw the highest CPI since last November, mainly due to logistics disruptions that caused food inflation to jump to 1.9% from 1.5% in March. The People's Bank of China (PBoC) set a target CPI of around 3%, the same as in 2021.

The **producer price index (PPI)** continued to ease over the first four months of 2022. April's PPI slowed to 8.0% y-o-y from 8.3% in March, aided by government measures to secure supply and control surging commodity prices. The cost of means of production moderated as well in April to 10.3% from 10.7%. Over 1Q22 the PPI expanded by 8.6% y-o-y.

In May 2022, the PBoC cut its benchmark **reserve requirement ratio** for all banks by 25 bps in an effort to boost long-term funds for banks, and kept the borrowing costs of its medium-term lending facility (MLF) steady for the third straight month. The move also aimed to support the falling yuan by cutting the amount of money banks need to keep in reserve for their foreign-currency holdings. Moreover, the 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-bps cut in January.

On the fiscal policy front, the government has rolled over several fiscal measures, including those from the 2022 Government Work Report, to support businesses and stimulate demand to offset damage from restrictions. The current **stimulus package** includes about $29 billion in additional tax rebates, loan deferments and tax cuts on new car purchases for consumers; a $120 billion credit line for infrastructure projects; and a host of new measures to stabilize the nation's supply chains. According to Bloomberg's calculation of announced China's monetary and fiscal measures, they equates to about a third of China's $17 trillion economy, yet current measures might be smaller than the stimulus launched in 2020.

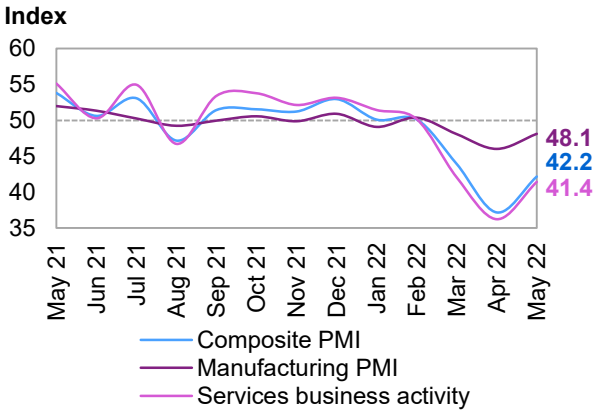
Near-term expectations

Considering the new announcement of sticking with a "zero-COVID" policy, China's growth outlook might face more downside risks, the main one being COVID-related mobility restrictions across major cities and provinces which will likely delay the consumption recovery, discourage investment, disrupt external demand, and shrink growth. Risks may also emanate from persistent pressure on the property sector, which might lead to financial repercussions. A potential growth upside stems from an effective COVID-19 control policy associated with fewer restrictions, as well as stimulus and monetary support.

In May, the manufacturing **PMI** surged to 48.1 from April's 26-month low of 46.0, yet it was the third straight month of a fall in factory activity, amid stringent COVID-19 control measures. Similarly, the services PMI increased to 41.4 in May from April's 26-month low of 36.2, the second-sharpest drop in the sector since February 2020.

Noticeably, manufacturing and business confidence strengthened due to hopes of a strong recovery once the pandemic is brought under control and market conditions normalise. However, sentiment is still weak amid concerns over the longevity of restrictions and geopolitical unrest in Eastern Europe.

Graph 3 - 10: China's PMI



Sources: Caixin, IHS Markit and Haver Analytics.

Considering governmental support, as well as the strict adherence to zero-COVID policies, China's 2022 **GDP** forecast was kept unchanged from last month at 5.1% y-o-y.

Table 3 - 6: China's economic growth rate and revision, 2021–2022*, %

	China
2021	**8.1**
Change from previous month	0.0
2022	**5.1**
Change from previous month	0.0

*Note: * 2022 = Forecast.*

Source: OPEC.

Other Asia

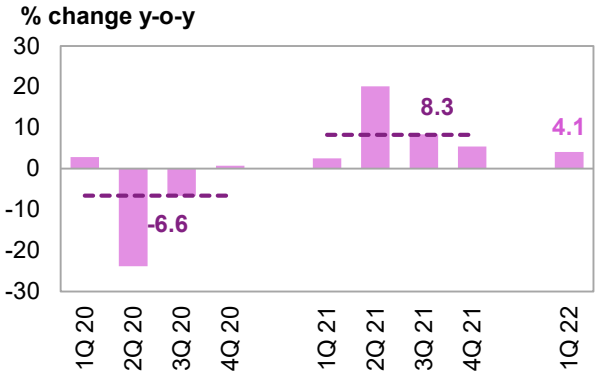
India

Update on the latest developments

India's economy expanded for the sixth straight quarter in 1Q22, but growth eased to 4.1% y-o-y following 5.4% y-o-y in 4Q21, amid rising Omicron infections during 1Q22, elevated energy prices and ongoing supply chain constraints.

On the expenditure side, private spending slowed sharply to 1.8% y-o-y in 1Q22 from 7.4% y-o-y in 4Q21. Export growth eased to 16.9% y-o-y from 23.1% y-o-y in 4Q21. Similarly, import growth dropped to 18% y-o-y in 1Q22 from 23.1% y-o-y in 4Q21. In 1Q22, public spending increased to 4.8% y-o-y from 3% y-o-y in 4Q21 and gross fixed capital formation accelerated to 5.1% y-o-y from 2.1% in 4Q21. Over the period from March 2021 to March 2022, India's economy expanded by 8.7% y-o-y.

Graph 3 - 11: India's GDP quarterly growth



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

In April 2022, industrial production jumped by 7.1% y-o-y, advancing from a 2.2% y-o-y rise in March. This was the strongest growth in industrial activity seen since August of 2021, as output accelerated for all sectors. Yet, on a sequential basis, industrial production declined by 9.2%, with a contraction of 8.8% in manufacturing output and 19.7% in mining output. Industrial production recovery durability might have been caused by elevated inflation and an inclement external situation, nevertheless y-o-y industrial production expansion might surge in the near term on the back of a favourable base, linked to a second wave of COVID-19.

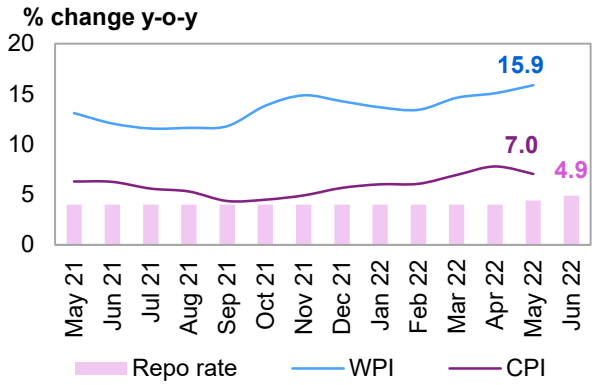
Pressure on the labour market increased, as the unemployment rate edged up to 7.8% in April from 7.6% in March. India's jobless rate dropped to 7.4% in 1Q22 compared with 7.5% in 4Q21. Yet, according to the latest available data, the labour force participation rate increased to 47.5% in 1Q21 from 47.3% in 4Q20.

The **consumer price index (CPI)** dropped to 7.0% y-o-y in May, following 7.8% in April. The upward price pressure came from the cost of transportation and communication. Inflation stayed above the 2% to 6% tolerance limit of the central bank for the fourth month in a row.

Similarly, the **wholesale price index (WPI)** increased to 15.9% y-o-y in May, from 15.1% in April amid elevated input costs and delays in global shipments.

Incorporating surging commodity prices, the Reserve Bank of India (RBI) upwardly revised the country's inflation forecast for FY 2022–2023 to 6.7% from 5.7%.

Graph 3 - 12: Repo rate and inflation in India

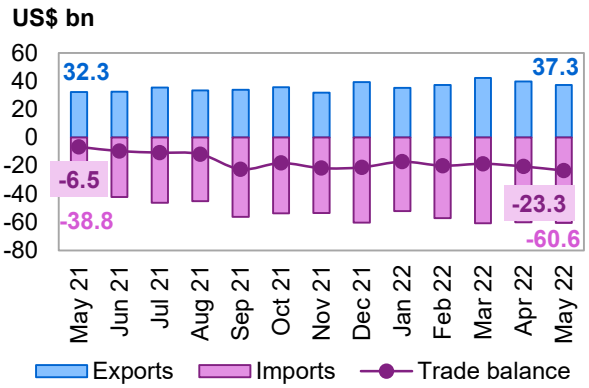


Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

Following a rise in the **inflation rate**, the Reserve Bank of India increased its key repo rate by 50 bps to 4.9% in June aiming to ensure inflation remains within its target going forward, while supporting growth. The central bank also raised both the standing deposit facility (SDF) rate and the marginal standing facility (MSF) rate, along with the bank rate by 50 bps to 4.65% and 5.15%, respectively.

Regarding the external demand outlook, preliminary data indicates that India's **trade deficit** widened to $23.3 billion in May, the highest figure on record, from $6.3 billion in the same period last year. Imports surged by 56.1% y-o-y to $60.6 billion, boosted by increased purchases of oil, electronic goods and gold. In contrast, the import of coal fell amid a jump in domestic production. Exports expanded by only 15.5% to $37.3 billion, driven by slight increases in the sale of engineering goods, petroleum products, along with gems and jewellery.

Graph 3 - 13: India's trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

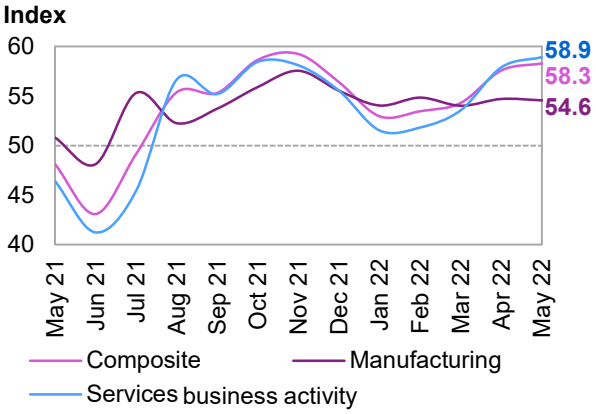
Near-term expectations

In the near term, pent-up private consumption and increased policy support might push for further growth. However, elevated inflation, especially food inflation, might temper the recovery and curtail discretionary consumption impulses. Moreover, the indirect impact of high inflation could increase pressure on the labour market, considering the decrease in real wages. Also, external demand may slow amid a slower global growth recovery, which will affect demand for exports. In the meantime, the RBI's recent move to hike the policy rate to 4.9% to cope with spiralling inflation may have a lagging and limited impact on curbing it. It is likely that the current tightening policy will quickly cause higher lending rates, slowing consumer credit growth and moderating consumption impulses starting in late 2022. It might also affect the profit margins of small- and medium-sized investments. Additionally, monetary tightening might increase long-term government bond yields, resulting in a higher market borrowing cost for the government, as well as less fiscal headroom for productive capital expenditure. The policy rate increase may provide some intermittent strength to the rupee exchange rate against the US dollar, though adverse sentiment towards emerging market countries might keep the rupee under pressure, leading to depreciation against the dollar.

The May manufacturing **PMI** was unchanged from last month at 54.6, yet the reading marked the 11th straight month of expansion in the manufacturing sector. Meanwhile, the services PMI surged to 58.9 in May, from 57.9 in April, buoyed by a substantial pick-up in new business growth, as demand continued to recover following reopening of the economy after COVID-19 lockdowns.

However, both manufacturing and services business sentiment remained subdued, as concerns lingered over inflationary pressures.

Graph 3 - 14: India's PMIs



Sources: IHS Markit and Haver Analytics.

India's 2022 **GDP** forecast for this month was kept unchanged from last month at 7.1% y-o-y. However, uncertainty still exists and downside risk factors such as higher inflation rates or lower consumer/producer confidence might manifest. Such risks would be under close continuous monitoring to incorporate any changes as needed.

Table 3 - 7: India's economic growth rate and revision, 2021–2022*, %

	India
2021	**8.3**
Change from previous month	0.2
2022	**7.1**
Change from previous month	0.0

*Note: * 2022 = Forecast.*

Source: OPEC.

Latin America

Brazil

Update on latest developments

Brazil's economy expanded by 1.7% y-o-y in 1Q22, following a 1.6% y-o-y expansion in 4Q21, mainly driven by a 2.2% y-o-y increase in household consumption, following an increase in demand for services as restrictions were relaxed. Public spending grew by 3.3% y-o-y, but gross fixed capital formation retreated by 7.2%, amid lower levels of domestic production and import of capital goods. Meanwhile, net trade contributed negatively to GDP growth, as goods and services imports jumped by 11%, while exports rose at a softer 8.1%. Recent macroeconomic indicators reflect some resilience to the fall-out from the Russia-Ukraine conflict and a soft economic recovery, but recovery momentum in Brazil is still slow amid a sharp increase in overall prices and hikes in borrowing costs that have weighed on the economy.

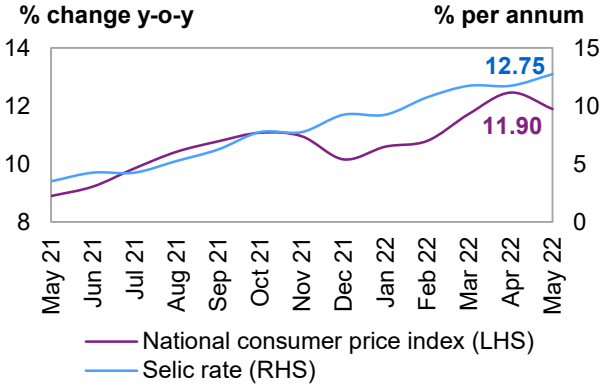
Industrial production stayed in contraction territory in April, though it contracted at a softer pace of 0.5% y-o-y, compared with a decline of 1.2% y-o-y in March.

Meanwhile, Brazil's **retail sales** increased by 4.5% y-o-y in April, accelerating from 4.0% y-o-y growth in March.

On a bright note, the annual i**nflation rate** in Brazil eased to 11.9% in May from of 12.5% in April. However, it marked the ninth consecutive month of double-digit inflation.

By June, the Central Bank of Brazil (BCB) increased the **Selic rate** — the tenth consecutive interest rate hike — to almost 12.8%. The current normalization interest rate policy reflects the uncertainty around inflation and aims to balance risks to bring inflation down to the BCB's target.

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



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

Most recently, the government has proposed a combination of temporary and permanent tax breaks on fuel, aiming to reduce Brazil's high inflation rate. If Congress approves these tax break measures, it would hit state government accounts and exact an annual fiscal cost of up to $29 billion, or about 1.6% of the GDP. Moreover, if measures were approved, a decline in fuel prices would materialize in 2H22.

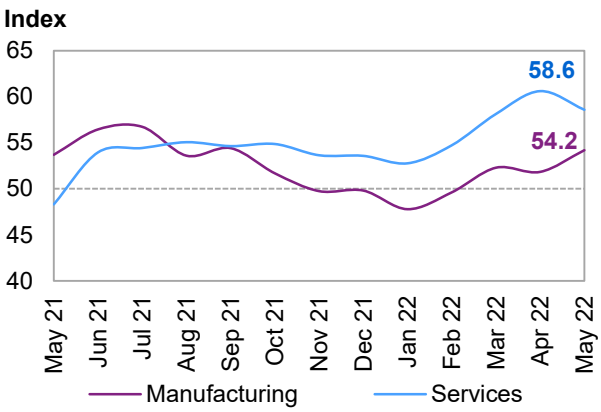
On the external demand front, Brazil's **trade surplus** narrowed to $8.1 billion in April from $9.9 billion one year earlier. Over the first four months of 2022, the trade surplus widened to $19.9 billion from $18 billion in the first four months of 2021.

Near-term expectations

Brazil's fiscal outlook was supposed to be positive following the increase in commodity prices, fed by tension in Eastern Europe. Yet the surging inflation rate, as well as tighter monetary policy, could offset this positive outlook and indeed increase 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 political uncertainty at both the local and global levels. It is expected that Congress may partially approve recent proposed tax break measures. As a result, there would be a reduction in tax revenue, which would likely cause a greater burden on the government's already high debt (78.5% of GDP). Moreover, proposed changes might generate momentous economic and political strain for regional governments amid revenue losses resulting from the measures. Accordingly, the potential benefit of tax breaks might be largely offset by the negative consequences that they would generate for fiscal accounts, investor confidence in the economy, fiscal stability and the trajectories of inflation and growth.

May manufacturing **PMI** readings mirrored the resilience of economic activity. The index rose to 54.2 from 51.8 in April, as both production and new orders grew at stronger rates, driven by strengthening demand conditions and new product launches. Moreover, according to the PMI survey, business confidence remained firmly in positive territory, with some firms expecting further improvements in sales and greater investment. In contrast, the services PMI fell to 58.6 in May from a record high of 60.6 in April amid high inflationary pressure. Yet, service sector business confidence was more optimistic according to the PMI survey, supported by efforts to increase customer demand following the ease of COVID-19 restrictions and hopes of price stability.

Graph 3 - 16: Brazil's PMIs



Sources: IHS Markit and Haver Analytics.

Taking into consideration current data for 1Q22, while at the same time considering a solid rebound for the remainder of the year, the 2022 Brazil **GDP growth** estimate will expand to 1.2%, up from 0.7% in the last MOMR.

Table 3 - 8: Brazil's economic growth rate and revision, 2021–2022*, %

	Brazil
2021	**4.6**
Change from previous month	0.0
2022	**1.2**
Change from previous month	0.5

*Note: * 2022 = Forecast.*

Source: OPEC.

Africa

South Africa

Update on the latest developments

South Africa's **real GDP** expanded by 3% y-o-y in 1Q22, edging up from 1.7% y-o-y growth in the prior period and reaching the fastest pace of growth since 2Q21. Nevertheless, recent indicators suggest that the recovery might have been impacted by severe flooding, tight global economic conditions and the ramifications of COVID-19. For instance, industrial production plunged by 7.8% y-o-y in April from a 0.6% y-o-y contraction in March 2022. The steep drop in manufacturing activity caused by the KwaZulu-Natal floods as it led to a temporary shutdown in manufacturing, especially in the motor vehicle industry. Recent unemployment data suggested a slight easing of the jobless rate, which dropped to 34.5% in 1Q22 from 35.3% in 4Q21.

In April, South Africa's annual **inflation rate** was unchanged from the previous month at 5.9% but remains close to the upper boundary of the South African Reserve Bank's (SARB) target range of 3-6%. However, annual core inflation (which excludes prices of food, non-alcoholic beverages, fuel and energy) rose to 3.9% in April 2022 from 3.8% in the prior month, the highest since October of 2019. To keep inflation expectations well anchored, in May 2022 the SARB lifted the benchmark repo rate by 50 bps to 4.75% from 4.25%. Policymakers said that the "overall risks to the medium-term growth outlook are assessed to be balanced, while the risks to the inflation outlook are assessed to the upside". The central bank CPI forecast has been revised up to 5.9% in 2022 (vs 5.8% in March), 5% in 2023 (vs 4.6%) and 4.7% in 2024 (vs 4.6%). Meanwhile, GDP growth projections were revised down to 1.7% in 2022 from an earlier estimate of 2%, mainly due to a combination of short-term factors including flooding in the key KwaZulu-Natal province and the resumption of rolling power blackouts.

Near-term expectations

Although South Africa returned to pre-COVID-19 levels of economic growth, the combination of local factors (devastating floods in parts of KwaZulu-Natal and the latest bout of load shedding) and global factors (such as COVID-19 lockdowns in China) as well as geopolitical tensions in Eastern Europe might increase the stagflation risk. Yet the favourable terms of trade have been the main factor that support the economy and the local currency despite all the market turmoil.

Furthermore, the seasonally adjusted Absa Purchasing Managers' Index grew to 54.8 in May of 2022 from 50.7 in the previous month. The expansion in manufacturing activity followed a normalisation in domestic demand normalised and export sales returned to positive terrain following the floods in KwaZulu-Natal.

With the confirmation of strong growth in 1Q22, and considering the recent development South Africa's **GDP** 2022 revised down to 2.2% from 2.5% in last MOMR. The uncertainty surrounding this forecast remains high especially with regard to the industrial output performance following the damaging floods and taking into account high inflation and unemployment levels.

Table 3 - 9: South Africa's economic growth rate and revision, 2021–2022*, %

	South Africa
2021	**4.9**
Change from previous month	0.0
2022	**2.2**
Change from previous month	-0.3

*Note: * 2022 = Forecast.*

Source: OPEC.

Russia and Central Asia

Russia

Update on the latest developments

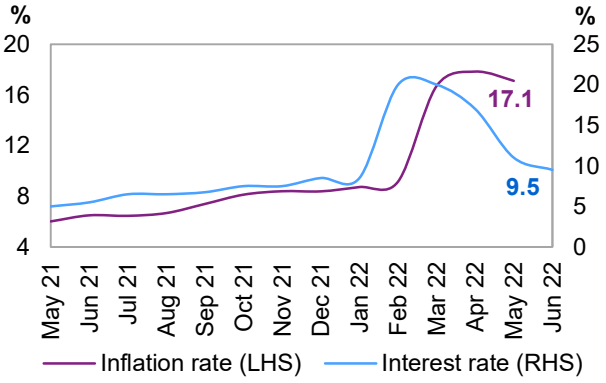
According to a preliminary estimate, Russia's economy expanded by 3.5% y-o-y in 1Q22, easing from the 5% growth seen in 4Q21. This was the slowest growth rate in four quarters, in part because of the low base effects caused by the pandemic. Yet this might be short-lived following the market turmoil, uncertainty and disruptions in the banking sector stemming from the ongoing Russia-Ukraine geopolitical tensions. According to the monthly GDP estimates released by Russia's Ministry of Economic Development, Russia's economy contracted by 3.0% y-o-y in April 2022, following a downwardly revised 1.3% gain in March. This marked the first contraction since February 2021 amid the external sanctions and sluggish consumer demand.

Nonetheless, some of macroeconomic indicators posted a slower pace of contraction, pointing to resilient economic performance and suitable government interventions. For instance, industrial production plunged only 1.6% y-o-y in April following 3.0% y-o-y growth in March. Retail trade contracted by 9.7% y-o-y in April compared with growth of 5.8% y-o-y in March. Yet consumer confidence picked up during 1Q22 to -21 from -23 in 4Q21. However, the greater household confidence observed in 1Q21 might have been driven by optimism following the easing of most COVID-19 restrictions.

Consumer inflationary pressure fell, according to the latest available data, to 17.1% y-o-y in May 2022 from 17.8% in April 2022. In contrast, the producer price index (PPI) jumped 31.5% y-o-y in April compared with 26.7% y-o-y in March as Russia's producers are facing the effects of the external conditions imposed on the country.

In a recent move, the central bank cut its **key interest rate** by 150 bps to 9.5%, bringing the rate back to the pre-Ukraine crisis level. Meanwhile, the government increased the fund that cushions the economy with $3.4 billion in additional oil and gas revenues resulting from rising energy prices.

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



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

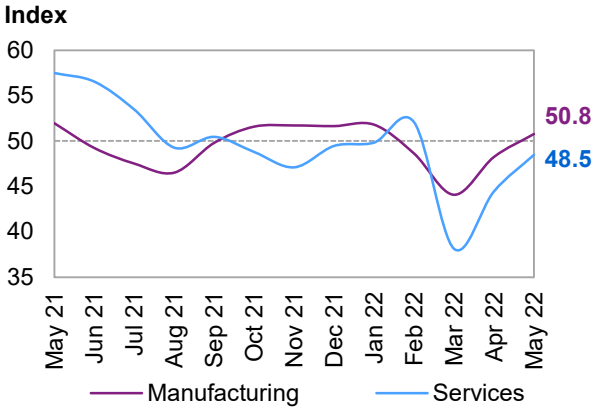
According to the central bank, annual inflation may range between 14% and 17% in 2022, and is expected to decline between 5% and 7% in 2023. The key rate is expected to average between 10.8% and 11.4% in 2022, then between 7% and 9% in 2023.

Near-term expectations

Acknowledging the high level of uncertainties, the recent positive figures from the main macroeconomic indicators as well as the financial conditions suggest a slower rate of decline in economic activity. Yet the unfolding geopolitical tensions may weigh on Russia's short-term economic outlook. Russia's economy is still benefitting from a strong macro-financial framework supported by increased energy prices, but these external conditions may lead to significant economic challenges, especially if the current geopolitical tension stretches beyond 1H22.

The manufacturing **PMI** increased to 50.8 in May 2022 from 48.2 in April, pointing to the first expansion in factory activity since January, while the Russian Services PMI increased to 48.5 in May 2022 from 44.5 in April. This was a third straight month of contraction but it marked the weakest contraction in the sector.

Graph 3 - 18: Russia's PMI



Sources: IHS Markit and Haver Analytics.

Russia's 2022 **GDP forecast** is unchanged from last month at -6.0%. The geopolitical situation is still unfolding and the level of uncertainty remains extremely high. Indeed, Russia's economy may face more external sanctions depending on how the conflict develops. The situation will be monitored closely and the forecast will be adjusted when there is more clarity.

Table 3 - 10: Russia's economic growth rate and revision, 2021–2022*, %

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

*Note: * 2022 = Forecast.*

Source: OPEC.

OPEC Member Countries

Saudi Arabia

Saudi Arabia's economy expanded by 9.9% in 1Q22, slightly higher than flash estimates of 9.6% reported in our last MOMR. This was the highest rate of growth since 2011. The oil sector grew by 21.3% y-o-y, while non-oil activities expanded by 3.7% y-o-y. Recent macroeconomic indicators measuring consumer spending point to strong domestic demand. Indeed, the private final consumption spending share to GDP stood at 2.7% y-o-y in 1Q22. The Purchasing Managers' Index (PMI) reading of 55.7 in May was unchanged from April 2022, yet it pointed the 21st straight month of expansion in non-oil private-sector activity. Although the Kingdom's inflation rate stood at a comparatively low 2.3% y-o-y in April, it has been rising since September 2021.Nevertheless, the 2022 outlook is bearish and more growth potential is anticipated amid policy support and the improvement in fossil fuel prices.

Nigeria

Nigeria's real GDP advanced by 3.1% y-o-y in 1Q22, following almost 4% y-o-y growth in the prior period. Driven by a solid performance in the information and communication industry, the non-oil sector grew by 6.1% y-o-y in 1Q22, faster than 4.7% in 4Q21. On a quarterly basis, the GDP contracted by 14.66%.

Meanwhile, Nigeria's inflation outlook has deteriorated in recent months, reaching 16.8% y-o-y in April 2022, up from 15.9% y-o-y in March. Like most African countries, Nigeria's economy is grappling with rising food prices since it is largely dependent on agricultural imports, especially grains. Also, increasing diesel prices and the ongoing dollar shortage contributed to the upward trend in inflation. Despite several challenges across the economy – including high inflation, elevated fertiliser prices and power-supply issues – the growth outlook for

the economy remains positive, supported by improved fossil fuel prices and economic stimulus measures that followed the outset of the pandemic, especially in the agriculture sector. However, the pace of growth may flatten amid fuel and power shortages, low water levels and higher borrowing costs for corporations and households following a 150 basis-point increase in the policy rate by the central bank in May.

The United Arab Emirates (UAE)

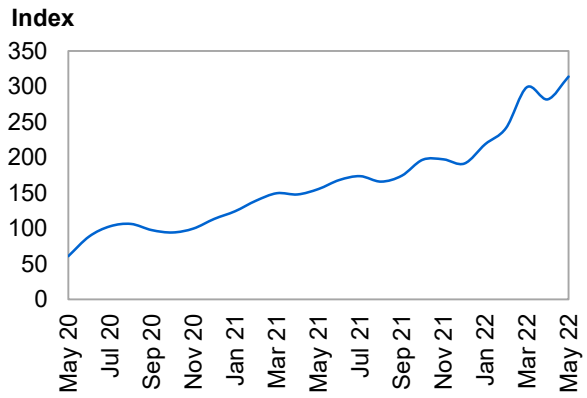
Recent indicators suggest that tourism numbers approached pre-pandemic levels in 1Q22, aided by the Dubai Expo. Indeed, y-t-d Dubai international arrivals reached 3.97 million by the end of 1Q22, a significant increase from 1.27 million in the same period last year. Since the travel and tourism sector accounts for about 16% of GDP in the UAE, tourism spending has provided a boost for the recovery directly and indirectly via its impact on the supply chain. Meanwhile, the UAE's S&P Global PMI increased to 55.6 in May 2022 from 54.6 in April. The May reading marked to the 18th straight monthly rise and the strongest growth in five months. Looking ahead, the short-term outlook remains positive, supported by the global relaxation of pandemic-related restrictions and energy price developments.

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

The **US dollar (USD) index** rose for the fifth consecutive month, increasing by 2.4% m-o-m. The USD continued to advance on the back of a strong performance of the US economy and rising interest rates. The USD rallied across all major currencies in both develop markets (DM) and emerging markets (EM). In the former, the USD rose m-o-m by 2.4% against the Euro, and by 2.1% and 4.0% against the yen and pound respectively in the same period. Monetary policy divergences continued to support the appreciation of the USD against DM currencies.

In the EMs, the USD rose m-o-m by 1.5% against the rupee, 4.4% against the yuan and 4.4% against the real in the same period. Weaker economic outlooks compared to the US as well as tighter monetary policies are supporting the strengthening of the USD against EM currencies.

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



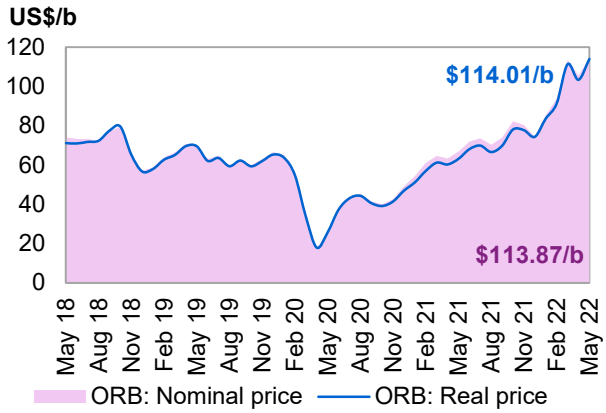
Sources: IMF and OPEC.

The strengthening of the USD amid higher interest rates continued to lend to support to the ORB, while easing inflationary pressures. **Inflation** (nominal price minus real price) fell for the third consecutive month, declining by 106% m-o-m.

In **nominal terms**, accounting for inflation, the price of the ORB went from $105.64/b in April 2022 to $113.87/b in May 2022, a 7.8% decline m-o-m.

In **real terms** (excluding inflation), the ORB went from to $103.42/b in April 2022 to $114.01/b in May 2022, a 10.2% decline m-o-m.

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



Source: OPEC.

World Oil Demand

World oil demand growth in 2021 remain unchanged as compared to the previous month's report to stand at 5.7 mb/d. During 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 remain unchanged at 3.4 mb/d as compared to the May MOMR. World oil demand is projected to average 100.29 mb/d, which is same as the previous month's estimates, and demand is expected to exceed 2019 by 0.09 mb/d.

In 1Q22, world oil demand recorded robust growth of 5.2 mb/d, mainly due to a strong economic rebound supported by further easing of COVID-19 containment measures, particularly in OECD countries. OECD oil demand grew by 3.4 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 took into account mainly current economic forecasts and other factors that could potentially reduce global oil requirements, including COVID-19 developments in China.

Diesel and gasoline are anticipated to record the highest gains among petroleum products y-o-y on the back of increasing mobility and healthy industrial activity globally. The easing of supply chain bottlenecks in major consuming countries will support oil demand, with light distillates largely supported by strong petrochemical demand, notably in China, the US and India. The recovery in global air travel amid declining COVID-19 infections is expected to further support jet kerosene demand.

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

							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	5.22
Asia Pacific	7.14	7.67	7.04	7.11	7.82	7.41	0.27	3.78
Total OECD	**42.13**	**42.40**	**44.05**	**45.79**	**46.77**	**44.77**	**2.64**	**6.26**
China	13.86	14.18	15.08	14.95	15.54	14.94	1.08	7.78
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	7.45	7.75	7.52	8.06	7.85	7.79	0.35	4.67
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**	**97.65**	**100.31**	**96.92**	**5.74**	**6.29**
Previous Estimate	91.19	94.05	95.60	97.66	100.30	96.92	5.74	6.29
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

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

World oil demand	2021	1Q22	2Q22	3Q22	4Q22	2022	Change 2022/21 Growth	Change 2022/21 %
Americas	24.28	24.78	24.99	25.69	25.76	25.31	1.03	4.26
of which US	*19.93*	*20.30*	*20.57*	*21.19*	*21.21*	*20.82*	*0.90*	*4.50*
Europe	13.08	13.10	13.06	14.29	14.15	13.65	0.57	4.35
Asia Pacific	7.41	7.90	7.22	7.25	7.93	7.57	0.17	2.23
Total OECD	**44.77**	**45.77**	**45.26**	**47.23**	**47.84**	**46.53**	**1.77**	**3.95**
China	14.94	14.67	15.16	15.42	15.97	15.31	0.37	2.48
India	4.77	5.18	4.85	5.01	5.39	5.11	0.33	7.01
Other Asia	8.63	9.09	9.59	8.93	8.95	9.14	0.51	5.91
Latin America	6.23	6.32	6.25	6.53	6.42	6.38	0.16	2.51
Middle East	7.79	8.06	7.77	8.32	8.09	8.06	0.27	3.43
Africa	4.22	4.51	4.15	4.23	4.55	4.36	0.14	3.23
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	0.79	0.71	0.73	0.80	0.76	0.01	1.01
Total Non-OECD	**52.16**	**53.50**	**52.92**	**53.62**	**54.94**	**53.75**	**1.60**	**3.06**
Total World	**96.92**	**99.28**	**98.19**	**100.85**	**102.77**	**100.29**	**3.36**	**3.47**
Previous Estimate	96.92	99.28	98.44	100.74	102.64	100.29	3.36	3.47
Revision	0.00	0.00	-0.25	0.11	0.13	0.00	0.00	0.00

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

OECD

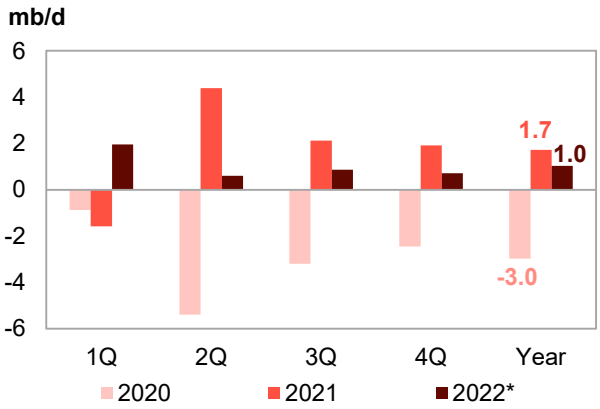
OECD Americas

Update on the latest developments

Oil demand in the US continues to recover despite some macroeconomic challenges. In March, the US recorded strong growth of 1.3 mb/d, equal to 7% y-o-y. LPG demand from residential requirements for heating and cooking as well as demand from commercial sectors were the leading sources of oil demand growth, LPG registered growth of 0.3 mb/d, equivalent to 10% y-o-y growth.

Behind the continuing improvement in air travel in the US in March, jet kerosene demand grew by about 0.4 mb/d, equivalent to 31% annual growth. Gasoline demand suffered a setback yet registered growth of 0.3 mb/d annually, lower than previous months' growth levels.

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



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

Gasoline demand was partly impacted by a decline in vehicle sales due to the supply chain bottlenecks that are affecting vehicle manufacturers and a sharp reduction in monthly motor vehicle travel in the US, which fell from 10.7% in February to 2.9% in March. Diesel demand grew by 0.1 mb/d y-o-y. Diesel in the US is mostly used in industrial and commercial applications, and to some extent in road transportation and is tied closely to economic activity. However, naphtha demand fell by 10 tb/d, y-o-y.

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

By product	Mar 21	Mar 22	Change Mar 22/Mar 21 Growth	%
LPG	3.04	3.34	0.30	9.9
Naphtha	0.17	0.16	-0.01	-7.1
Gasoline	8.58	8.86	0.28	3.3
Jet/kerosene	1.16	1.52	0.36	31.4
Diesel	4.03	4.16	0.13	3.2
Fuel oil	0.29	0.44	0.15	49.8
Other products	2.23	2.33	0.10	4.6
Total	**19.49**	**20.80**	**1.31**	**6.7**

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

Near-term expectations

After strong growth of 1.7 mb/d annually in 1Q22, in 2Q22 the US oil demand is forecast to grow at 0.4 mb/d, y-o-y. In 2Q22, the US economy is forecast to grow by 3.6%, after a contraction in 1Q22. In the 2Q22, the US economy will be affected by high producer prices due to current geopolitical developments. This will fuel domestic inflation combined with tight monetary policy which may cap oil demand in the industrial and commercial sectors. Nevertheless, the declining impact of the COVID-19 pandemic will likely support the demand for gasoline and diesel. Demand for diesel is also expected to be supported by rising requirements for trucking, home delivery and the distribution of goods due to relative improvements in economic activity in the US. By 3Q22, US oil demand is forecast to improve and grow by 0.8 mb/d, y-o-y. Furthermore, improvements in both domestic and international air travel will support jet kerosene demand to increase further. Residential and industrial demand for light distillates will support the demand for LPG and naphtha, which will benefit from petrochemical feedstock requirements in the remaining part of 2022.

However, in 4Q22, the US GDP is forecast to slow and settle at 2.9%. The slowdown in the economy, food inflation as a result current geopolitical developments and tight monetary policy will further fuel inflation. These factors combined with a slowdown in winter driving activity will drag oil demand to annual growth of 0.6 mb/d

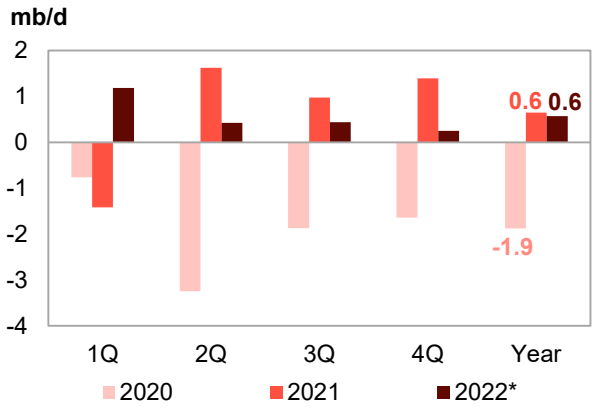
Nevertheless, as the US government continues to implement monetary and fiscal policy measures to support the economy, rising inflation is likely to slow in 2023 and supply chain bottlenecks are expected to ease further. Consequently, the manufacturing sector and households are expected to benefit from these policies and support oil demand growth.

OECD Europe

Update on the latest developments

OECD Europe saw bullish oil requirements amid rising jet kerosene and gasoline demand with the onset of warmer weather, the easing of COVID-19 measures and the growth in travel activity, despite high inflation and energy prices. March 2022 oil demand data shows strong oil demand growth of 1.1 mb/d, equivalent to 9% y-o-y. Demand from the aviation sector in the region has continued to improve, correlating with the reopening of international travel. Statistics from Eurostat show that the number of commercial flights in the Europe increased by 156% in March 2022 compared to March 2021. Jet kerosene demand grew by 0.5 mb/d, or a huge 78% y-o-y, though this reflects a low historical baseline.

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



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

Behind the strong mobility recovery in OECD Europe, gasoline demand registered growth of 0.3 mb/d, or 16% y-o-y. Since the easing of lockdowns in European countries, driving mobility has improved significantly; in the UK in March driving mobility recorded y-o-y growth of 27%, in Italy 59%, France 30% and Germany 26%. Diesel demand recorded growth of 0.4 mb/d y-o-y grow and m-o-m diesel requirements declined by 0.1 mb/d, also consistent with seasonal demand, with less diesel needed for heating during warmer weather.

LPG recorded growth of 61 tb/y-o-y, a slight decline m-o-m. Naphtha demand recorded a contraction of 0.1 mb/d y-o-y for the fourth consecutive month.

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

By product	Mar 21	Mar 22	Change Growth	Mar 22/Mar 21 %
LPG	0.44	0.50	0.06	12.8
Naphtha	0.59	0.50	-0.08	-14.2
Gasoline	1.01	1.14	0.13	12.5
Jet/kerosene	0.36	0.59	0.23	63.4
Diesel	3.04	3.15	0.11	3.5
Fuel oil	0.15	0.17	0.02	16.2
Other products	0.42	0.54	0.13	30.1
Total	**6.01**	**6.59**	**0.58**	**9.7**

*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

After strong growth of 1.2 mb/d in 1Q22, oil demand growth in OECD Europe is projected to fall to 0.4 mb/d in 2Q22. In 2Q22, the region's GDP is forecast to grow by 2.4% as the regional economy is expected to be affected by geopolitical developments, which will worsen supply chain bottlenecks and increase inflation. Headline inflation in the region hit a new high of 8.2% in April 2022, up from 5.9% in February. In addition, there are trade- and commodity-related supply chain bottlenecks, particularly for consumable merchandise, energy and other industrial goods. Nonetheless, in 3Q22, the region's GDP is expected to improve and grow by 3.2%, while the summer season will enhance mobility and give further support to transportation fuels. Consequently, overall demand growth in 3Q22 is expected to reach 0.4 mb/d, y-o-y and on top of a robust growth during the same quarter in 2021.

However, in 4Q22, the combined effects of expected declines in the region's GDP to grow by 2.0%, alongside logistical problems due to geopolitical developments, will exacerbate inflation. The latter combined with the winter mobility slowdown in the region will lead to a decline of oil demand growth in 4Q22 to 0.2 mb/d, y-o-y. Overall, in 2022, OECD Europe oil demand growth is expected to average 0.6 mb/d annually.

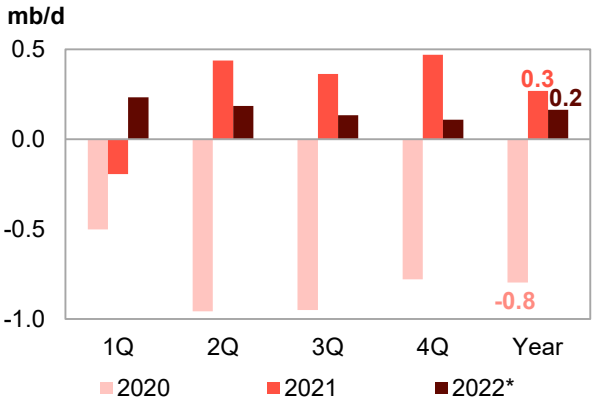
OECD Asia Pacific

Update on the latest developments

Oil demand in Asia Pacific grew by 0.1 mb/d, y-o-y, in March 2022. Oil demand in the region is mostly supported by Japanese and South Korean requirements for NGLs/LPG for transportation and household fuels, and feedstocks for the petrochemical industry.

In Japan, for example, a considerable share of LPG is utilized for cooking and heating in the residential sector. There is also substantial demand from utilities, industries and the transportation sector. Supported by a regional recovery in air traffic, jet kerosene demand grew by 54 tb/d, y-o-y. According to data from the International Air Transport Association (IATA), air travel in Japan rebounded in March by 47% y-o-y and 30.3% m-o-m. Air travel in Australia grew by 26.3% y-o-y in March.

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



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

Diesel demand in the region posted a growth of 32 tb/d, y-o-y, marking an improvement compared to the y-o-y growth in February. However, gasoline demand contracted by 55 tb/d, y-o-y and for the second consecutive month. The demand for diesel and gasoline in Japan was affected by the slow pace of economic growth in 1Q22, combined with the country's COVID-19 emergency restrictions which dented consumer spending and capped diesel and gasoline requirements.

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

By product	Apr 21	Apr 22	Change Growth	Apr 22/Apr 21 %
LPG	0.44	0.49	0.05	11.8
Naphtha	0.70	0.57	-0.13	-18.5
Gasoline	0.74	0.70	-0.04	-5.2
Jet/kerosene	0.27	0.26	-0.01	-5.5
Diesel	0.71	0.67	-0.05	-6.4
Fuel oil	0.22	0.22	0.01	4.2
Other products	0.18	0.13	-0.05	-26.2
Total	**3.26**	**3.04**	**-0.22**	**-6.6**

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

Near-term expectations

After recording growth of 0.2 mb/d in 1Q22, y-o-y, in 2Q22, the oil demand is expected to remain at 0.2 mb/d, annually. The oil demand will be affected by the economic growth in region which is expected to remain at 2.3%. The slowdown in GDP growth is expected to affect manufacturing activity and dampen consumer spending with also a consequent impact on mobility. In 3Q22 and 4Q22, oil demand growth in the region is expected to continue its downward trend to remain at 0.1 mb/d, y-o-y, for each quarter. A slowdown in driving activity during the winter is also likely to dampen gasoline consumption in 4Q22. Overall oil demand in the region is expected to grow by 0.2 mb/d annually in 2022.

Generally, the gradual economic and mobility recovery in the region, combined with improvements in the region's air travels would boost gasoline and jet kerosene demand and provide additional support for oil demand in 2022. Currently, the South Korean government's subsidy rate hike and rapid removal of COVID-19 restrictions would lead to higher demand for the middle distillate fuels over the peak summer driving season. Similarly, improvements in the aviation sector will support the demand for jet kerosene in the region. Diesel demand will be supported by trucking and industrial sector demand.

Non-OECD

China

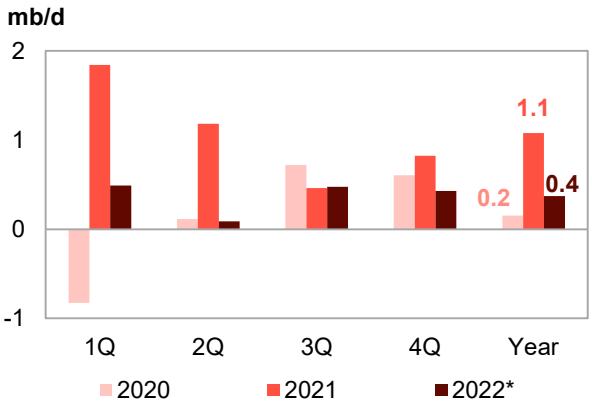
Update on the latest developments

The extension of the zero-COVID-19 policy due to the resurgence of cases in Eastern China weighed heavily on **Chinese oil demand** in April.

The latest data shows that oil demand contracted by 0.7 mb/d in April, y-o-y, for the first time since February 2020. The re-introduction of complete lockdown measures – including mobility restrictions and industrial shutdowns due to trade-related supply chain bottlenecks in the major city of Shanghai and other provinces capped oil demand.

Similarly, both domestic and international air passenger traffic declined, causing demand for jet kerosene to plunge by 40% annually, equivalent to 0.4 mb/d, y-o-y.

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



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

Moreover, weakening mobility caused gasoline consumption to nosedive by 0.3 mb/d, equivalent to an annual decline of 8%. Manufacturing shutdowns and supply chain bottlenecks during the period led to a 0.2 mb/d contraction in diesel demand, an equivalent annual decline of 8%. However, naphtha demand grew by 0.1 mb/d, y-o-y, supported by demand for petrochemical feedstock in the Chinese petrochemical industry.

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

By product	Apr 21	Apr 22	Change Growth	Apr 22/Apr 21 %
LPG	1.81	1.81	0.00	0.3
Naphtha	1.17	1.27	0.10	8.9
Gasoline	3.36	3.10	-0.26	-7.8
Jet/kerosene	0.88	0.53	-0.35	-39.9
Diesel	2.83	2.61	-0.21	-7.6
Fuel oil	0.69	0.71	0.02	2.5
Other products	2.05	2.00	-0.05	-2.2
Total	**12.79**	**12.04**	**-0.75**	**-5.9**

*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

After posting a 0.5 mb/d growth in 1Q22, China's near-term outlook remains challenged by uncertainties. While the Chinese economy is forecast to grow by 5.1% in 2022, trade bottlenecks and a slowdown of manufacturing operations could also weigh on oil demand, notably during 2Q22. In 2Q22, oil demand growth is forecast to settle at 87 tb/d. Light distillates, NGL/LPG and naphtha are expected to be the main contributors for the demand growth in the second quarter.

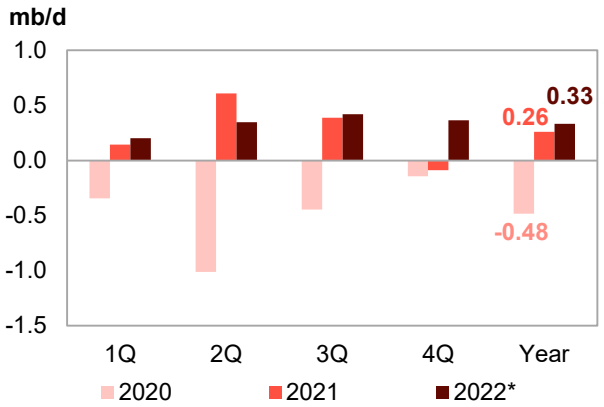
As lockdowns were due to end in Shanghai and other provinces as COVID-19 cases declined, the Chinese government is very keen to support the economy and consumers with stimulus packages. Currently, China rolled out a broad package of measures to offset the effects of the COVID-19 containment. These stimulus measures are likely to support the Chinese economy and are expected to support consumer spending as well as ease some supply chain bottlenecks, further supporting manufacturing activity. During 3Q22 and 4Q22, oil demand growth will recover from the previous quarter and settle at 0.5 mb/d and 0.4 mb/ respectively, y-o-y.

India

Update on the latest developments

Data for April, the latest available, shows continued growth in **India's oil demand** amid improvements in economic and social activity and the easing of pandemic containment measures. The resumption of mobility and other economic activity has stimulated pent-up demand and helped demand grow by 0.5 mb/d, y-o-y in April, equivalent to strong 10%. Transportation fuels are the main drivers of India's oil demand growth in April. Gasoline recorded growth of 0.2 mb/d, equivalent to 28%, y-o-y and was strongly supported by the mobility recovery as the Indian government relaxed all travel restrictions. Additionally, individual preferences for private vehicles over public transport gave an additional boost to gasoline demand.

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



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

Diesel demand has rose, supported by economic activity and the harvest season. Diesel accounts for about 40% of the total oil products used in India and recorded growth of 0.2 mb/d, y-o-y. Rise in GDP in India also aided small scale industries, supported India's industrial production to grow by 134% in April, up from 130% in March, also adding a boost to diesel demand. Domestic air travel in April recorded 83% y-o-y growth; international traffic surpassed pre-COVID-19 levels, and accordingly, jet kerosene demand grew by 38 tb/d, or equivalently 25% y-o-y in April. LPG requirements also registered gains during April to grow by 70 tb/d, annually, despite slight increases in prices. Naphtha demand suffered a setback to contract by 0.1 mb/d, y-o-y in April, recording a 29% drop.

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

By product	Apr 21	Apr 22	Change Growth	Apr 22/Apr 21 %
LPG	0.86	0.93	0.07	7.9
Naphtha	0.45	0.32	-0.13	-28.8
Gasoline	0.68	0.86	0.19	27.6
Jet/kerosene	0.15	0.19	0.04	25.3
Diesel	1.67	1.86	0.19	11.2
Fuel oil	0.23	0.27	0.04	17.9
Other products	0.53	0.59	0.06	12.0
Total	**4.57**	**5.03**	**0.46**	**10.0**

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

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

Near-term expectations

India's oil demand is forecast to grow by 0.3 mb/d annually in 2022.the demand is expected to improve from 0.2 mb/d in 1Q22 to reach 0.4 mb/d in 3Q22 and 4Q22, y-o-y. The projected growth is expected to be supported by strong GDP growth of 7.1%. Furthermore, the Indian government cut taxes on fuels to address mounting inflationary pressure that have been hitting households, farmers and manufacturers. The cuts include slashing levies on pump prices of gasoline and diesel as well as increasing subsidies for cooking gas for households. Transportation fuels are expected to be the main beneficiaries of the policy, hence the main drivers of oil demand growth. Transportation fuel demand will be backed by a recovery in mobility and industrial requirements; gasoline and diesel are expected to lead the demand growth in 2022. Light distillates, LPG and naphtha demand from the residential sector and petrochemical feedstock are also expected to appreciate to reach pre-pandemic levels in India. Similarly, diesel demand will be supported by requirements for electricity for cooling homes due to hot summer weather and harvest requirements from farmers.

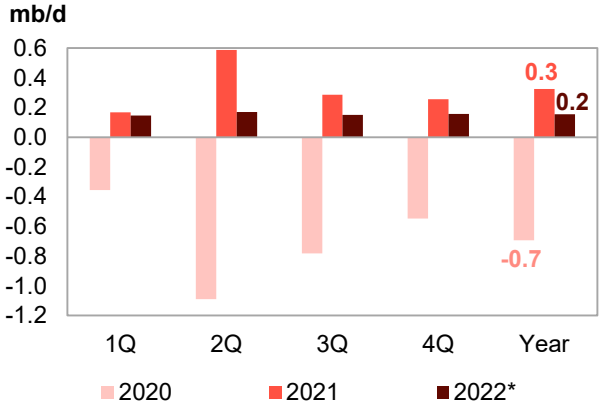
Latin America

Update on the latest developments

The latest data implies **oil demand growth in the Latin America** of 0.1 mb/d, y-o-y, in March. Gasoline recorded growth of 0.1 mb/d, y-o-y in line with improving mobility. Despite high inflation and to some extent supply chain challenges, demand remained resilient in the region. Jet kerosene and diesel demand also grew solidly, in line with robust manufacturing activity and improved air travel.

Overall gains have been partly offset by shrinking LPG and naphtha requirements, mainly as a result of fuel substitution. Oil demand grew y-o-y in Brazil, Argentina and Venezuela. The slow pace of the economic recovery in some big oil-consuming countries of Latin America, combined with high inflation, has dampened consumer purchasing power and created additional supply chain bottlenecks, which partially affected the oil demand in the region.

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



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

Near-term expectations

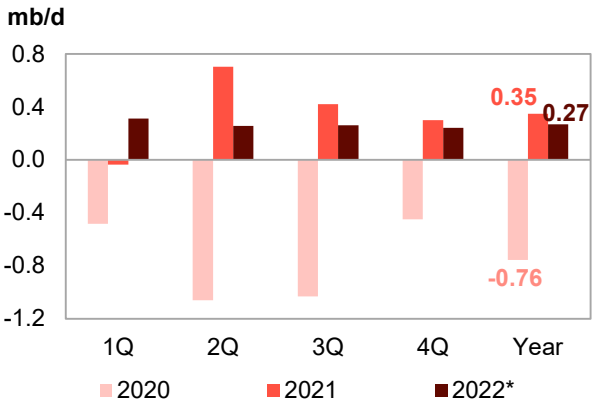
The pace of the economic recovery in Latin America is still slow, with current GDP growth in the region at 2.2%. Furthermore, COVID-19 cases are still very high. Despite these factors, the 0.1 mb/d annual oil demand growth recorded in 1Q22 is expected to improve slightly to around 0.2 mb/d in the remaining quarters. The prospects of oil demand improvements in the region largely depend on the momentum of the economic recovery in several regional countries.

Middle East

Update on the latest developments

The latest available data implies that **oil demand in the Middle East** grew solidly in March by 0.3 mb/d, y-o-y. The GDPs of several big regional countries are very healthy and COVID-19 in the region has been successfully managed. On the back of these positive developments, mobility, construction activity and significant improvements in passenger air traffic were in support of oil demand. Consequently, gasoline recorded the highest growth in the oil product demand mix to reach 0.1 mb/d, or around 10%, y-o-y, slightly higher than the growth recorded in February. Gasoline consumption was supported by improvements in the region's driving mobility. Apple's driving mobility data indicates 11% mobility growth in March in Saudi Arabia and 43% in the UAE, y-o-y.

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



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

Furthermore, on the back of industrial and construction demand, diesel grew by 83 tb/d, y-o-y. S&P Global indicated that Saudi Arabia's manufacturing index (PMI) increased to 56.8 in March from 56.2 in February. Improvements in the region's aviation sector backed the demand for jet kerosene to grow by 64 tb/d, about 22% y-o-y. Backed by residential and industrial requirements, LPG grew by 20 tb/d y-o-y.

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

			Change	*Apr 22/Apr 21*
By product	**Apr 21**	**Apr 22**	**Growth**	**%**
LPG	0.05	0.05	-0.01	-9.5
Gasoline	0.44	0.47	0.03	7.7
Jet/kerosene	0.04	0.09	0.05	139.7
Diesel	0.50	0.54	0.04	8.5
Fuel oil	0.64	0.60	-0.04	-5.6
Other products	0.48	0.48	0.00	0.6
Total	**2.15**	**2.23**	**0.08**	**3.9**

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

Sources: JODI and OPEC.

Near-term expectations

After posting 0.3 mb/d annual growth in 1Q22, oil demand growth is forecast to remain roughly at the same level in 2Q22 and 3Q22. In 3Q22, the acceleration of travel and manufacturing activity will boost industrial and transportation demand. Hence, gasoline and diesel demand will improve. Summer demand for cooling in the region will boost diesel, residual fuel and crude direct use. Annual pilgrimage and international travel will lend additional support for jet kerosene and gasoline demand, notably in Saudi Arabia. In 4Q22, oil demand growth is forecast to slow and settle at 0.2 mb/d, y-o-y. The overall prospects for oil demand growth in the region are very strong, due to expected strong GDP growth and successful COVID-19 management.

World Oil Supply

Non-OPEC liquids supply growth y-o-y in 2021 (including processing gains of 0.1 mb/d) remains 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. 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 2.1 mb/d, for a yearly average level of 65.7 mb/d, with Russia's liquids production for 2022 revised down by 0.25 mb/d. In the US, the current rate of hydraulic fracturing and drilling in the major shale oil areas is above the level required to maintain production and could support production growth in the coming months, especially in the second half of the year. Nevertheless, the US liquids supply growth forecast for 2022 remained broadly unchanged at 1.3 mb/d. The main drivers of liquids supply growth for the year are expected to be the US, Brazil, Canada, Kazakhstan, Guyana and China, while production is expected to decline mainly in Russia, Indonesia and Thailand.

OPEC NGLs and non-conventional liquids production in 2021 is revised up by 20 tb/d from the previous assessment and estimated to have grown by 0.1 mb/d y-o-y for an average of 5.3 mb/d. Growth of 0.1 mb/d y-o-y is forecast for 2022. OPEC-13 crude oil production in May decreased by 176 tb/d m-o-m to average 28.51 mb/d, according to available secondary sources.

Preliminary non-OPEC liquids production in May, including OPEC NGLs, is estimated to have increased m-o-m by a minor 23 tb/d to average 70.2 mb/d, but is up by 1.7 mb/d y-o-y. As a result, preliminary data indicates that global oil supply in May decreased by 0.15 mb/d m-o-m to average 98.75 mb/d, up by 4.64 mb/d y-o-y.

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

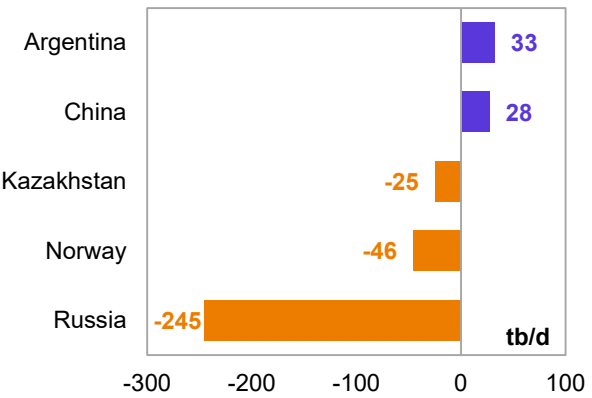
The non-OPEC supply growth forecast for 2022 was revised down by 0.3 mb/d from the previous month's assessment to 2.1 mb/d. Downward adjustments in Eurasian countries more than offset by any upward revisions.

In the OECD, an upward revision of 0.1 mb/d in 1Q22 was mostly offset by downward revisions to the following quarters, leading to a minor downward revision of 46 tb/d for the year. The main downward adjustment was due to planned maintenance in 2Q22 in Norway. Other OECD countries remained unchanged in terms of growth.

The non-OECD supply forecast for 2022 was revised down by 0.2 mb/d, mainly due to a downward revision to Eurasia. Russia and Kazakhstan were considered to account for the major changes in this month.

With this, the non-OPEC liquids supply forecast for 2022 was revised down by 254 tb/d to average 65.7 mb/d, with y-o-y growth revised down to 2.1 mb/d.

Graph 5 - 1: Major revisions to annual supply change forecast in 2022*, MOMR Jun 22/May 22

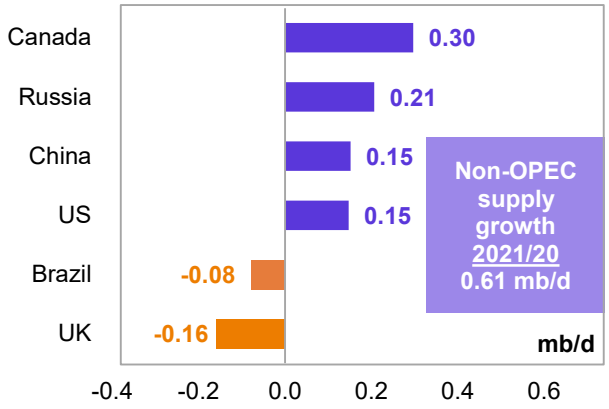


*Note: * 2022 = Forecast. Source: OPEC.*

Key drivers of growth and decline

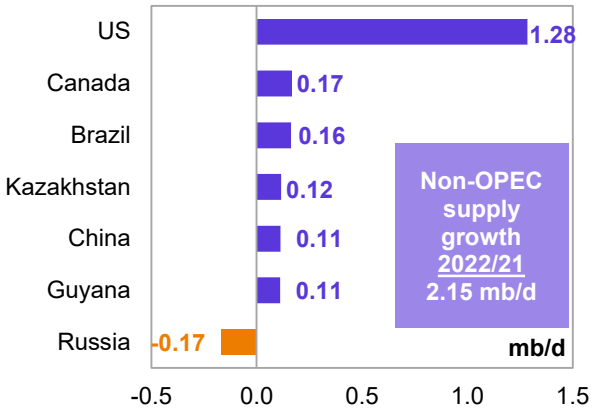
The **key drivers of non-OPEC liquids supply growth in 2021** are estimated to have been Canada, Russia, China and the US, while output is estimated to have declined in the UK and Brazil.

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



Source: OPEC.

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, China and Guyana, while oil production is projected to decline mainly in Russia, Indonesia and Thailand.

Non-OPEC liquids production in 2021 and 2022

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

Non-OPEC liquids production	2020	1Q21	2Q21	3Q21	4Q21	2021	Change 2021/20 Growth	Change 2021/20 %
Americas	24.71	24.11	25.19	25.22	26.17	25.18	0.47	1.89
of which US	*17.61*	*16.63*	*17.93*	*17.85*	*18.58*	*17.75*	*0.15*	*0.84*
Europe	3.89	3.95	3.51	3.81	3.78	3.76	-0.13	-3.34
Asia Pacific	0.52	0.51	0.45	0.55	0.52	0.51	-0.01	-2.67
Total OECD	**29.13**	**28.58**	**29.15**	**29.58**	**30.47**	**29.45**	**0.32**	**1.11**
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	1.42
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	3.09	2.93	0.02	0.56
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**	**31.85**	**31.78**	**32.17**	**31.87**	**0.16**	**0.50**
Total Non-OPEC production	60.84	60.24	61.00	61.36	62.64	61.32	0.48	0.79
Processing gains	2.15	2.28	2.28	2.28	2.28	2.28	0.13	6.03
Total Non-OPEC liquids production	**62.99**	**62.52**	**63.28**	**63.64**	**64.92**	**63.60**	**0.61**	**0.97**
Previous estimate	62.97	62.50	63.26	63.60	64.87	63.56	0.59	0.94
Revision	0.02	0.02	0.02	0.04	0.05	0.03	0.02	0.03

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

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

Non-OPEC liquids production	2021	1Q22	2Q22	3Q22	4Q22	2022	Change 2022/21 Growth	Change 2022/21 %
Americas	25.18	25.89	26.31	26.96	27.47	26.66	1.48	5.88
of which US	*17.75*	*18.26*	*18.94*	*19.27*	*19.67*	*19.04*	*1.28*	*7.24*
Europe	3.76	3.70	3.59	3.79	4.13	3.80	0.04	1.15
Asia Pacific	0.51	0.49	0.54	0.56	0.54	0.53	0.02	4.19
Total OECD	**29.45**	**30.07**	**30.44**	**31.30**	**32.13**	**30.99**	**1.54**	**5.24**
China	4.31	4.49	4.41	4.35	4.43	4.42	0.11	2.61
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	-0.04	-1.53
Latin America	5.96	6.15	6.28	6.21	6.43	6.27	0.31	5.25
Middle East	3.24	3.29	3.36	3.38	3.39	3.36	0.12	3.63
Africa	1.34	1.32	1.31	1.30	1.31	1.31	-0.03	-2.02
Russia	10.80	11.33	10.40	10.40	10.40	10.63	-0.17	-1.55
Other Eurasia	2.93	3.06	2.93	3.17	3.22	3.10	0.17	5.64
Other Europe	0.11	0.11	0.11	0.10	0.10	0.10	-0.01	-6.90
Total Non-OECD	**31.87**	**32.91**	**31.97**	**32.09**	**32.47**	**32.36**	**0.49**	**1.54**
Total Non-OPEC production	61.32	62.98	62.41	63.40	64.60	63.35	2.03	3.32
Processing gains	2.28	2.39	2.39	2.39	2.39	2.39	0.11	4.91
Total Non-OPEC liquids production	**63.60**	**65.37**	**64.80**	**65.79**	**67.00**	**65.74**	**2.15**	**3.38**
Previous estimate	63.56	65.24	65.17	66.14	67.28	65.97	2.40	3.78
Revision	0.03	0.13	-0.37	-0.35	-0.29	-0.22	-0.25	-0.40

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

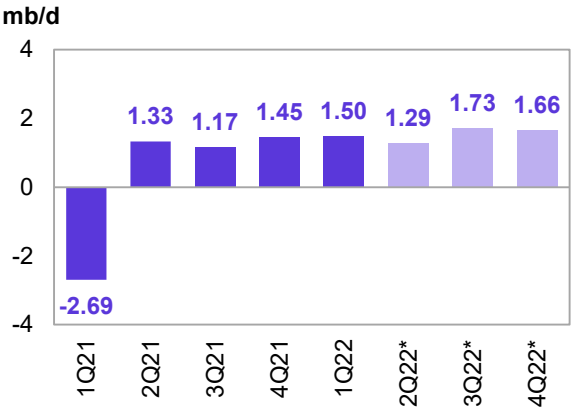
OECD

OECD liquids production in 2021 is estimated to have increased by 0.3 mb/d y-o-y to average 29.4 mb/d, revised up by a minor 18 tb/d from the previous assessment due to official Mexican data revisions.

OECD Americas is estimated to have grown by 0.5 mb/d to average 25.2 mb/d for the year.

Production in OECD Europe and OECD Asia Pacific is estimated to have declined y-o-y by 130 tb/d and 14 tb/d, to average 3.8 mb/d and 0.5 mb/d, respectively.

Graph 5 - 4: OECD quarterly liquids supply, y-o-y changes



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

For **2022**, oil production in the OECD region is forecast to increase by 1.5 mb/d y-o-y, to average 31 mb/d. This has been revised down by a minor 46 tb/d compared to a month earlier, on the back of the downward revision of 46 tb/d for OECD Europe, due to the planned maintenance in North Sea offshore platforms. OECD Americas remained unchanged compared to the last month's assessment.

Based on these revisions, OECD Americas is forecast to grow by 1.5 mb/d, to average 26.7 mb/d. Oil production in OECD Europe and OECD Asia Pacific is anticipated to grow y-o-y by 43 tb/d and 21 tb/d to average 3.8 mb/d and 0.5 mb/d, respectively.

OECD Americas

US

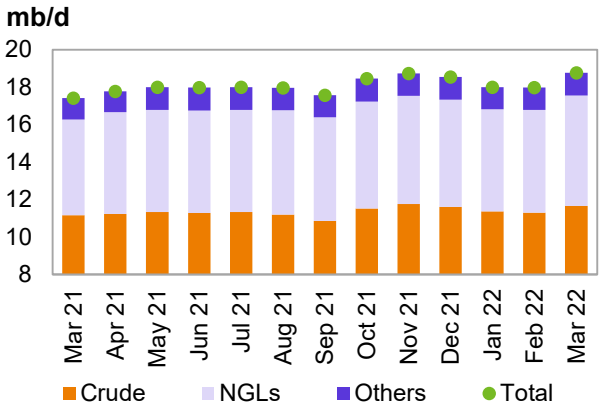
US liquids production in 2021 is estimated to have increased by 0.15 mb/d to average 17.75 mb/d, unchanged m-o-m. Crude oil output fell by 0.1 mb/d y-o-y to average 11.2 mb/d, while NGLs production and non-conventional liquids, particularly ethanol, increased by 0.2 mb/d and 20 tb/d y-o-y to average 5.4 mb/d and 1.2 mb/d, respectively. Average tight crude output in 2021 is estimated at 7.3 mb/d, according to the latest information from the US Energy Information Administration (EIA).

US liquids production jumped m-o-m in **March 2022** by 0.8 mb/d to average 18.8 mb/d, and was higher by 1.5 mb/d compared with March 2021.

Crude oil and condensate production rose in **March 2022** by 349 tb/d m-o-m to average 11.7 mb/d, and was up by 1.9 mb/d y-o-y.

Regarding the crude and condensate production breakdown by region (PADDs), production increased mainly in the US Gulf Coast (USGC), up by 289 tb/d to average 8.3 mb/d. It also increased by 64 tb/d in the Midwest in North Dakota and Oklahoma. At the same time, the Rocky Mountains and East Coast showed a slight increase, while the West Coast decreased by 13 tb/d, m-o-m. Recovered production in the main regions was primarily due to the better weather conditions following the winter freeze.

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



Source: OPEC.

NGLs production was up by 434 tb/d m-o-m to average 5.9 mb/d in March, which was higher by 0.8 mb/d y-o-y. Production of **non-conventional liquids** (mainly ethanol) increased by 17 tb/d m-o-m to average 1.2 mb/d, according to the US Department of Energy (DoE). Preliminary estimates see non-conventional liquids averaging 1.2 mb/d in April 2022, down by 48 tb/d compared to the previous month.

Production in the **Gulf of Mexico (GoM)** recovered m-o-m by 75 tb/d in March to average 1.7 mb/d, on the back of a partial return from maintenance in the WD-143 platform.

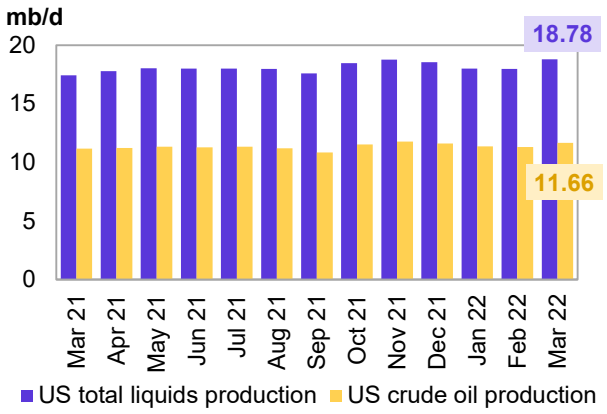
Looking at individual states, oil production in New Mexico increased by 66 tb/d m-o-m to average 1.5 mb/d, 311 tb/d higher than a year ago. Production in Texas jumped by 147 tb/d to average 5.0 mb/d, 244 tb/d higher than a year ago. Production in North Dakota increased by 34 tb/d m-o-m to average 1.1 mb/d, up by 76 tb/d y-o-y. Production in Oklahoma was up by 23 tb/d to average 0.4 mb/d. However, oil output in Colorado remained broadly unchanged, while Alaska showed a marginal m-o-m decline of 10 tb/d. In the onshore lower 48, March production increased m-o-m by 284 tb/d to average 9.5 mb/d.

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

State	Mar 21	Feb 22	Mar 22	Change m-o-m	Change y-o-y
Texas	4,728	4,825	4,972	*147*	*244*
Gulf of Mexico (GOM)	1,854	1,615	1,690	*75*	*-164*
New Mexico	1,156	1,401	1,467	*66*	*311*
North Dakota	1,030	1,072	1,106	*34*	*76*
Alaska	453	450	440	*-10*	*-13*
Colorado	371	425	429	*4*	*58*
Oklahoma	402	386	409	*23*	*7*
Total	**11,160**	**11,306**	**11,655**	***349***	***495***

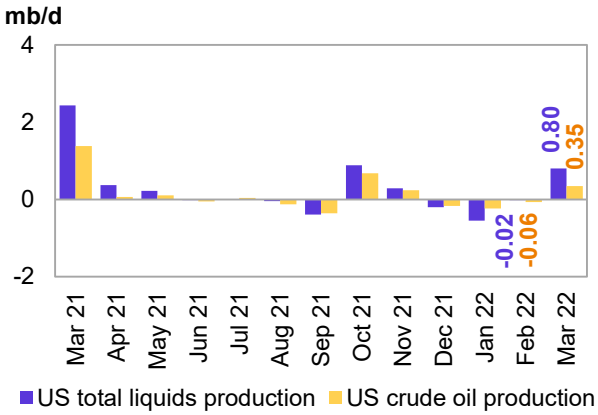
Sources: EIA and OPEC.

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



Sources: EIA and OPEC.

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



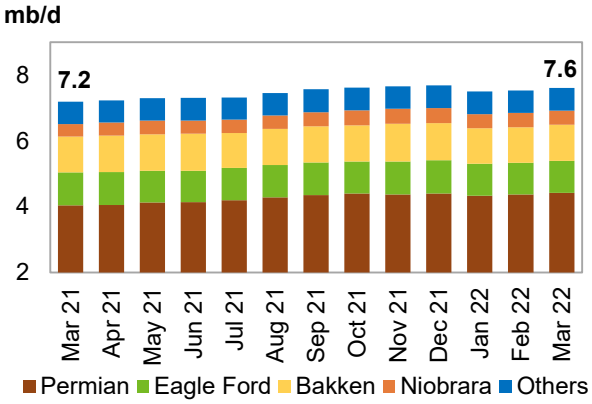
Sources: EIA and OPEC.

US tight crude output in **March 2022** increased by 73 tb/d m-o-m to average 7.6 mb/d, which was 0.4 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 48 tb/d to average 4.4 mb/d. This was up by 0.4 mb/d, y-o-y.

In the Williston Basin, production in the Bakken shale increased marginally by 9 tb/d to average 1.1 mb/d, unchanged y-o-y. Tight crude output at Eagle Ford in Texas rose by 15 tb/d to average 1.0 mb/d down by 19 tb/d y-o-y, while production in Niobrara-Codell in Colorado and Wyoming was down marginally by 8 tb/d to average 0.4 mb/d.

Graph 5 - 8: US tight crude output breakdown



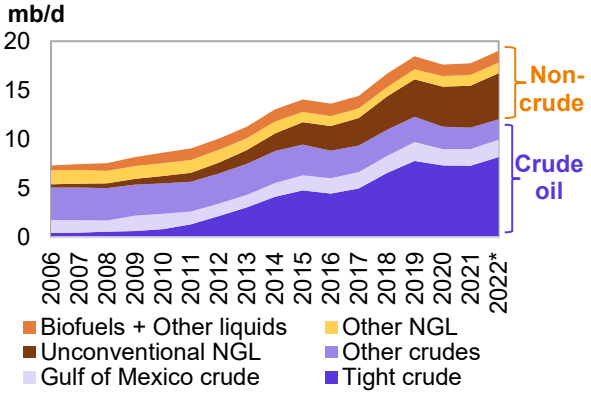
Sources: EIA, Rystad Energy and OPEC.

US liquids production in 2022, excluding processing gains, is forecast to grow y-o-y by 1.3 mb/d to average 19.0 mb/d, unchanged from the previous assessment.

The 2022 gains are due primarily to expected tight crude production growth of 0.9 mb/d, to average 8.2 mb/d, NGLs growth, mainly from unconventional basins, of 0.4 mb/d, to average 5.8 mb/d, and projected growth of 0.1 mb/d in the GoM. Non-conventional liquids are projected to grow by 40 tb/d to average 1.2 mb/d.

However, the expected growth will be partially offset by natural declines in onshore conventional fields of 0.1 mb/d y-o-y.

Graph 5 - 9: US liquids supply developments by component



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

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).

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

US liquids	2020	Change 2020/19	2021	Change 2021/20	2022*	Change 2022/21
Tight crude	7.34	-0.46	7.29	-0.05	8.17	0.88
Gulf of Mexico crude	1.64	-0.25	1.70	0.06	1.77	0.06
Conventional crude oil	2.30	-0.29	2.20	-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**	**1.28**

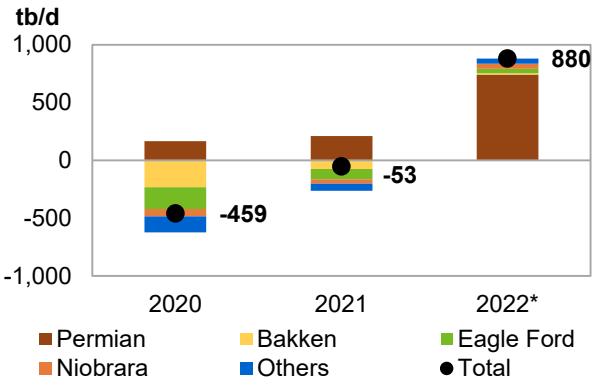
*Note: * 2022 = Forecast. Sources: EIA, OPEC and Rystad Energy.*

US tight crude production in the Permian in **2021** is estimated to have increased by 210 tb/d to 4.1 mb/d and is forecast to grow by 742 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 spring blizzards in April.

The Eagle Ford in Texas is estimated to have declined by 90 tb/d in 2021 to average 968 tb/d, but is forecast to expand in 2022 by 39 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 of 79 b/d in the Eagle Ford, according to the EIA-DPR (Drilling Productivity Report) forecast for June 2022. However, overall Eagle Ford production is expected to increase m-o-m by 27 tb/d during the same time.

Graph 5 - 10: US tight crude output by shale play, y-o-y changes



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

Production in the Niobrara, following an estimated decline of 39 tb/d in 2021, is forecast to grow by 43 tb/d y-o-y in 2022, to average 0.5 mb/d. Other shale plays are expected to show marginal increases totalling 45 tb/d in 2022, given current drilling and completion activities.

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

US tight oil	2020	Change 2020/19	2021	Change 2021/20	2022*	Change 2022/21
Permian tight	3.91	0.17	4.12	0.21	4.87	0.74
Bakken shale	1.18	-0.23	1.11	-0.07	1.12	0.01
Eagle Ford shale	1.06	-0.19	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	0.04
Total	**7.34**	**-0.46**	**7.29**	**-0.05**	**8.17**	**0.88**

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

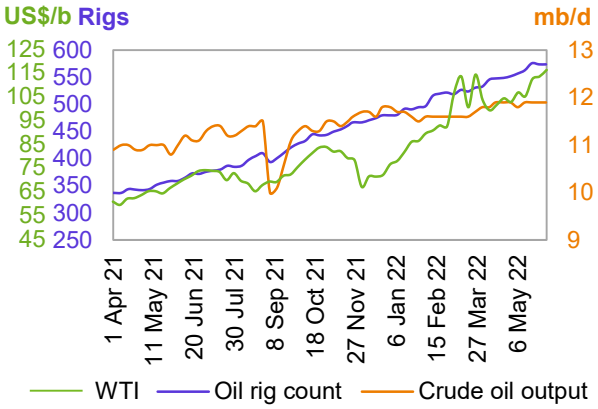
US rig count, spudded, completed, DUC wells and fracking activity

Total **US active drilling rigs** remained unchanged at 727 rigs in the week ending 3 June, which is 271 more rigs than a year ago. The number of active offshore rigs was steady w-o-w at 16, three rigs more than the same month in 2021. Moreover, 710 rigs (oil and gas) were active onshore, unchanged w-o-w, with one rig in inland waters.

The **US horizontal rig count** was also unchanged on a weekly basis at 666 rigs, compared with 415 horizontal rigs a year ago. The number of drilling rigs for oil and gas was recorded at 574 and 151, respectively, with no w-o-w changes.

The rig count in the Permian remained unchanged w-o-w at 342 rigs. At the same time, the number of active rigs remained unchanged at 66 in the Eagle Ford, at 38 in Williston basin, and at 15 in the DJ-Niobrara basins. They declined by one in the Cana Woodford to 27. Four oil rigs have been operating in the Barnett basin.

Graph 5 - 11: US weekly rig count vs. US crude oil output and WTI price

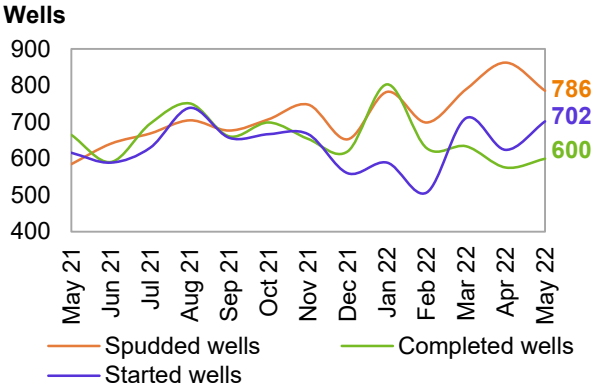


Sources: Baker Hughes, EIA and OPEC.

Drilling and completion (D&C) activities for spudded, completed and started wells in all US shale plays, based on the EIA-DPR regions, saw 863 horizontal wells spudded in April 2022 (as per preliminary data), up by 73 m-o-m, and 51% higher than in April 2021.

In April 2022, preliminary data indicates a lower number of completed wells at 576 m-o-m, which is down by 9% y-o-y. Moreover, the number of started wells was estimated at 624, which is 13% higher than in April 2021. Preliminary data for May estimates 786 spudded, 600 completed and 702 started wells, according to Rystad Energy.

Graph 5 - 12: Spudded, completed and started wells in US shale plays

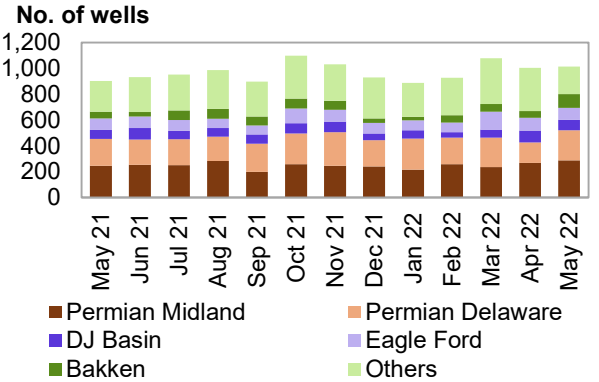


Note: Apr 22-May 22 = Preliminary data.
Sources: Rystad Energy and OPEC.

In terms of identified **US oil and gas fracking operations** by region, Rystad Energy reported that after the highest number of fracked wells seen since March 2020, with 1,097 fracked in October 2021, 1,004 and 1,014 wells started to frack in April and May, respectively. This preliminary number is based on analysis of high-frequency satellite data.

Preliminary data on fracking in April shows that 268 and 158 wells were fracked in the Permian Midland Tight and Permian Delaware Tight, respectively. In comparison with March, there was a drop of 68 wells fracked in the Delaware and a jump of 32 wells fracked in the Midland tight, according to preliminary data. Data also indicated that 90 wells were fracked in the DJ Basin, 100 in the Eagle Ford and 53 in the Bakken in April.

Graph 5 - 13: Fracked wells count per month



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

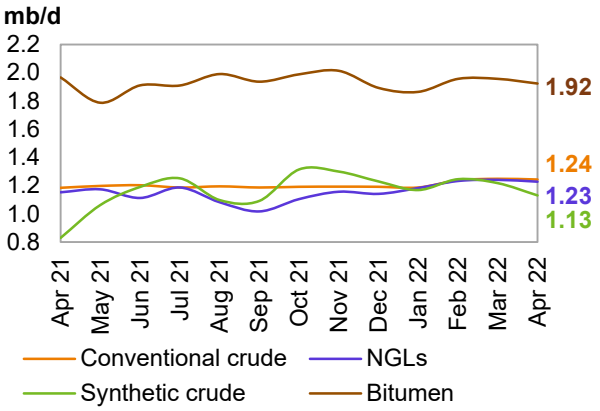
Canada

Canada's liquids production in **April** is estimated to have declined by 138 tb/d to average 5.6 mb/d.

Crude bitumen production and synthetic crude output decreased by 33 tb/d and 87 tb/d, respectively. Taken together, crude bitumen and synthetic crude production declined by 120 tb/d to 2.7 mb/d. At the same time, production of conventional crude and NGLs decreased slightly, following two consecutive months of increase, to average 1.2 mb/d, each.

Seasonal turnarounds in the main sand mine facilities started in April and are expected to reduce total output in the coming months, especially in 2Q22. However, project ramps and optimization in oil sands output will drive production in 4Q22.

Graph 5 - 14: Canada's monthly liquids production development by type

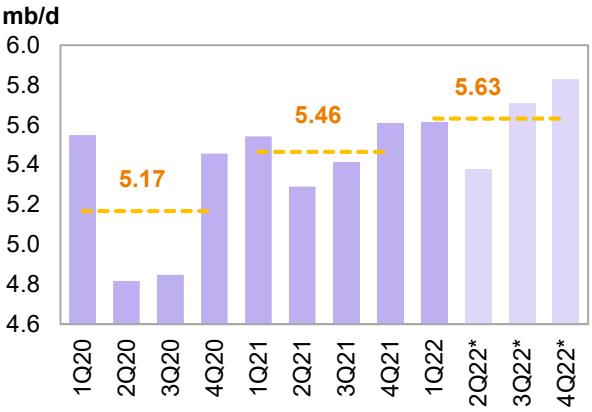


Sources: National Energy Board and OPEC.

Canadian liquids supply in **2021** is estimated to have grown by 0.3 mb/d for a yearly average of 5.5 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 0.2 mb/d to average 5.6 mb/d, unchanged from the previous month. 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.

Graph 5 - 15: Canada's quarterly liquids production and forecast



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

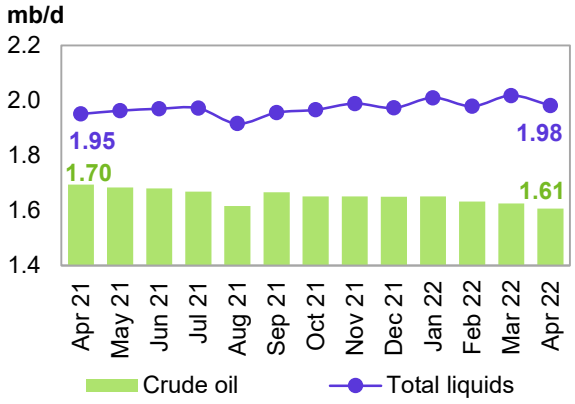
Mexico

Mexico's crude output decreased slightly in **April** by 18 tb/d to average 1.6 mb/d. NGLs output also was reduced by 18 tb/d. Therefore, Mexico's total liquids output in April decreased by 36 tb/d m-o-m, to average 1.98 mb/d. Lower Ku-Maloob-Zaap (KMZ) crude output offset higher production in ENI's Area 1 and some other fields.

For **2021**, liquids production in Mexico is estimated to have grown by 23 tb/d to average 1.95 mb/d, up by a minor 9 tb/d, on the back of revised official data.

For **2022**, growth is forecast at 30 tb/d to average 1.96 mb/d. Pemex' total crude production in mature fields continues to decline and new project output is not sufficient to offset the trend, while foreign-operated field production is expected to rise.

Graph 5 - 16: Mexico's monthly liquids and crude production development



Sources: PEMEX and OPEC.

OECD Europe

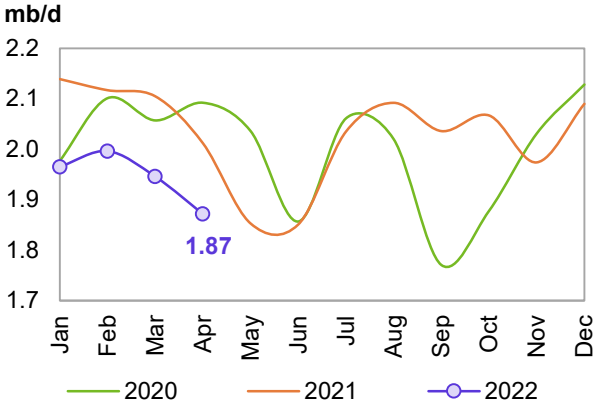
Norway

Norwegian liquids production in **April** declined by 74 tb/d m-o-m to average 1.9 mb/d. This was due to early seasonal maintenance at a number of fields related to the Troll crude-blend facilities.

Norway's crude production decreased by 82 tb/d m-o-m in April to average 1.7 mb/d, down by 72 tb/d y-o-y. Oil production in April is 10.6% lower than the Norwegian Petroleum Directorate's (NPD) forecast. Production of NGLs and condensates marginally declined by 8 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 grown by 31 tb/d to average 2.0 mb/d.

Graph 5 - 17: Norway's monthly liquids production development



Sources: NPD and OPEC.

For **2022**, Norway's liquids production is forecast to grow by 42 tb/d to average 2.1 mb/d, revised down by 46 tb/d from last month's assessment. This downward revision was mainly because of lower-than-expected production in April and considering planned maintenance in offshore platforms. However, following the end of the maintenance season, growth is expected in 4Q22, when the second phase of the Johan Sverdrup field development starts production, adding around 220 tb/d on top of the 535 tb/d already being produced.

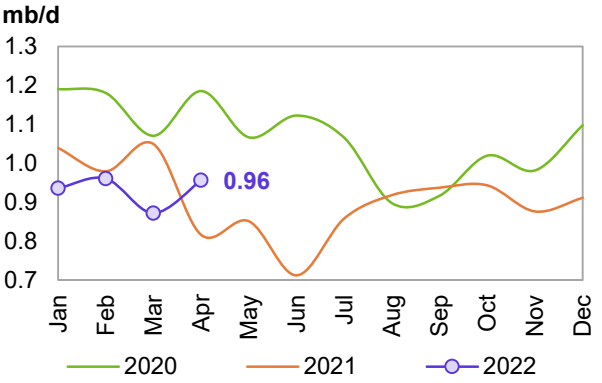
UK

UK liquids production increased in **April** by 85 tb/d m-o-m to average 0.96 mb/d. Crude oil output increased by 81 tb/d m-o-m to average 0.83 mb/d, according to official data, and was up by 112 tb/d y-o-y. NGLs output was up by a minor 4 tb/d to 92 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 21 tb/d to average 0.93 mb/d, following two consecutive years of heavy declines, unchanged from the previous month's assessment. Low investment levels, COVID-19-related delays, and poor mature reservoir performance have been the cause of this weak growth forecast. Liquids production in the UK is expected to face challenges, given an inadequate number of new projects.

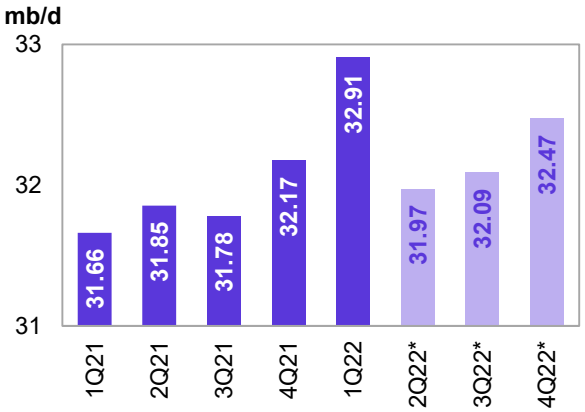
Graph 5 - 18: UK monthly liquids production development



Sources: Department of Energy & Climate Change and OPEC.

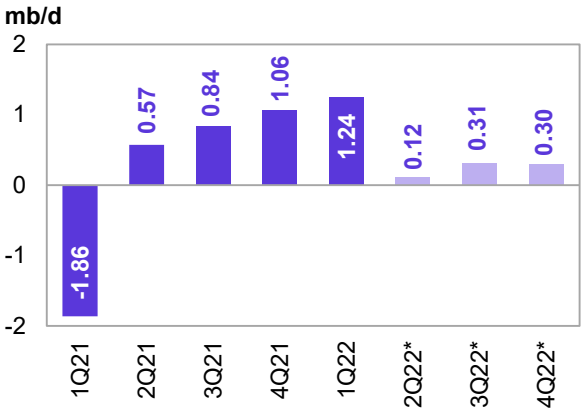
Non-OECD

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



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

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

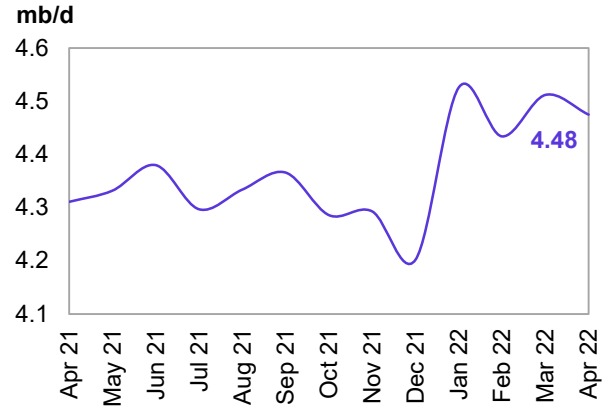


*Note: * 2Q22-4Q22 = Forecast. Source: OPEC.*

China

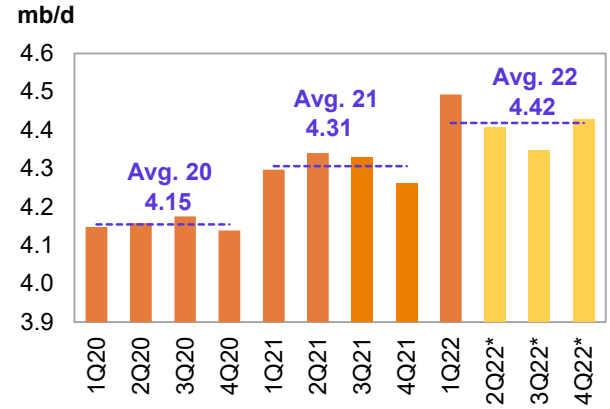
China's liquids production decreased by 37 tb/d m-o-m in **April** to average 4.5 mb/d, which was up by 164 tb/d y-o-y, according to official data. Crude oil output in April declined by 35 tb/d to average 4.1 mb/d, higher by 144 tb/d y-o-y. This marks the fourth month in a row of liquid production reaching above 4.4 mb/d.

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



Sources: CNPC and OPEC.

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 0.2 mb/d y-o-y, to average 4.3 mb/d.

For **2022**, growth of 112 tb/d is forecast for an average of 4.4 mb/d, revised up by 28 tb/d on higher production expectations for 2Q22 compared to the previous assessment.

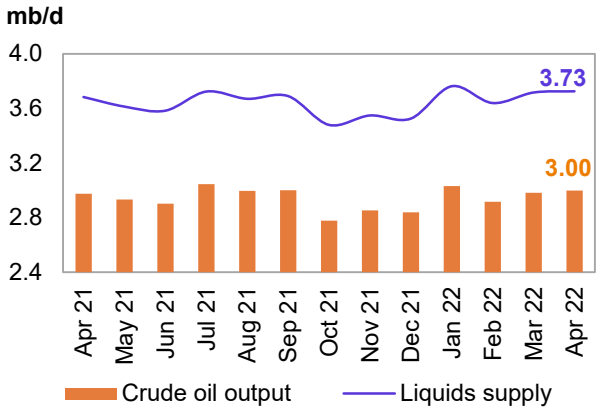
The COVID-19 lockdown in Shanghai and other provinces does not appear to have had any considerable impact on China's oil production in the previous months. Natural decline rates are still expected to be offset by Chinese company investments in new project start-ups, additional in-fill wells and EOR projects.

Latin America

Brazil

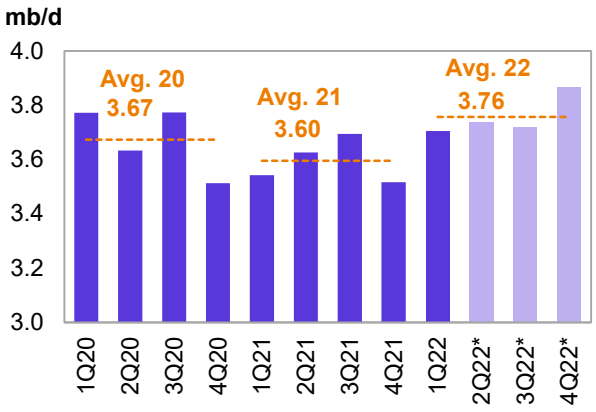
Brazil's crude output in **April** increased by 18 tb/d m-o-m to average 3.0 mb/d. NGLs production decreased slightly by 9 tb/d to average 94 tb/d and is expected to remain flat in May. Biofuel output (mainly ethanol) remained unchanged in April to average 632 tb/d, with preliminary data showing a flat trend in May as well. Therefore, in April, total liquids production increased by a minor 9 tb/d to average 3.7 mb/d, higher by 42 tb/d y-o-y.

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



Sources: ANP, Petrobras and OPEC.

Graph 5 - 24: Brazil's quarterly liquids production



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

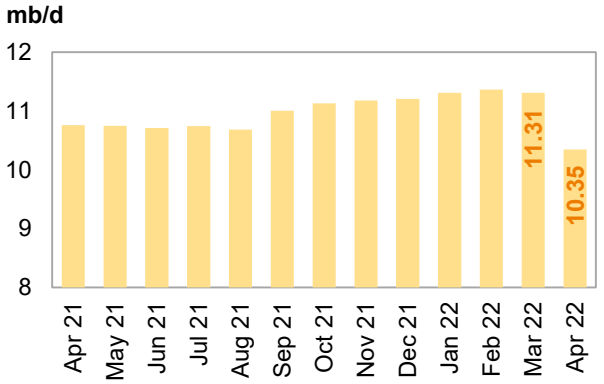
Liquids supply for **2021** is estimated to have averaged 3.6 m/d, a decline of 78 tb/d y-o-y, unchanged from the previous month's assessment.

For **2022,** Brazil's liquids supply, including biofuels, is forecast to increase by 0.2 mb/d y-o-y to average 3.8 mb/d, unchanged from the previous assessment. 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 start-ups of Mero 1 and Peregrino Phase 2 in the pre-salt Santos basin. Connection activities at the Mero oilfield – the third largest field in Brazil's pre-salt regions after Buzios and Tupi – have finished and the Petrobras-operated Guanabara Floating Production Storage and Offloading (FPSO) vessel saw first oil in May.

Russia

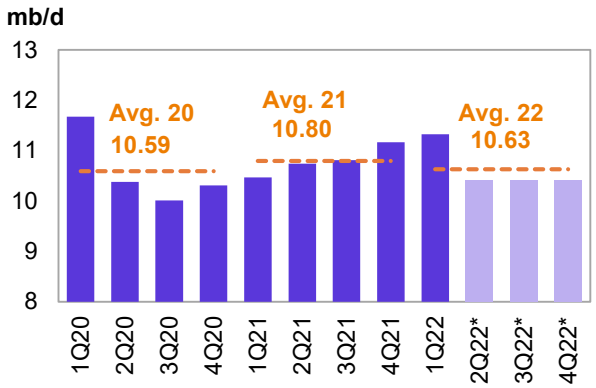
Russia's liquids production in April declined m-o-m by 964 tb/d to average 10.3 mb/d. This includes 9.1 mb/d of crude oil and condensate and 1.2 mb/d of NGLs. A preliminary estimate for Russia's crude and condensate production in May 2022 shows an expected increase of 152 tb/d m-o-m for crude and condensate to average 9.3 mb/d, while around a 38 tb/d decline is expected 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.

Liquids production in **2021** is estimated to have increased by 0.2 mb/d y-o-y to average 10.8 mb/d.

For **2022**, Russian liquids output is expected to decrease by 0.2 mb/d to average 10.6 mb/d, revised down by 0.25 mb/d, compared to the previous month's assessment. It should be noted that this forecast is subject to high uncertainty.

Caspian

Kazakhstan & Azerbaijan

Liquids output in Kazakhstan decreased by 175 tb/d to average 1.8 mb/d in **April**. Crude production declined by 128 tb/d m-o-m to average 1.4 mb/d. Production of NGLs declined by 47 tb/d m-o-m in April to average 0.3 mb/d.

Kazakhstan's liquids supply forecast for **2021** is estimated to have increased marginally by 10 tb/d y-o-y, to average 1.8 mb/d. For **2022**, liquids supply is forecast to grow by 117 tb/d to average 1.95 mb/d, revised down by 25 tb/d from the previous month's assessment, due to maintenance in the Kashagan oil field in 2Q22.

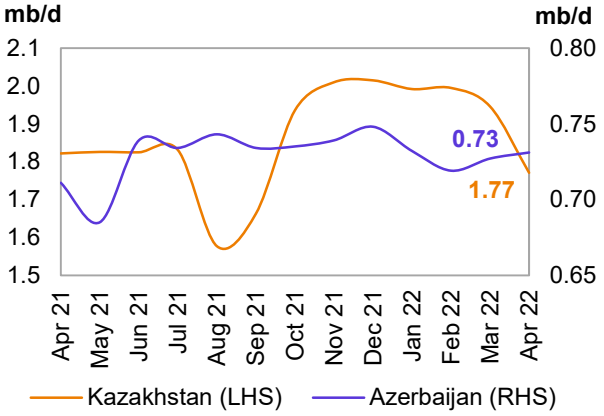
Azerbaijan's liquids production in April rose by a minor 4 tb/d m-o-m to average 0.7 mb/d, up by 20 tb/d y-o-y. Crude production increased by 3 tb/d m-o-m to average 583 tb/d, while NGL output averaged at 148 tb/d, according to official sources.

No new project is expected to come online in 2022 and the main decline in the offshore ACG crude and other legacy fields is expected to be offset by ramp-ups in other fields, such as Shah Deniz Phase 2 and the Absheron condensate project.

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

For **2021**, liquids supply in Azerbaijan is estimated to have grown by 10 tb/d y-o-y to average 0.7 mb/d.

Graph 5 - 27: Caspian monthly liquids production development by selected country



Sources: Nefte Compass and OPEC.

For **2022**, Azerbaijan liquids supply is forecast to grow by 56 tb/d for an average of 0.8 mb/d.

OPEC NGLs and non-conventional oils

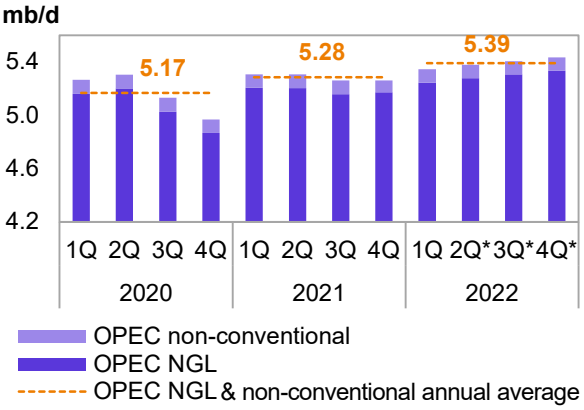
OPEC NGLs and non-conventional liquids in 2021 are estimated to have grown by 122 tb/d, to average 5.3 mb/d, revised up by 20 tb/d, according to official data.

Production of OPEC NGLs and non-conventional oils has declined from 5.35 mb/d in 2Q18. In 2021, output was around 5.3 mb/d in all the quarters.

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

For **2022**, OPEC NGLs and non-conventional liquids production is forecast to grow by 0.1 mb/d to average 5.4 mb/d.

Graph 5 - 28: OPEC NGLs and non-conventional liquids quarterly production and forecast



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

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

OPEC NGL and non-coventional oils	2020	Change 20/19	2021	Change 21/20	1Q22	2Q22	3Q22	4Q22	2022	Change 22/21
OPEC NGL	**5.06**	*-0.06*	**5.18**	*0.12*	5.24	5.28	5.31	5.33	**5.29**	*0.11*
OPEC non-conventional	**0.10**	*0.01*	**0.10**	*0.00*	0.10	0.10	0.10	0.10	**0.10**	*0.00*
Total	**5.17**	***-0.05***	**5.28**	***0.12***	**5.34**	**5.38**	**5.41**	**5.43**	**5.39**	***0.11***

Note: 2022 = Forecast. Source: OPEC.

OPEC crude oil production

According to secondary sources, total **OPEC-13 crude oil production** averaged 28.51 mb/d in May 2022, lower by 176 tb/d m-o-m. Crude oil output increased mainly in Saudi Arabia, the UAE and Kuwait, while production in Libya, Nigeria, Iraq, Gabon and IR Iran declined.

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

Secondary sources	2020	2021	3Q21	4Q21	1Q22	Mar 22	Apr 22	May 22	*Change* May/Apr
Algeria	904	913	926	959	984	996	1,004	1,011	*7*
Angola	1,247	1,117	1,108	1,124	1,151	1,142	1,175	1,176	*1*
Congo	294	266	261	266	264	259	262	270	*7*
Equatorial Guinea	114	98	98	87	92	91	96	94	*-2*
Gabon	194	186	184	188	199	204	198	166	*-32*
IR Iran	1,991	2,392	2,472	2,472	2,528	2,548	2,565	2,544	*-20*
Iraq	4,076	4,049	4,078	4,240	4,286	4,302	4,426	4,405	*-21*
Kuwait	2,439	2,419	2,448	2,531	2,612	2,640	2,660	2,687	*27*
Libya	366	1,143	1,146	1,111	1,063	1,069	893	707	*-186*
Nigeria	1,575	1,372	1,335	1,321	1,376	1,339	1,306	1,262	*-45*
Saudi Arabia	9,204	9,113	9,557	9,879	10,164	10,215	10,364	10,424	*60*
UAE	2,804	2,727	2,770	2,861	2,954	2,974	3,015	3,046	*31*
Venezuela	512	555	540	662	684	696	719	717	*-2*
Total OPEC	**25,721**	**26,351**	**26,922**	**27,700**	**28,358**	**28,475**	**28,684**	**28,508**	***-176***

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

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

Direct communication	2020	2021	3Q21	4Q21	1Q22	Mar 22	Apr 22	May 22	*Change* May/Apr
Algeria	899	911	924	958	984	996	1,006	1,015	*9*
Angola	1,271	1,124	1,114	1,123	1,161	1,133	1,183	1,162	*-21*
Congo	300	267	266	260	267	264	261	261	*0*
Equatorial Guinea	114	93	92	79	95	95	95	89	*-6*
Gabon	207	181	180	183	197	198	174	183	*9*
IR Iran	..	..	..	..	..	..	..	..	..
Iraq	3,997	3,971	3,979	4,167	4,188	4,148	4,430	4,470	*40*
Kuwait	2,438	2,415	2,447	2,528	2,612	2,639	2,664	2,639	*-25*
Libya	389	1,207	1,220	1,182	1,151	1,166	..	..	..
Nigeria	1,493	1,323	1,269	1,260	1,299	1,238	1,219	1,024	*-195*
Saudi Arabia	9,213	9,125	9,565	9,905	10,224	10,300	10,441	10,538	*97*
UAE	2,779	2,718	2,758	2,854	2,949	2,970	3,011	3,032	*21*
Venezuela	569	636	635	817	756	728	775	735	*-40*
Total OPEC	..	..	..	..	..	..	..	..	..

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

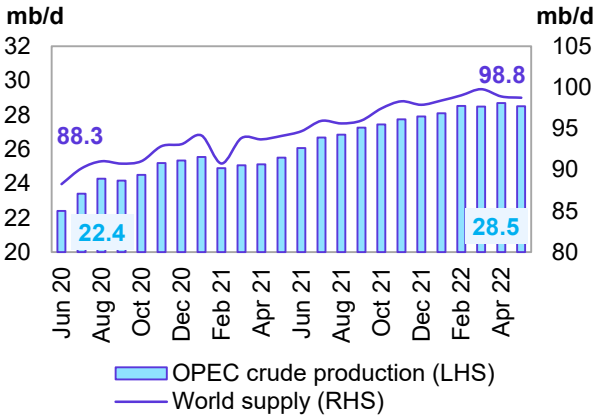
World oil supply

Preliminary data indicates that **global liquids production in May** decreased by 0.15 mb/d to average 98.75 mb/d compared with the previous month.

Non-OPEC liquids production (including OPEC NGLs) is estimated to have increased in May by a minor 23 tb/d m-o-m to average 70.2 mb/d, but was higher by 1.7 mb/d y-o-y. Preliminary estimated decreases in production during May were mainly driven by Canada and the UK by 0.4 mb/d, while Eurasia and Latin America are expected to have seen growth in liquids output of 0.4 mb/d.

The **share of OPEC crude oil in total global production** decreased by 0.1 pp to 28.9% in May compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Graph 5 - 29: OPEC crude production and world oil supply development



Source: OPEC.

Product Markets and Refinery Operations

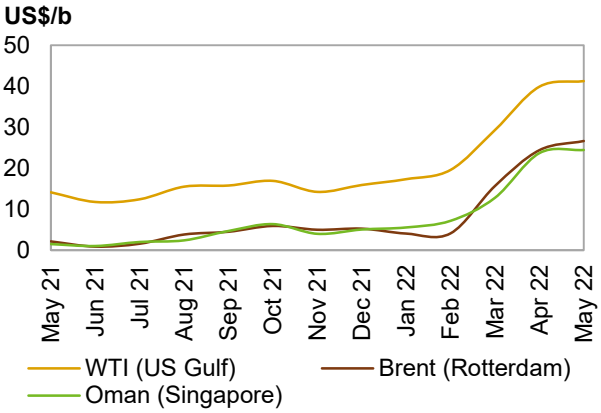
In May, refinery margins on all main trading hubs continued to increase, albeit at a considerably slower rate relative to previous months, as rising product output levels given the conclusion of peak turnarounds began to limit the contraction in global product balances. In the western hemisphere, gasoline was the sole positive performer and margin driver across the barrel. Gasoline inventories declined in the US, while that for gasoil showed some recovery. In Asia, all product markets strengthened, with the exception of naphtha and fuel oil, as regional transport fuel consumption improved amid the roll back of COVID lockdown measures in China. Going forward, refinery intakes are expected to rise further, to accommodate the seasonal pick up in fuel consumption and to replenish stocks.

Refinery margins

US Gulf Coast (USGC) refining margins against WTI rose further, despite showing the lowest monthly gain since November 2021. Gasoline was the sole positive performer and margin driver across the barrel as gasoline inventories continued to decline throughout the month. Firm gasoline demand led to sizeable stock draws just as the peak driving season unfolds. Meanwhile, rising US utilization rates as refineries return from major turnarounds and, consequently, higher refinery outputs weighed on crack spreads for all other products across the barrel.

According to preliminary estimates, US refinery intake moved up by around 0.46 mb/d m-o-m to settle at 16.61 mb/d in May. Refinery maintenance in the US dropped by around 200 tb/d m-o-m in May, which, together with strong refining margins, contributed to the rise in intakes.

Graph 6 - 1: Refining margins



Sources: Argus and OPEC.

Going forward, US refinery intakes are expected to increase further as product inventories for the most part remain low. This could lead to a downward correction in refining economics in the near term. USGC margins against WTI averaged $41.23/b in May, up by $1.37 m-o-m and by $27.13 y-o-y.

Refinery margins in **Rotterdam** against Brent increased and exhibited the largest monthly gain relative to other main trading hubs. Strong gasoline exports exerted pressure on inventory levels and exacerbated the gasoline market amid, reportedly, healthy gasoline flows to the US. Russian product deliveries to Europe declined to 1.42 mb/d in May (down 230 tb/d m-o-m), with this downturn further contributing to the regional product tightness. Over the month, product prices rose again following the decline registered in the previous month, which reflected a m-o-m uptick in the Brent price.

European refinery processing rates in May increased by 200 tb/d m-o-m, according to preliminary data, as refinery maintenance in the region subsided. This trend came amid a sharp increase in the gasoline crack spread in Europe. The crack rose $24/b m-o-m to $53/b, while gasoline blending components, including MTBE, toluene and mixed xylene, were reported to have witnessed tight supplies throughout May. Furthermore, the onset of the summer driving season additionally contributed to the healthy gasoline crack spread. Refinery margins against Brent in Europe averaged $26.60/b in May, up by $2.24 compared with a month earlier and up by $24.48 y-o-y.

Singapore refining margins against Oman saw the mildest gains compared to the other main trading hubs, with support manifested across the barrel except the bottom section. Improvements in fuel consumption levels, and stronger gasoline fundamentals led to stronger gasoline, gasoil and jet/kerosene markets.

The overall change in Asian refinery intakes was estimated to be 350 tb/d higher in May relative to the previous month, at an average 25.52 mb/d, as refining runs in China showed some signs of improvement compared to April. According to preliminary data, refinery runs in China have reached almost 12.9 mb/d (up nearly 300 tb/d m-o-m). Nonetheless, May intakes were 1.4 mb/d lower y-o-y, as the country battled with a new COVID outbreak, with restrictions starting to ease only in the second half of the month. Going forward, the easing

COVID-related restrictions in China are expected to boost fuel consumption levels in the coming months. Moreover, the shift in product trade flows in Eastern Europe, because of 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 77¢ m-o-m to average $24.42/b in May, higher by $22.96 y-o-y.

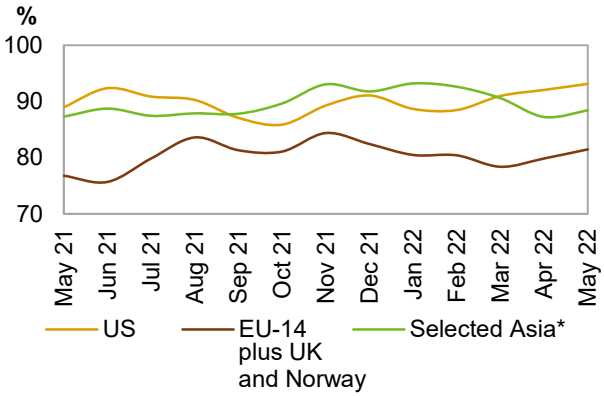
Refinery operations

US refinery utilization rates increased in May to average 93.16%, which corresponds to a throughput of 16.61 mb/d. This represented a rise of 1.1 pp and 460 tb/d, respectively, compared with the previous month. Y-o-y, the May refinery utilization rate was up by 4.2 pp, with throughput showing a rise of 476 tb/d.

European refinery utilization averaged 81.49%, corresponding to a throughput of 9.6 mb/d. This is a m-o-m rise of 1.6 pp or 190 tb/d. On a y-o-y basis, utilization rates were higher by 4.7 pp, while throughput was up by 460 tb/d.

In **selected Asia** – comprising Japan, China, India, Singapore and South Korea – refinery utilization rates increased to average 88.48% in May. This corresponded to a throughput of 25.52 mb/d. Compared with the previous month, utilization rates were up by 1.2 pp, while throughput was higher by 350 tb/d. Meanwhile, utilization rates were higher by 1.1 pp y-o-y, and throughput was up by 309 tb/d.

Graph 6 - 2: Refinery utilization rates



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

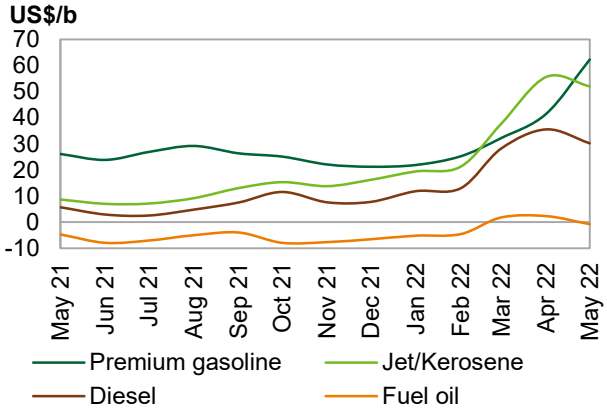
Product markets

US market

USGC gasoline crack spreads rose for the fourth consecutive month, supported mainly by demand-side dynamics, as a strong recovery in US fuel requirements outpaced product supplies. US gasoline inventory levels declined further over of the month, which drove US gasoline crack spreads to increase sharply by nearly $21/b m-o-m to settle at more than $62/b. This led to a rise in gasoline crack spreads in other key regions, most notably in Europe, due to its close interlinkage with the US market via the Atlantic Basin.

The improvement in US gasoline markets was largely attributed to strong gasoline exports to Latin America. Moreover, gasoline prices averaged $172.15/b in May, a new multi-year record. This was higher by $28.90 m-o-m, and by $80.81 y-o-y, as deliveries of domestic and foreign supplies failed to keep pace with demand.

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



Sources: Argus and OPEC.

The USGC gasoline crack spread gained $20.74 m-o-m to average $62.29/b in May, which is an increase of $36.13 y-o-y.

USGC **jet/kerosene crack spreads** weakened, affected by stronger refinery outputs, although jet fuel requirements for air passenger travel were supportive. Jet fuel margins were replaced in May by gasoline as the main margin contributor. Going forward, with the onset of the summer season, jet fuel markets are expected to respond positively to upside potential in air travel activity, which should add support to middle distillate crack spreads. The US jet/kerosene crack spread against WTI averaged $52.07/b, down by $3.62 m-o-m, but higher by $43.32 y-o-y.

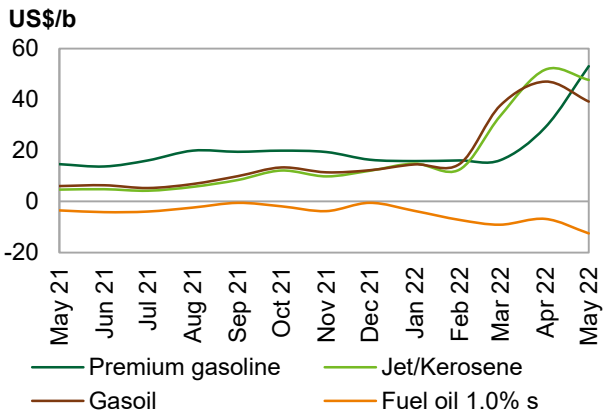
The USGC **gasoil crack spread** against WTI exhibited a loss, as diesel stocks showed signs of recovery. However, US gasoil prices averaged $140.05/b in May, compared with $137.21/b in April, higher by $2.84 m-o-m, and $69.11 higher than a year earlier. The current level is the highest in more than five years. Compared to the previous month, diesel versus gasoline price differentials widened considerably, signalling stronger profits for gasoline production over diesel. This could incentivise US refiners to operate at maximum gasoline yields going forward. Strong exports to Europe amid product tightness there given the recent decisions to partially ban Russian products amid firm global manufacturing and industrial activities, should continue to provide some support to the US gasoil market in the near term and prevent a sharper downturn. The US gasoil crack spread against WTI averaged $30.19/b, down by $5.32 m-o-m, but up by $24.43 y-o-y.

USGC **fuel oil crack spreads** against WTI lost some ground and returned to negative territory in May as fuel oil supplies rose. Going forward, strong interest for fuel oil destruction to alleviate the gasoil tightness and rising fuel oil demand for feedstock blending amid high crude prices is expected to contribute positively to markets for the product. In May, the US fuel oil crack spread against WTI averaged 77¢/b, lower by $3.09/b m-o-m, but up by $3.92 y-o-y.

European market

Gasoline crack spreads saw an extension of the robust performance seen in the previous month and drove European refining margins to post substantial gains in May. The gasoline crack spread rose $24/b m-o-m to $53/b, while gasoline blending components, including MTBE, toluene and mixed xylene, were reported to have witnessed tight supplies throughout May. Furthermore, the onset of the summer driving season additionally contributed to the healthy gasoline crack spread. Moreover, gasoline exports were high, with reportedly firm flows shipped to the US, despite supressed domestic stock levels. The gasoline crack spread against Brent averaged $53.01/b in May, up by $23.94 m-o-m and by $38.37 y-o-y.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



Sources: Argus and OPEC.

In May, **jet/kerosene margins** took a downturn, affected by rising production levels as refineries in Europe increased their utilization rates. The Rotterdam jet/kerosene crack spread against Brent averaged $47.68/b, down by $4.02 m-o-m, but up by $42.97 y-o-y.

Gasoil 10 ppm crack spreads weakened as stronger gasoil output levels partially offset the impact of record breaking high prices, and pointed to some relief to the previously increasingly tight gasoil balance in the region as This led to an improvement of the regional diesel supply-demand imbalance, which was further exacerbated by a reduction in refinery output amid the onset of the heavy refinery maintenance season, while gasoil requirements from the manufacturing and industrial sectors remained well sustained. Gasoil prices rose to a new multi-year high of $156.48/b compared with $112.77/b (+39%) the previous month, and were up by $69.94/b (+124%) compared to the same time last year. The gasoil crack spread against Brent averaged $39.24/b, which was lower by $7.85 m-o-m and by $33.18 y-o-y.

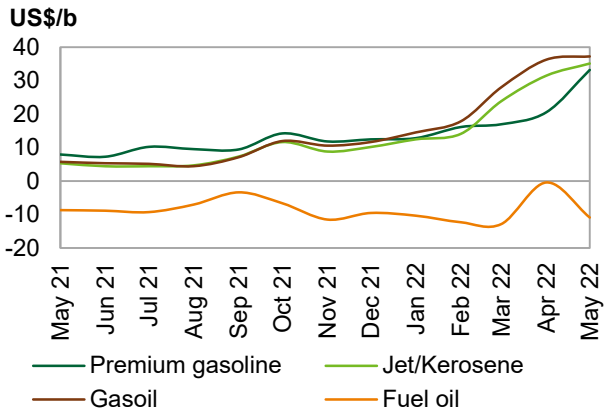
At the bottom of the barrel, **fuel oil 1.0% crack spreads** declined and headed deeper into negative territory. Maintenance works at secondary and conversion units likely weighed on fuel oil processing rates, and led to a relatively higher volume availability of the residual fuel. However, prices for the same product rose considerably in response to higher crude prices, although high sulphur fuel oil was the only product across the European barrel priced below the $100/b mark in May. In Europe, fuel oil cracks averaged minus $12.47/b in May, having lost $5.70 m-o-m and $9.03 y-o-y.

Asian market

The **Asian gasoline 92 crack spread** was relatively unchanged as the lifting of COVID-19 lockdown and mobility restrictions led to an improvement in gasoline demand in Southeast Asia. However, the most recent COVID outbreaks in China and South Korea partially offset the strength of the region's fuels markets. The Singapore gasoline crack spread against Oman in May averaged $33.16/b, up by $12.62 m-o-m and by $25.19 y-o-y.

Asian **naphtha crack spreads** reversed trends again and exhibited losses. The spread was affected by ample supply availability, amid weaker petrochemical feedstock requirements over the month due to high volumes of steam cracker maintenance. The Singapore naphtha crack spread against Oman averaged minus $12.07/b, having dropped by $6.91 m-o-m and by $11.60 y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Dubai



Sources: Argus and OPEC.

In the middle of the barrel, **jet/kerosene crack spreads** trended upwards as some countries eased COVID restrictions, while refinery outputs declined. Moreover, a contraction in jet fuel balances in other regions gave way to stronger import requirements, particularly from the US, as they sought to replenish suppressed stockpiles. At the same time, Singapore's regraded swap, the jet fuel differential to diesel, has narrowed sharply since early March, as it turned into a deep discount after the geopolitical tensions in Eastern Europe further contracted an already tight diesel market. This will likely continue to incentivize refiners to maximize diesel yields over that of jet fuel. The Singapore jet/kerosene crack spread against Oman averaged $35.07/b, up by $3.63 m-o-m and by $29.77 y-o-y.

The Singapore **gasoil crack spread** soared to a new record-breaking high. This reflected strong regional demand, firm industrial and manufacturing activity, as well as a contraction in regional gasoil availability amid expectations for an even tighter market going forward. The Singapore gasoil crack spread against Oman averaged $37.25/b, up by 98¢ m-o-m and by $31.55 y-o-y.

The Singapore **fuel oil 3.5% crack spread** saw an extension of its downturn trajectory, pressured by weaker fundamentals as strong high sulphur fuel oil availability in the region amid seasonally lower demand weighed on HSFO markets. Going forward, an upside potential in fuel oil markets could be expected once the peak maintenance season reaches an end and with a possible revived focus on fuel oil as a feedstock in the utilities sector in the near term. Singapore fuel oil cracks against Oman averaged minus $10.92/b, down by $10.48 m-o-m and lower by $2.21 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	Jun 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	Jun 22 – Jul 22	↓ Negative impact on product markets	↓ Negative impact on product markets	↓ Negative impact on product markets	The expected rise in product output after peak turnarounds should lead to a recovery in global product inventory levels, and fuel price relief.
Summer season	Jun 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. This consequently points to product tightness over the summer months.

Source: OPEC.

Table 6 - 2: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				*Refinery utilization, %*			
	Mar 22	Apr 22	May 22	Change May/Apr	Mar 22	Apr 22	May 22	Change May/Apr
US	**16.27**	**16.15**	**16.61**	**0.46**	**91.01**	**92.09**	**93.16**	**1.1 pp**
Euro-14, plus UK and Norway	**9.23**	**9.41**	**9.60**	**0.19**	**78.41**	**79.88**	**81.49**	**1.6 pp**
France	0.80	0.80	0.83	0.02	69.25	69.77	71.82	2.1 pp
Germany	1.72	1.66	1.69	0.03	83.70	80.67	82.21	1.5 pp
Italy	1.23	1.29	1.31	0.02	64.79	67.89	69.01	1.1 pp
UK	1.05	1.07	1.09	0.02	89.43	91.30	93.22	1.9 pp
Selected Asia*	**26.14**	**25.18**	**25.52**	**0.35**	**90.62**	**87.28**	**88.48**	**1.2 pp**

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

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

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

Refinery crude throughput	2019	2020	2021	2Q21	3Q21	4Q21	1Q22	2Q22
OECD Americas	**19.04**	**16.59**	**17.79**	**18.20**	**18.42**	**18.20**	**18.38**	**18.99**
of which US	*16.99*	*14.72*	*15.65*	*16.17*	*16.22*	*16.02*	*16.02*	*16.59*
OECD Europe	**12.13**	**10.65**	**10.92**	**10.65**	**11.35**	**11.50**	**11.11**	**11.31**
of which:								
France	*1.00*	*0.67*	*0.69*	*0.65*	*0.79*	*0.76*	*0.79*	*0.83*
Germany	*1.78*	*1.72*	*1.72*	*1.66*	*1.75*	*1.90*	*1.75*	*1.72*
Italy	*1.35*	*1.11*	*1.23*	*1.24*	*1.27*	*1.34*	*1.16*	*1.33*
UK	*1.08*	*0.92*	*0.92*	*0.94*	*0.99*	*0.99*	*1.04*	*1.09*
OECD Asia Pacific	**6.79**	**5.89**	**5.78**	**5.49**	**5.78**	**6.01**	**6.36**	**5.71**
of which Japan	*3.02*	*2.48*	*2.49*	*2.22*	*2.51*	*2.69*	*2.80*	*2.92*
Total OECD	**37.96**	**33.14**	**34.48**	**34.33**	**35.55**	**35.71**	**35.85**	**36.01**
Latin America	**3.83**	**3.12**	**3.41**	**3.27**	**3.44**	**3.51**	**3.53**	**3.63**
Middle East	**6.97**	**6.09**	**6.78**	**6.52**	**6.80**	**7.27**	**7.40**	**7.88**
Africa	**1.97**	**1.79**	**1.97**	**2.00**	**1.96**	**1.98**	**1.99**	**2.02**
India	**5.04**	**4.42**	**4.73**	**4.55**	**4.40**	**5.02**	**5.18**	**5.23**
China	**13.02**	**13.48**	**14.07**	**14.38**	**13.76**	**14.03**	**13.96**	**12.92**
Other Asia	**5.13**	**4.74**	**4.80**	**4.85**	**4.84**	**4.90**	**5.09**	**5.19**
Russia	**5.70**	**5.39**	**5.61**	**5.52**	**5.63**	**5.75**	**5.62**	**5.27**
Other Eurasia	**1.21**	**1.03**	**1.18**	**1.16**	**1.28**	**1.20**	**1.18**	**0.97**
Other Europe	**0.55**	**0.43**	**0.41**	**0.48**	**0.43**	**0.33**	**0.39**	**0.44**
Total Non-OECD	**43.40**	**40.49**	**42.95**	**42.72**	**42.55**	**44.01**	**44.33**	**43.54**
Total world	**81.36**	**73.63**	**77.43**	**77.06**	**78.09**	**79.72**	**80.18**	**79.54**

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

		Apr 22	May 22	Change May/Apr	Annual avg. 2021	Year-to-date 2022
US Gulf (Cargoes FOB)						
Naphtha*		100.37	98.69	-1.68	70.70	98.39
Premium gasoline	(unleaded 93)	143.25	172.15	28.90	91.41	135.65
Regular gasoline	(unleaded 87)	133.51	157.81	24.30	86.72	128.00
Jet/Kerosene		157.39	161.93	4.54	78.32	136.26
Gasoil	(0.2% S)	137.21	140.05	2.84	73.94	122.75
Fuel oil	(3.0% S)	89.41	94.82	5.41	59.84	86.52
Rotterdam (Barges FoB)						
Naphtha		100.31	98.23	-2.08	70.15	98.36
Premium gasoline	(unleaded 98)	133.44	166.14	32.70	85.89	130.22
Jet/Kerosene		156.07	160.81	4.74	77.17	136.26
Gasoil/Diesel	(10 ppm)	151.46	152.37	0.91	78.31	134.85
Fuel oil	(1.0% S)	97.60	100.66	3.06	69.12	96.35
Fuel oil	(3.5% S)	97.50	99.42	1.92	61.38	90.49
Mediterranean (Cargoes FOB)						
Naphtha		97.78	94.86	-2.92	69.40	96.34
Premium gasoline**		126.04	148.78	22.74	80.46	121.62
Jet/Kerosene		150.30	157.01	6.71	75.06	132.53
Diesel		147.85	148.63	0.78	77.73	131.90
Fuel oil	(1.0% S)	104.14	106.96	2.82	70.51	100.74
Fuel oil	(3.5% S)	87.17	91.99	4.82	58.98	84.35
Singapore (Cargoes FOB)						
Naphtha		97.75	95.76	-1.99	70.83	97.05
Premium gasoline	(unleaded 95)	126.73	146.88	20.15	80.28	122.69
Regular gasoline	(unleaded 92)	123.45	140.99	17.54	78.28	119.27
Jet/Kerosene		134.35	142.90	8.55	75.10	122.70
Gasoil/Diesel	(50 ppm)	148.36	152.90	4.54	77.36	130.53
Fuel oil	(180 cst)	137.21	143.96	6.75	75.71	124.82
Fuel oil	(380 cst 3.5% S)	102.47	96.91	-5.56	62.07	89.95

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

Sources: Argus and OPEC.

Tanker Market

Dirty tanker spot freight rates fell back in May from the sharp gains seen during the previous month. Suezmax rates declined 37% m-o-m and Aframax fell 22% over the same period, as ample availability overwhelmed the upward pressure caused by trade dislocations. VLCC rates declined 20%, with losses both East and West of Suez.

In contrast, clean rates continued to surge, up 37% on average amid tight product markets. Preliminary data for June, however, shows reduced momentum in recent weeks.

Dirty spot freight rates are likely to remain capped by ample tanker supply, clean rates will benefit from trade shifts pointing to higher vessel demand.

Spot fixtures

The latest estimates show **global spot fixtures** declined in May, averaging 12.8 mb/d. Fixtures fell 3.8 mb/d, or around 23% m-o-m. Compared with the previous year, spot fixtures were down 2.8 mb/d, or about 18%.

Table 7 - 1: Spot fixtures, mb/d

Spot fixtures	Mar 22	Apr 22	May 22	*Change* May 22/Apr 22
All areas	15.26	16.64	12.82	-3.82
OPEC	10.07	10.79	9.25	-1.54
Middle East/East	5.72	6.75	5.72	-1.03
Middle East/West	1.10	1.04	1.09	0.05
Outside Middle East	3.25	3.00	2.44	-0.56

Sources: Oil Movements and OPEC.

OPEC spot fixtures also declined m-o-m in May, averaging 9.3 mb/d. This represented a drop of 14%, or 1.5 mb/d. In comparison with the same month in 2021, they were about 1.2 mb/d, or 11%, lower.

Middle East-to-East fixtures fell 1.0 mb/d, or 15%, to average 5.7 mb/d. Compared with the same month last year, eastward flows declined 0.4 mb/d, or over 6%.

In contrast, spot fixtures from the **Middle East-to-West** rose m-o-m by around 50 tb/d, or 5%, in May, to average 1.0 mb/d. Y-o-y, rates were 0.1 mb/d, or 10%, higher.

Outside the Middle East, fixtures averaged 2.4 mb/d in May. This represents a m-o-m decline of 0.6 mb/d, or 19%, and 0.9 mb/d, or 27%, y-o-y.

Sailings and arrivals

OPEC sailings declined m-o-m by 0.5 mb/d, or over 2%, in May to average 22.9 mb/d. OPEC sailings were 2.1 mb/d, or over 10%, higher compared with the same month a year ago.

Middle East sailings edged up in May to average 17.8 mb/d. Y-o-y, sailings from the region rose 2.6 mb/d, or around 17%, compared with May 2021.

Crude arrivals in May saw declines across all regions except Europe, reversing the trend seen last month. Arrivals in the Far East increased m-o-m by 0.1 mb/d, or about 1%, to average 16.0 mb/d. Y-o-y, arrivals were 3.4 mb/d, or about 27%, higher. In West Asia, arrivals declined m-o-m by 0.5 mb/d, or 5%, in May to average 8.6 mb/d, representing a y-o-y increase of 2.3 mb/d, or 37%.

Meanwhile, arrivals in North America edged down slightly to average 8.9 mb/d, representing a y-o-y rise of 0.4 mb/d, or about 5%. In contrast to the other regions, European arrivals rose m-o-m by 0.4 mb/d, or 3%, to average 13.7 mb/d. However, this was 1.7 mb/d, or about 14%, higher than in the same month last year.

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

Sailings	Mar 22	Apr 22	May 22	Change May 22/Apr 22
OPEC	23.10	23.41	22.88	-0.53
Middle East	17.18	17.97	17.76	-0.21
Arrivals				
North America	8.75	8.95	8.89	-0.06
Europe	12.91	13.28	13.66	0.38
Far East	15.31	16.12	16.00	-0.12
West Asia	8.37	9.04	8.57	-0.47

Sources: Oil Movements and OPEC.

Dirty tanker freight rates

Very large crude carriers (VLCCs)

VLCC spot rates lost the previous month's gains, declining 20% on average m-o-m. Rates fell on all reported routes, as ample tanker availability overwhelmed the temporary gains driven by trade dislocations.

On the **Middle East-to-East** route, rates fell 16% m-o-m to average WS42 points but were 24% higher y-o-y. Rates on the **Middle East-to-West** route declined 19% m-o-m to average WS25 points. However, this was still a y-o-y gain of 14%.

West Africa-to-East spot rates dropped 23% m-o-m to average WS44 in May. Compared with the same month last year, rates were 22% higher.

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

VLCC	Size *1,000 DWT*	Mar 22	Apr 22	May 22	Change May 22/Apr 22
Middle East/East	230-280	44	50	42	-8
Middle East/West	270-285	23	31	25	-6
West Africa/East	260	44	57	44	-13

Sources: Argus and OPEC.

Suezmax

Suezmax rates also lost the previous month's strong gains in May, dropping 37% m-o-m. Y-o-y, rates were 90% higher. Rates fell back as the upward pressure from trade dislocations in some regions was offset by ample availability globally.

Rates on the **West Africa-to-US Gulf Coast (USGC)** route declined by 39% m-o-m in May to average WS83. Compared with the same month last year, rates were 80% higher.

Spot freight rates on the **USGC-to-Europe** route rose 34% over the previous month to average WS78 points. Y-o-y, rates were 100% higher.

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

Suezmax	Size *1,000 DWT*	Mar 22	Apr 22	May 22	Change May 22/Apr 22
West Africa/US Gulf Coast	130-135	82	136	83	-53
US Gulf Coast/ Europe	150	77	118	78	-40

Sources: Argus and OPEC.

Aframax

Aframax spot freight rates similarly gave up the gains seen the month before. On average, spot Aframax rates fell 22% m-o-m. Compared with the same month last year, rates were 73% higher.

Rates on the **Indonesia-to-East** route were one of the bright spots in the market in May, increasing 11% m-o-m, averaging WS172. However, y-o-y, rates on the route were up 105%.

Spot rates on the **Caribbean-to-US East Coast (USEC)** route declined 31% m-o-m to average WS163. Y-o-y, rates were also 58% higher.

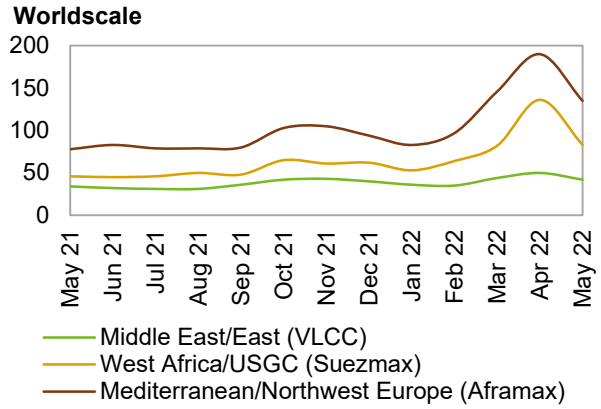
Table 7 - 5: Dirty Aframax spot tanker freight rates, WS

Aframax	Size 1,000 DWT	Mar 22	Apr 22	May 22	Change May 22/Apr 22
Indonesia/East	80-85	134	155	172	17
Caribbean/US East Coast	80-85	167	235	163	-72
Mediterranean/Mediterranean	80-85	161	199	139	-60
Mediterranean/Northwest Europe	80-85	146	190	135	-55

Sources: Argus and OPEC.

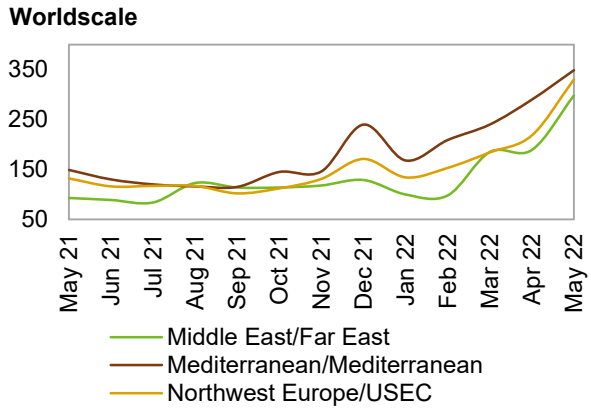
Cross-Med spot freight rates saw similar declines in May, down around 30% m-o-m to average WS139. Y-o-y, rates were 60% higher. On the **Mediterranean-to-NWE** route, rates fell 29% m-o-m to average WS135. Compared with the same month last year, rates were 73% higher.

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



Sources: Argus and OPEC.

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



Sources: Argus and OPEC.

Clean tanker freight rates

Clean spot freight rates also showed gains across all monitored routes. On average, rates increased 37% m-o-m in May and were up by 147% compared with the levels seen in the same month last year. Gains were seen on both sides of the Suez, amid a continued tight product balance, globally.

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

East of Suez	Size 1,000 DWT	Mar 22	Apr 22	May 22	Change May 22/Apr 22
Middle East/East	30-35	185	189	298	109
Singapore/East	30-35	208	223	336	113
West of Suez					
Northwest Europe/US East Coast	33-37	184	218	330	112
Mediterranean/Mediterranean	30-35	240	290	349	59
Mediterranean/Northwest Europe	30-35	248	300	359	59

Sources: Argus and OPEC.

Rates on the **Middle East-to-East** route jumped 58% m-o-m in May, building on the improvements seen in recent months, to average WS298. Y-o-y, rates are up 220%. Freight rates on the **Singapore-to-East** route gained 51% m-o-m to average WS336 and were 130% higher compared with the same month last year.

In the West of Suez market, rates on the **Northwest Europe (NWE)-to-USEC** route rose 51% m-o-m to average WS330 points. They were 150% higher y-o-y. Rates in the **Cross-Med** and **Med-to-NWE** saw gains of 20% each to average WS349 and WS359 points, respectively. Compared with the same month last year, rates were 134% higher Cross-Med and up 126% on the Med-to-NWE route.

Crude and Refined Products Trade

Preliminary data shows US crude imports averaged 6.4 mb/d in May, a gain of 6% m-o-m, while crude exports set a new record high of 3.7 mb/d in May. US product imports remained steady, averaging 2.2 mb/d, supported by an increase in gasoline flows ahead of the driving season. US crude and product exports are likely to see steady growth, supported by Europe's need for alternative supplies of crude and products.

China's crude imports averaged 10.5 mb/d in April, continuing to pick up from weak performance in February, despite lower refinery throughput. Preliminary data shows crude inflows averaging 10.8 mb/d. China's product exports edged lower in April, averaging 1.0 mb/d, as declines in gasoline, diesel and fuel oil exports offset increased jet fuel outflows. The long-awaited lifting of lockdown measures should support crude imports in June, although this could be offset by refiners drawing from existing inventories. Reports that China has issued a second round of product export quotas should help to alleviate regional market tightness in diesel, gasoline and jet fuel.

India's crude imports jumped 13%, averaging 5.1 mb/d in April, as refineries maximized run rates and snapped up discounted Russian crude. Crude imports are seen declining in May, although still higher y-o-y, with Russian inflows more than doubling. Product imports are seen declining in May, amid reduced inflows of fuel oil. Meanwhile, product exports are expected to increase in May, driven by higher diesel outflows.

Japan's crude imports saw the fourth-consecutive m-o-m gain in April, edging up to average 2.9 mb/d amid expectations for improving product demand. Japan's product imports, including LPG, were broadly flat, while product exports fell 30% m-o-m, with declines across most major products amid lower flows to China.

OECD Europe trade flows remain a key uncertainty due to sanctions and the challenge of sourcing crude and refined products from other suppliers. Tanker tracking data shows crude imports at steady levels through April, accelerating in May to ~9.3 mb/d. Crude exports were seen lower with more North Sea supply remaining in the region.

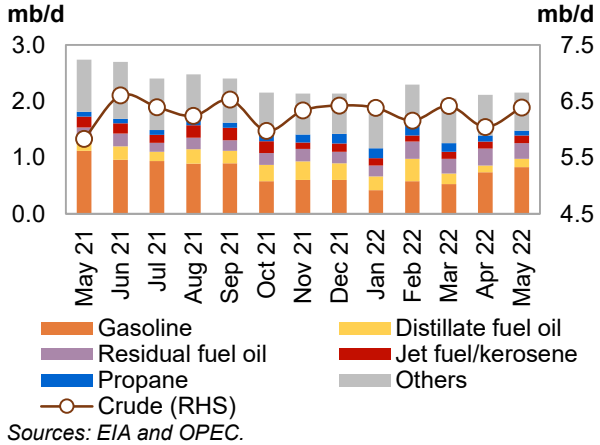
Preliminary data indicates Russian crude exports have held up despite trade dislocations, with the increase in flows to Asia estimated to be considerably outpacing the decline in exports to Europe.

US

Preliminary data shows **US crude imports** rose 6%, or 0.3 mb/d, m-o-m in **May** to average 6.4 mb/d. Compared with the same month in 2021, they were around 0.6 mb/d, or almost 10%, higher.

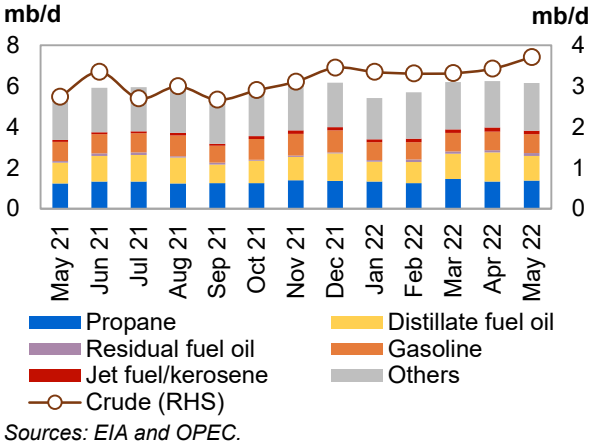
US crude exports set a new record high in **May**, averaging 3.7 mb/d, a gain of 8%, or 0.3 mb/d, m-o-m. Exports were almost 1.0 mb/d, or around 36%, higher than in the same month last year. Gains were driven by higher flows to Europe, which continued to outpace exports to Asia, amid shifting trade flows.

Graph 8 - 1: US imports of crude and products



Sources: EIA and OPEC.

Graph 8 - 2: US exports of crude and products



Sources: EIA and OPEC.

The **top three suppliers of crude** to the US remained unchanged in **March**, according to the latest monthly EIA data. Canada held the top spot with a share of 63%, averaging above 4.0 mb/d for the fifth time on record. Mexico was second with a share of 10%, after increasing by 84 tb/d m-o-m. Saudi Arabia was third with a share of almost 8%, following a gain of 61 tb/d.

Singapore was the top **destination** for **US crude exports** in March, with a share of 11%. The Netherlands and South Korea both held a 10% share, followed by Canada with 9%.

Based on weekly data, **US net crude imports** averaged 2.7 mb/d in **May**, compared with 2.6 mb/d the month before and 2.8 mb/d in the same month last year.

On the **product** side, figures remained steady, averaging 2.2 mb/d, some 2%, or around 40 tb/d, higher. An increase in gasoline and residual fuels offset a sharp fall in distillate imports. Compared with the same month last year, product imports declined by 22%, or about 0.6 mb/d.

Product exports fell back from the high levels seen the month before, averaging 6.2 mb/d in May, representing a decline of 2%, or about 0.1 mb/d m-o-m. Distillate exports were sharply lower, offsetting a pick-up in gasoline and residual fuel. Compared with May 2021, product exports were 0.6 mb/d, or about 11%, higher.

As a result, preliminary data shows **US net product exports** averaged just under 4.0 mb/d in May, compared with 4.1 mb/d in the previous month and 2.8 mb/d in the same month of 2021.

Preliminary data indicates that US **net crude and product exports** averaged 1.3 mb/d in May. This compares with net exports of 1.5 mb/d the month before and net imports of 0.3 tb/d in May 2021.

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

US	Mar 22	Apr 22	May 22	Change May 22/Apr 22
Crude oil	3.10	2.62	2.68	0.06
Total products	-4.15	-4.13	-4.00	0.13
Total crude and products	**-1.05**	**-1.52**	**-1.32**	**0.19**

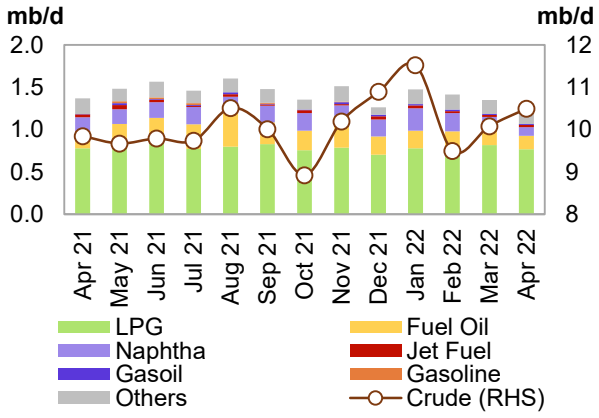
Note: Totals may not add up due to independent rounding.
Sources: EIA and OPEC.

Looking ahead, US crude imports should remain supported over the driving season, along with gasoline inflows. US crude and product exports are likely to see steady growth, supported by Europe's need for alternative supplies of crude and products.

China

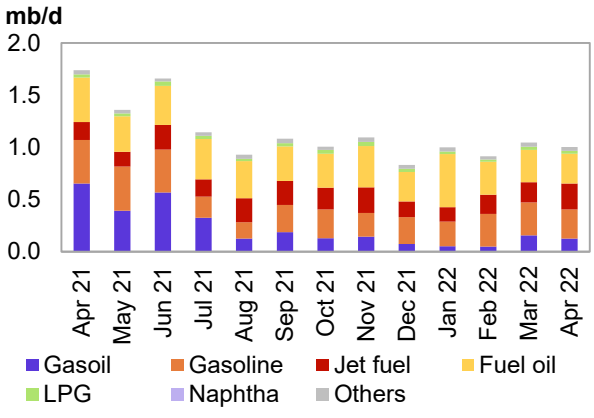
China's crude imports averaged 10.5 mb/d in April, continuing to pick up from weak performance in February, despite lower refinery throughput. M-o-m, crude flows into China were 4%, or 0.4 mb/d, higher. Recently released customs data shows China's crude imports reached 10.8 mb/d in **May**, an increase of 0.3 mb/d or 0.3 mb/d, despite expectations that reduced demand due to COVID-19 lockdowns would weigh on imports. Compared with the same month last year, crude imports rose 7%, or 0.6 mb/d in April and were up 8% or 0.8 mb/d y-o-y in May.

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 April, with a share of 21%, amid a surge in volume. Russia remained in second place at 15%, with volumes increasing slightly. Iraq came in third with a 10% share, despite a drop in volume.

Product imports declined a further 9% or 0.1 mb/d to average 1.2 mb/d, amid declines across a broad range of products, including naphtha and fuel oil. Compared with the same month last year, product imports decreased by 11%, or around 150 tb/d.

Product exports edged lower in April, averaging 1.0 mb/d, as declines in gasoline, diesel and fuel oil exports offset increased jet fuel outflows. M-o-m, product exports were about 4%, or 42 tb/d, lower. Y-o-y, product outflows fell 42%, or 0.7 mb/d, amid a government policy of more closely tailoring refinery output to domestic needs.

As a result, China's **net product imports** averaged 220 tb/d in April, compared with net imports of 296 tb/d the month before and net product exports of 371 tb/d in the same month of 2021.

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

China	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
Crude oil	9.45	10.09	10.46	0.37
Total products	0.50	0.30	0.22	-0.08
Total crude and products	**9.95**	**10.38**	**10.68**	**0.30**

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

Sources: China, Oil and Gas Petrochemicals and OPEC.

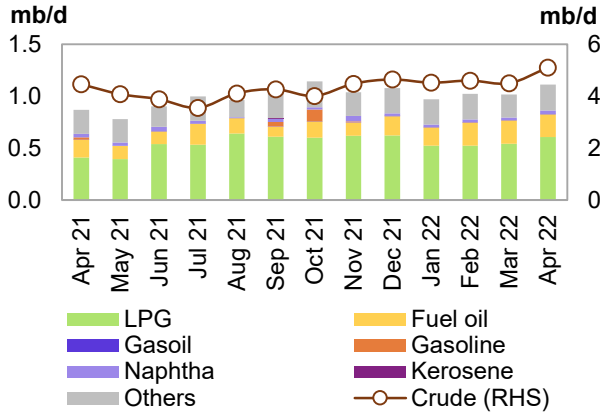
Looking ahead, the long-awaited lifting of lockdown measures should support crude imports in June, although this could be offset by refiners drawing from existing inventories. China's product exports could increase, as the government allows outflow to relieve excessive inventories.

India

India's crude imports jumped 13%, or 0.6 mb/d, to average 5.1 mb/d in April, as refineries maximized run rates and snapped up discounted Russian crude. Crude inflows were 14%, or 0.6 mb/d, higher y-o-y.

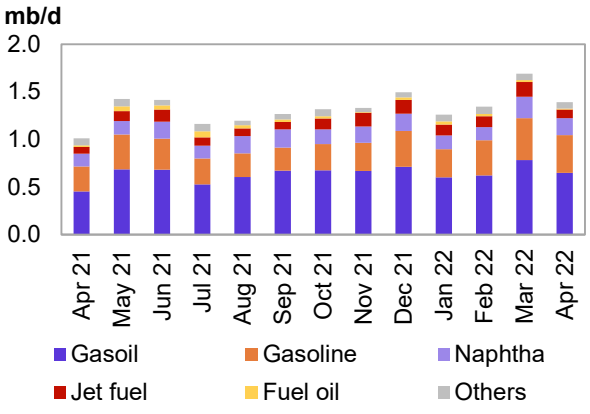
In terms of **crude imports by source**, the latest data shows Iraq moved up to the top position in **March**, with a share of 30%. Saudi Arabia was second with 17%, followed by Nigeria with almost 10%. Official data shows India still only importing limited volumes of Russian crude in March, while Kpler data shows flows surging in April and May, as domestic refiners took advantage of deeply discounted Urals crude.

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



Sources: PPAC and OPEC.

Graph 8 - 6: India's exports of products



Sources: PPAC and OPEC.

Regarding **products**, **imports** averaged 1.1 mb/d, representing a 9% or 96 tb/d increase, supported by higher flows of LPG and naphtha. Compared with the same month in 2021, inflows were 28%, or over 0.2 mb/d, higher.

Product exports fell back from a more than 9-year high, averaging 1.4 mb/d. Declines were seen across most major products, particularly diesel. M-o-m, product exports were almost 18%, or close to 0.3 mb/d, lower amid lower flows to all regions, except Latin America. Compared with the same month last year, product exports were 37%, or 0.4 mb/d, higher.

As a result, **net product exports** averaged 280 tb/d in April, compared with 671 tb/d the month before and 145 tb/d in the same month of 2021.

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

India	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
Crude oil	4.60	4.49	5.09	0.60
Total products	-0.32	-0.67	-0.28	0.39
Total crude and products	**4.28**	**3.82**	**4.81**	**0.99**

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.

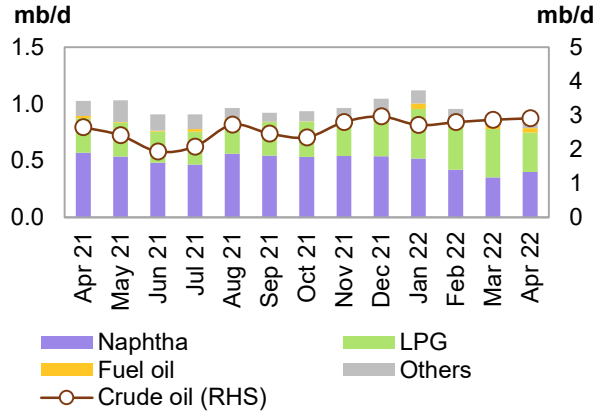
Looking ahead, crude imports were seen declining in May, although still higher y-o-y, with Russian inflows more than doubling. Product imports were also seen declining in May, amid reduced inflows of fuel oil. Product exports were expected to increase in May, driven by higher diesel outflows.

Japan

Japan's crude imports saw the fourth-consecutive m-o-m gain in April, edging up to average 2.9 mb/d amid expectations for improving product demand. M-o-m, crude inflows were about 2%, or about 44 tb/d, higher. Compared with the same month last year, they gained almost 10%, or 262 tb/d.

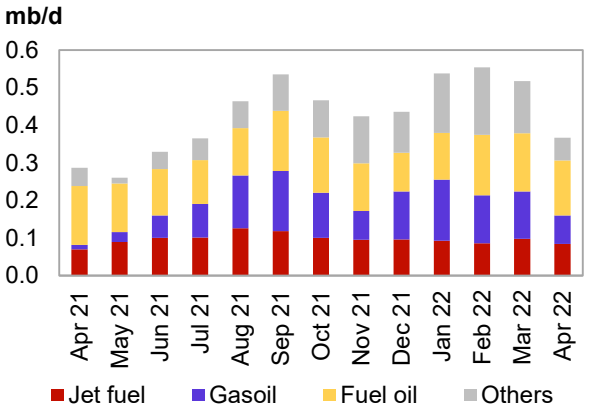
In terms of **crude imports by source**, Saudi Arabia claimed the top spot with a share of almost 44%, amid higher inflows. The United Arab Emirates was second with 32%, followed by Kuwait with around 8%. Russia supplied 84 tb/d, or around 3%, of Japan's crude imports in April, compared with about 4% the month before.

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



Sources: METI and OPEC.

Graph 8 - 8: Japan's exports of products



Sources: METI and OPEC.

Product imports, including LPG, were broadly unchanged at 857 tb/d in April, with gains in gasoline and naphtha offset by a sharp fall in LPG amid reduced heating demand. Y-o-y, imports declined by 17%, or 170 tb/d.

Product exports fell 30%, or 151 tb/d m-o-m, to average 367 tb/d, with declines across most major products amid lower flows to China. In contrast, product outflows were 80 tb/d, or around 28%, higher compared with the same month of 2021.

As a consequence, Japan's **net product imports** averaged 489 tb/d in April. This was up from 334 tb/d the month before and 739 tb/d in April 2021.

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

Japan	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
Crude oil	2.80	2.87	2.91	0.04
Total products	0.40	0.33	0.49	0.16
Total crude and products	**3.20**	**3.21**	**3.40**	**0.20**

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

Sources: METI and OPEC.

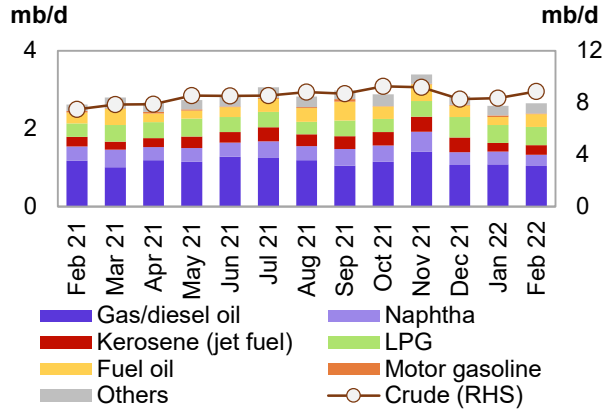
Looking ahead, crude imports are expected to decline in May, but still remain higher y-o-y amid efforts to maintain an inventory buffer. Product imports were seen declining in May due to reduced naphtha inflows, while product exports were seen supported by higher diesel outflows.

OECD Europe

The latest data for **OECD Europe** crude imports averaged 8.8 mb/d in February, up 6%, or 0.5 mb/d, compared with the previous month. Y-o-y, imports rose by 1.4 mb/d, or almost 19%.

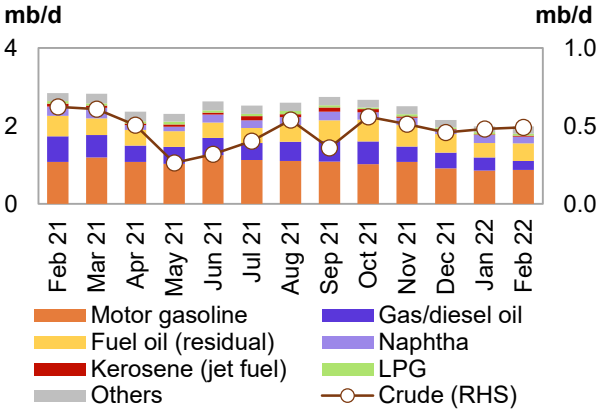
In terms of **import sources** from outside the region, Russia retained the top spot in February with almost 3.2 mb/d, followed by the US, which supplied close to 1.2 mb/d, and Kazakhstan with 0.9 mb/d. The high share of Russian crude imports points to the challenge Europe is facing in reducing imports from Russia. The EU published the details of its oil embargo on 3 June, which bans the “purchase, import or transfer, directly or indirectly, crude oil or petroleum products” from Russia, well as prohibits providing brokering, technical and financial assistance, including insurance and reinsurance, for the "transport, including through ship-to-ship transfers, to third countries of crude oil or petroleum products", Argus reported. The ban includes various exemptions and periods of phasing in. The land-locked countries of Hungary, the Czech Republic, Slovakia and Croatia are exempt from the ban and includes the possibility of sourcing Russian crude by pipeline. However, the onward transfer or re-sale of Russian crude or petroleum products is prohibited.

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



Sources: IEA and OPEC.

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



Sources: IEA and OPEC.

Crude exports edged higher to average 491 tb/d, up 2%, or 11 tb/d m-o-m, but were still 21%, or 130 tb/d lower y-o-y, amid reduced buying by Chinese independents.

In terms of **destination**, China remained the top buyer of OECD Europe crude exports outside the region, purchasing 360 tb/d in February, up from 323 tb/d the month before.

Net crude imports averaged 8.4 mb/d in February, compared with 7.9 mb/d the month before and 6.9 mb/d in the same month last year.

On the **product** side, **imports** picked up in February, averaging 2.6 mb/d, a gain of about 2%, or 63 tb/d, with gains in fuel oil offsetting declines in gasoline and diesel. Product imports rose around 1%, or 31 tb/d, compared with February 2021 levels.

Product exports were broadly unchanged, averaging just under 2 mb/d, with declines in diesel offsetting higher flows of gasoline and fuel oil. Y-o-y, exports were close to 30%, or 0.9 mb/d, lower than in the same month of 2021.

Net product imports averaged 659 tb/d in February, compared with net imports of 599 tb/d in January and net product exports of 219 tb/d in February 2021, when extended lockdown measures led to a surplus of refined products in the region.

Combined, **net crude and product imports** averaged 9.0 mb/d in February. This compares with 8.5 mb/d in January 2021, and 6.7 mb/d in February 2021.

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

OECD Europe	Dec 21	Jan 22	Feb 22	Change Feb 22/Jan 22
Crude oil	7.81	7.86	8.38	0.52
Total products	0.68	0.60	0.66	0.06
Total crude and products	**8.49**	**8.46**	**9.04**	**0.58**

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

Sources: IEA and OPEC.

Looking ahead, crude imports were seen hovering around current levels, before picking up in May, as the region sought to source alternative crudes. Crude exports were seen lower with more North Sea supply remaining in the region. Meanwhile, product exports were seen declining through April.

Eurasia

Total crude oil exports from Russia and Central Asia rose in **April**, averaging 7.2 mb/d. M-o-m, crude exports from the region increased 629 tb/d, or about 10%. Compared with the same month in 2021, total crude exports from the region were about 15%, or 949 tb/d, higher. The increase was driven primarily by higher Russian flows from the Baltic and Black Seas. Far East exports also increased.

Crude exports through the **Transneft system** saw gains across the board in April. Outflows increased by 703 tb/d, or around 18%, to average 4.6 mb/d. Compared with the same month last year, exports were 1.1 mb/d, or 30%, higher. From the **Baltic Sea**, exports rose 319 tb/d m-o-m, or about 24%, to average close to 1.7 mb/d. Exports from Ust-Luga rose 77 tb/d m-o-m, or about 13%, to average 674 tb/d, while flows from Primorsk surged 32%, or 242 tb/d, to average 1.0 mb/d. Shipments from the **Black Sea** port of Novorossiysk were up 211 tb/d, or over 48%, to average 646 tb/d. Meanwhile, shipments via the **Druzhba** pipeline rose 48 tb/d, or 6% m-o-m, to average 857 tb/d. Pacific flows were slightly higher, with **Kozmino** shipments up 98 tb/d, or close to 14% m-o-m, to average 815 tb/d. Exports to China via the **ESPO pipeline** increased by 5% m-o-m to average 619 tb/d in April.

In the **Lukoil system**, exports via the Varandey offshore platform in the Barents Sea averaged 133 tb/d in April, while exports from the Baltic Sea were unchanged.

On other routes, **Russia's Far East** exports declined by 80 tb/d m-o-m, or 23%, to average 264 tb/d in April. This was 26%, or 92 tb/d, lower than volumes in April 2021.

Central Asian exports averaged 228 tb/d in April, representing a 3% increase compared with the month before and a gain of 9%, y-o-y.

Black Sea total exports from the CPC terminal declined further in April, falling 263 tb/d m-o-m, or almost 18%, and were 8%, or 107 tb/d, higher than the same month of 2021. Exports via the Supsa terminal edged up to average 41 mb/d. Exports via the **Baku-Tbilisi-Ceyhan (BTC) pipeline** increased 126 tb/d, or about 23%, to 675 tb/d, representing a gain of 20% y-o-y.

Total product exports from Russia and Central Asia declined 159 tb/d, or 6% m-o-m, to average 2.5 mb/d in April. M-o-m, gasoline, naphtha and gasoil saw declines, while fuel oil and vacuum gas oil (VGO) saw slight gains. Y-o-y, total product exports were 20%, or 626 tb/d, lower in April.

Preliminary data indicates Russian crude exports have held up despite trade dislocations, with the increase in flows to Asia estimated to be outpacing the decline in exports to Europe. Reuters reported recently that Russia's leading producer, Rosneft, is holding back on signing new crude oil deals with two Indian state refiners, as it has committed sales to other customers, indicating that the country has managed to keep exporting its oil despite pressure from sanctions. Uncertainties regarding Russian crude and refined product trade flows due to sanctions and trade dislocations remains a key uncertainty currently impacting the oil market.

Commercial Stock Movements

Preliminary April data shows total OECD commercial oil stocks up m-o-m by 1.8 mb. At 2,628 mb, they were 287 mb less than the same time one year ago, 332 mb lower than the latest five-year average and 299 mb below the 2015-2019 average. Within the components, crude stocks rose m-o-m by 9.3 mb, while product stocks fell m-o-m by 7.5 mb.

At 1,293 mb, OECD crude stocks were 129 mb lower than the same time one year ago, 180 mb lower than the latest five-year average and 179 mb below the 2015-2019 average. OECD product stocks stood at 1,335 mb, representing a deficit of 158 mb with the same time one year ago, 152 mb lower than the latest five-year average and 120 mb below the 2015-2019 average.

In terms of days of forward cover, OECD commercial stocks fell m-o-m by 0.6 days in April to stand at 57.4 days. This is 7.6 days below April 2021 levels, 8.0 days less than the latest five-year average and 4.8 days lower than the 2015-2019 average.

Preliminary data for May shows total US commercial oil stocks rose m-o-m by 8.2 mb to stand at 1,155 mb. This is 139.0 mb lower than the same month in 2021 and 163.3 mb below the latest five-year average. Crude stocks fell by 1.0 mb, while product stocks rose m-o-m by 9.2 mb.

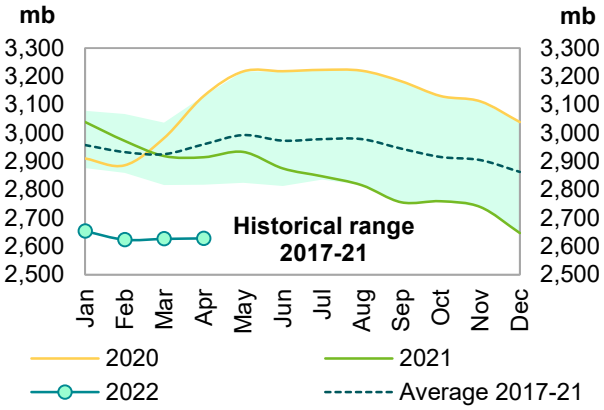
OECD

Preliminary April data sees **total OECD commercial oil stocks** up m-o-m by 1.8 mb. At 2,628 mb, they were 287 mb less than the same time one year ago, 332 mb lower than the latest five-year average and 299 mb below the 2015-2019 average.

Within the components, crude stocks rose m-o-m by 9.3 mb, while product stocks fell m-o-m by 7.5 mb. Total commercial oil stocks in April rose in OECD Asia-Pacific while they declined in OECD Americas and OECD Europe.

OECD **commercial crude stocks** stood at 1,293 mb in April. This is 129 mb lower than the same time a year ago and 180 mb below the latest five-year average. Compared with the previous month, OECD Americas saw a stock build of 1.3 mb, OECD Asia Pacific rose by 4.3 mb and OECD Europe increased by 3.6 mb.

Graph 9 - 1: OECD commercial oil stocks



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

Total product inventories stood at 1,335 mb in April. This is 158 mb less than the same time a year ago, and 152 mb lower than the latest five-year average. Product stocks in OECD Americas and Europe fell m-o-m by 2.4 mb and 7.8 mb, respectively, while product stocks rose m-o-m by 2.8 mb in OECD Asia Pacific.

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

OECD stocks	Apr 21	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
Crude oil	1,422	1,255	1,284	1,293	*9.3*
Products	1,492	1,368	1,342	1,335	*-7.5*
Total	**2,914**	**2,623**	**2,626**	**2,628**	***1.8***
Days of forward cover	**65.1**	**58.3**	**58.0**	**57.4**	***-0.6***

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 0.6 days in April to stand at 57.4 days. This is 7.6 days below April 2021 levels, 8.0 days less than the latest five-year average and 4.8 days lower than the 2015-2019 average. All three OECD regions were below the latest five-year average: the Americas by 8.4 days at 55.8 days, Asia Pacific by 7.9 days at 45.1 days and Europe by 7.0 days at 67.3 days.

OECD Americas

OECD Americas total commercial stocks fell by 1.1 mb m-o-m in April to settle at 1,416 mb. This is 141 mb less than the same month in 2021 and 147 mb lower than the latest five-year average.

Commercial crude oil stocks in OECD Americas rose m-o-m by 1.3 mb in April to stand at 724 mb, which is 90 mb lower than in April 2021 and 89 mb less than the latest five-year average. The stock build came on the back of lower crude runs.

In contrast, **total product stocks** in OECD Americas fell m-o-m by 2.4 mb in April to stand at 693 mb. This was 51 mb lower than in the same month of 2021 and 58 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 fell m-o-m by 4.2 mb in April to settle at 887 mb. This is 115 mb less than the same month in 2021 and 123 mb below the latest five-year average.

OECD Europe's **commercial crude stocks** in April rose m-o-m by 3.6 mb to end the month at 409 mb, which is 13 mb lower than one year ago and 32 mb below the latest five-year average. The build in crude oil inventories came despite higher m-o-m refinery throughput in the EU-14, plus the UK and Norway, which increased by 180 tb/d to stand at 9.41 mb.

Europe's **product stocks** fell m-o-m by 7.8 mb to end April at 478 mb. This is 102 mb lower than a year ago and 91 mb below the latest five-year average. The fall in product stocks could be attributed to higher consumption in the region.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks rose m-o-m by 7.1 mb in April to stand at 325 mb. This is 30 mb lower than a year ago and 62 mb below the latest five-year average.

OECD Asia Pacific's **crude inventories** rose by 4.3 mb m-o-m to end April at 161 mb, which is 26 mb lower than one year ago and 59 mb below the latest five-year average.

OECD Asia Pacific's **total product inventories** also rose m-o-m by 2.8 mb to end April at 164 mb. This is 4.3 mb lower than the same time a year ago and 2.7 mb below the latest five-year average.

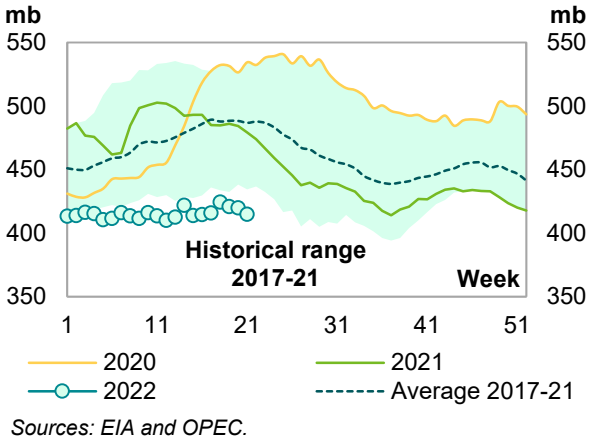
US

Preliminary data for May showed that **total US commercial oil stocks** rose m-o-m by 8.2 mb to stand at 1,155 mb. This is 139.0 mb, or 10.7%, lower than the same month in 2021 and 163.3 mb, or 12.4%, below the latest five-year average. Crude stocks fell by 1.0 mb, while product stocks rose m-o-m by 9.2 mb.

US **commercial crude stocks** in May stood at 414.7 mb. This is 61.9 mb, or 13.0%, lower than the same month of the previous year, and 71.3 mb, or 14.7%, below the latest five-year average. The monthly draw in crude oil stocks can be attributed to higher crude runs.

Total product stocks in May stood at 739.3 mb. This is 77.2 mb, or 9.4%, below May 2021 levels, and 92.0 mb, or 11.1%, lower than the latest five-year average. The stock build was mainly driven by higher product output.

Graph 9 - 2: US weekly commercial crude oil inventories



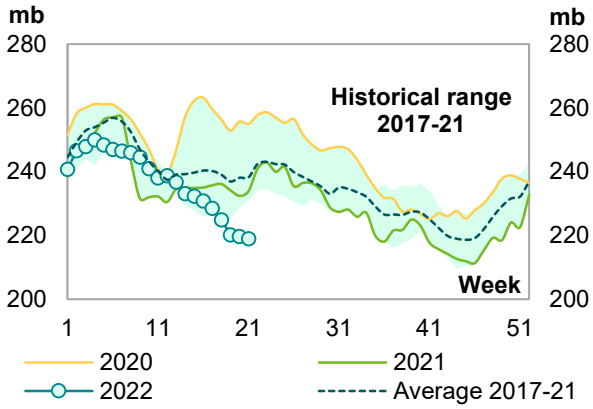
Sources: EIA and OPEC.

Gasoline stocks in May fell m-o-m by 9.6 mb to settle at 219.0 mb. This is 20.9 mb, or 8.7% lower than in the same month in 2021, and 25.0 mb, or 10.2%, lower than the latest five-year average. The monthly stock draw came mainly on the back of higher gasoline consumption.

Residual fuel oil stocks also fell by 1.3 mb m-o-m in May. At 26.9 mb, this was 4.8 mb, or 15.1%, lower than a year earlier, and 6.9 mb, or 20.5%, below the latest five-year average.

In contrast, **distillate stocks** rose m-o-m in May by 1.5 mb to stand at 106.4 mb. This is 33.6 mb, or 24.0%, lower than the same month of the previous year, and 36.9 mb, or 25.7%, below the latest five-year average.

Graph 9 - 3: US weekly gasoline inventories



Sources: EIA and OPEC.

Jet fuel stocks also rose m-o-m by 3.4 mb, ending May at 39.6 mb. This is 3.8 mb, or 8.7%, lower than the same month of 2021, and 2.2 mb, or 5.3%, below the latest five-year average.

Table 9 - 2: US commercial petroleum stocks, mb

US stocks	May 21	Mar 22	Apr 22	May 22	Change May 22/Apr 22
Crude oil	**476.6**	**414.4**	**415.7**	**414.7**	***-1.0***
Gasoline	239.9	238.5	228.6	219.0	*-9.6*
Distillate fuel	140.0	114.6	104.9	106.4	*1.5*
Residual fuel oil	31.7	27.9	28.2	26.9	*-1.3*
Jet fuel	43.4	35.6	36.2	39.6	*3.4*
Total products	**817.1**	**739.2**	**730.7**	**739.9**	***9.2***
Total	**1,293.7**	**1,153.6**	**1,146.4**	**1,154.7**	***8.2***
SPR	**627.6**	**566.1**	**550.0**	**526.6**	***-23.4***

Sources: EIA and OPEC.

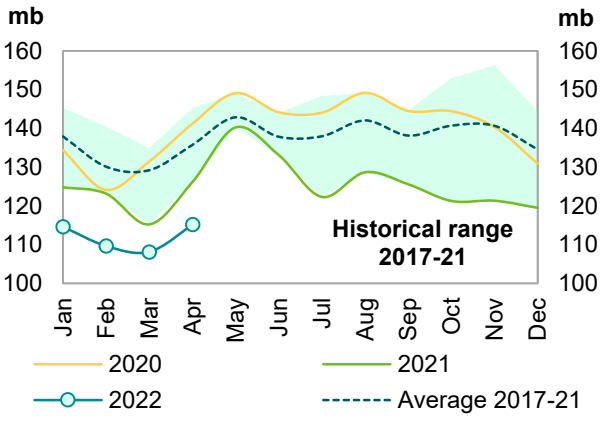
Japan

In **Japan**, **total commercial oil stocks** in April rose m-o-m by 7.1 mb to settle at 115.2 mb. This is 11.0 mb, or 8.7%, lower than the same month in 2021 and 20.5 mb, or 15.1%, below the latest five-year average. Crude and product stocks rose by 4.3 mb and 2.8 mb, respectively.

Japanese **commercial crude oil stocks** rose in April to stand at 64.8 mb. This is 1.8 mb, or 2.7%, lower than the same month of the previous year, and 13.4 mb, or 17.2%, lower than the latest five-year average. The build came on the back of higher crude imports along with lower crude runs.

Japan's **total product inventories** also rose m-o-m by 2.8 mb to end April at 50.4 mb. This is 9.1 mb, or 15.3%, lower than the same month in 2021 and 7.1 mb, or 12.3%, below the latest five-year average.

Graph 9 - 4: Japan's commercial oil stocks



Sources: METI and OPEC.

Gasoline stocks rose m-o-m by 0.5 mb to stand at 10.4 mb in April. This was 2.6 mb, or 20.3% lower than a year earlier, and 1.3 mb, or 11.3%, lower than the latest five-year average. Lower gasoline sales, which fell by 5.0%, were behind the gasoline stock build.

Distillate stocks also rose m-o-m by 1.0 mb to end April at 20.3 mb. This is 4.3 mb, or 17.4%, lower than the same month in 2021, and 3.5 mb, or 14.7%, below the latest five-year average. Within distillate components, jet fuel, kerosene and gasoil stocks rose by 10%, 6.4% and 1.3%, respectively.

Total residual fuel oil stocks rose m-o-m by 0.9 mb to end April at 11.0 mb. This is 1.2 mb, or 10.2%, lower than in the same month of the previous year, and 1.8 mb, or 14.0%, below the latest five-year average. Within the components, fuel oil A and fuel oil B.C stocks rose by 9.2% and 8.9%, respectively.

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

Japan's stocks	Apr 21	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
Crude oil	**66.6**	**56.0**	**60.5**	**64.8**	***4.3***
Gasoline	13.0	11.1	9.9	10.4	*0.5*
Naphtha	9.8	9.0	8.4	8.8	*0.4*
Middle distillates	24.6	22.4	19.3	20.3	*1.0*
Residual fuel oil	12.2	11.2	10.1	11.0	*0.9*
Total products	**59.6**	**53.6**	**47.6**	**50.4**	***2.8***
Total**	**126.2**	**109.6**	**108.2**	**115.2**	***7.1***

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

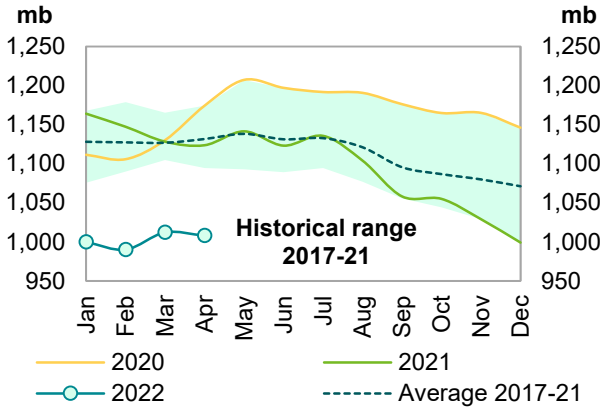
Sources: METI and OPEC.

EU-14 plus UK and Norway

Preliminary data for April showed that **total European commercial oil stocks** fell m-o-m by 4.2 mb to stand at 1,008 mb. At this level, they were 115.8 mb, or 10.3%, below the same month a year earlier, and 123.7 mb, or 10.9%, lower than the latest five-year average. Crude stocks rose by 3.6 mb, while product stocks fell by 7.8 mb.

European **crude inventories** rose in April to stand at 431.7 mb. This is 30.9 mb, or 6.7%, lower than the same month in 2021, and 54.2 mb, or 11.2%, below the latest five-year average. The build in crude oil inventories came despite higher m-o-m refinery throughputs in the EU-14, plus UK and Norway, which increased by 180 tb/d to stand at 9.41 mb.

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



Sources: Argus, Euroilstock and OPEC.

Total European product stocks fell m-o-m by 7.8 mb to end April at 576.5 mb. This is 84.9 mb, or 12.8%, lower than the same month of the previous year, and 69.4 mb, or 10.7%, below the latest five-year average.

Gasoline stocks rose m-o-m by 2.1 mb in April to stand at 112.1 mb. At this level, they were 4.4 mb, or 3.8%, lower than the same time a year earlier, and 6.4 mb/d, or 5.4%, less than the latest five-year average.

Residual fuel stocks rose m-o-m by 0.5 mb in April to stand at 60.0 mb. This is 6.2 mb, or 9.4%, lower than the same month in 2021, and 6.7 mb, or 10.1%, below the latest five-year average.

Naphtha stocks also rose by 1.1 mb in April, ending the month at 26.0 mb. This is 5.6 mb, or 17.8%, below April 2021 levels, and 4.0 mb, or 13.3%, below the latest five-year average.

In contrast, **distillate stocks** fell m-o-m by 11.6 mb in April to stand at 378.4 mb. This is 68.7 mb, or 15.4%, below the same month in 2021, and 52.3 mb, or 12.2%, less than the latest five-year average.

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

EU stocks	Apr 21	Feb 22	Mar 22	Apr 22	Change Apr 22/Mar 22
Crude oil	**462.5**	**419.8**	**428.0**	**431.7**	***3.6***
Gasoline	116.5	110.0	110.0	112.1	*2.1*
Naphtha	31.6	23.9	24.8	26.0	*1.1*
Middle distillates	447.1	379.4	390.0	378.4	*-11.6*
Fuel oils	66.2	57.3	59.5	60.0	*0.5*
Total products	**661.4**	**570.6**	**584.3**	**576.5**	***-7.8***
Total	**1,123.9**	**990.3**	**1,012.3**	**1,008.1**	***-4.2***

Sources: Argus, Euroilstock and OPEC.

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

Singapore

In April, **total product stocks in Singapore** fell m-o-m by 1.3 mb to 40.3 mb. This is 10.4 mb, or 20.5%, lower than the same month in 2021.

Light distillate stocks rose m-o-m by 0.3 mb in April to stand at 13.9 mb. This is 1.7 mb, or 13.8%, lower than the same month of the previous year.

In contrast, **middle distillate stocks** fell m-o-m by 0.4 mb in April to stand at 6.6 mb. This is 6.5 mb, or 49.5%, lower than a year earlier.

Residual fuel oil stocks also fell m-o-m by 1.1 mb, ending April at 19.7 mb. This is 5.6 mb, or 22.1%, lower than in April 2021.

ARA

Total product stocks in ARA fell m-o-m in April by 0.5 mb, reversing the build of last month. At 38.7 mb, they are 8.2 mb, or 17.4%, lower than the same month in 2021.

Gasoline stocks in April fell m-o-m by 0.2 mb to stand at 11.6 mb, which is 1.4 mb, or 13.3%, higher than the same month of the previous year.

Gasoil stocks fell by 0.5 mb to end April at 11.3 mb. This is 4.9 mb, or 30.5%, lower than the level seen in April 2021.

Jet oil stocks also fell m-o-m by 0.9 mb to end April at 6.7 mb. This is 1.0 mb, or 13.2%, lower than the level registered one year earlier.

In contrast, **fuel oil stocks** rose m-o-m by 0.8 mb in April to stand at 6.5 mb, which is 3.3 mb, or 34.1%, lower than in April 2021.

Fujairah

During the week ending 30 May 2022, **total oil product stocks in Fujairah** fell w-o-w by 0.12 mb to stand at 19.68 mb, according to data from Fed Com and S&P Global Platts. At this level, total oil stocks were 4.02 mb lower than the same time a year ago.

Light distillate stocks fell by 0.29 mb w-o-w to stand at 6.31 mb in the week to 30 May 2022, which is 1.09 mb higher than the same period a year ago. **Heavy distillate stocks** also fell w-o-w by 0.06 mb to stand at 10.84 mb, which is 3.81 mb lower than the same time last year. In contrast, **middle distillate stocks** rose by 0.23 mb to stand at 2.53 mb, which is 1.29 mb lower than a year ago.

Balance of Supply and Demand

Demand for OPEC crude in 2021 was revised down by 0.2 mb/d from the previous MOMR to stand at 28.0 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 1.0 mb/d lower than demand for OPEC crude in the same period. In 2Q21, OPEC crude production averaged 25.6 mb/d, which is 1.4 mb/d lower than demand for OPEC crude. In 3Q21, OPEC crude oil production averaged 26.9 mb/d, which is 1.8 mb/d lower than demand for OPEC crude. In 4Q21, OPEC crude oil production averaged 27.7 mb/d, which is 2.4 mb/d lower than demand for OPEC crude. For 2021, OPEC crude production averaged 26.4 mb/d, which was 1.7 mb/d below the demand for OPEC crude.

Demand for OPEC crude in 2022 remained unchanged from the previous month to stand at 29.1 mb/d, which is around 1.0 mb/d higher than in 2021. According to secondary sources, OPEC crude production averaged 28.4 mb/d in 1Q22, which is 0.2 mb/d lower than demand for OPEC crude.

Balance of supply and demand in 2021

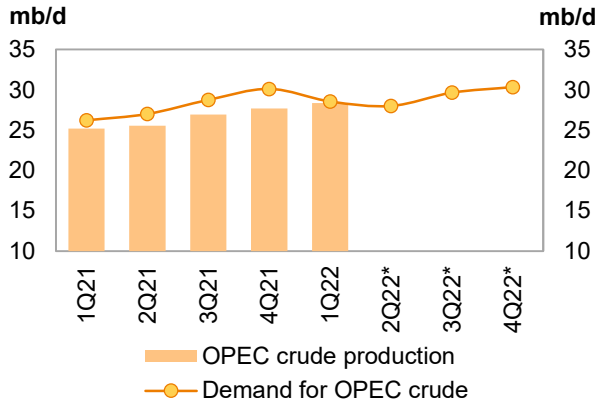
Demand for OPEC crude in 2021 was revised down by 0.2 mb/d from the previous MOMR to stand at 28.0 mb/d. This is around 5.0 mb/d higher than in 2020.

Compared with the previous assessment, 1Q21 and 2Q21 were revised down both by 0.2 mb/d, while 3Q21 and 4Q21 were revised down by 0.1 mb/d each.

When compared with the same quarters in 2020, demand for OPEC crude in 1Q21 and 2Q21 was higher by 3.8 mb/d and 9.5 mb/d, respectively. 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 1.0 mb/d lower than demand for OPEC crude in the same period. In 2Q21, OPEC crude production averaged 25.6 mb/d, which is 1.4 mb/d lower than demand for OPEC crude. In 3Q21, OPEC crude oil production averaged 26.9 mb/d, which is 1.8 mb/d lower than demand for OPEC crude. In 4Q21, OPEC crude oil production averaged 27.7 mb/d, which is 2.4 mb/d below demand for OPEC crude.

Graph 10 - 1: Balance of supply and demand, 2021–2022*



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

For 2021, OPEC crude production averaged 26.4 mb/d, which was 1.7 mb/d below the demand for OPEC crude.

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

	2020	1Q21	2Q21	3Q21	4Q21	2021	Change 2021/20
(a) World oil demand	**91.19**	**94.05**	**95.60**	**97.65**	**100.31**	**96.92**	***5.74***
Non-OPEC liquids production	62.99	62.52	63.28	63.64	64.92	63.60	*0.61*
OPEC NGL and non-conventionals	5.17	5.31	5.30	5.26	5.26	5.28	*0.12*
(b) Total non-OPEC liquids production and OPEC NGLs	**68.15**	**67.83**	**68.59**	**68.90**	**70.18**	**68.88**	***0.73***
Difference (a-b)	**23.03**	**26.22**	**27.01**	**28.76**	**30.12**	**28.04**	***5.01***
OPEC crude oil production	**25.72**	**25.18**	**25.57**	**26.92**	**27.71**	**26.35**	***0.63***
Balance	**2.69**	**-1.04**	**-1.45**	**-1.83**	**-2.42**	**-1.69**	***-4.38***

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

Balance of supply and demand in 2022

Demand for OPEC crude in 2022 remained unchanged from the previous month to stand at 29.1 mb/d, which is around 1.0 mb/d higher than in 2021.

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

Compared with the same quarters in 2021, demand for OPEC crude in 1Q22, 2Q22 and 3Q22 is forecast to be higher by 2.3 mb/d, 1.0 mb/d and 0.8 mb/d, respectively, while 4Q22 is forecast to be slightly higher by 0.1 mb/d.

According to secondary sources, OPEC crude production averaged 28.4 mb/d in 1Q22, which is 0.2 mb/d lower than demand for OPEC crude.

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

	2021	1Q22	2Q22	3Q22	4Q22	2022	*Change* 2022/21
(a) World oil demand	**96.92**	**99.28**	**98.19**	**100.85**	**102.77**	**100.29**	***3.36***
Non-OPEC liquids production	63.60	65.37	64.80	65.79	67.00	65.74	*2.15*
OPEC NGL and non-conventionals	5.28	5.34	5.38	5.41	5.43	5.39	*0.11*
(b) Total non-OPEC liquids production and OPEC NGLs	**68.88**	**70.72**	**70.18**	**71.19**	**72.43**	**71.13**	***2.25***
Difference (a-b)	**28.04**	**28.56**	**28.01**	**29.65**	**30.35**	**29.15**	***1.11***
OPEC crude oil production	**26.35**	**28.36**					
Balance	**-1.69**	**-0.20**					

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

Appendix

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

World oil demand and supply balance	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	24.99	25.69	25.76	25.31
of which US	*20.60*	*20.58*	*18.35*	*18.60*	*20.17*	*20.35*	*20.56*	*19.93*	*20.30*	*20.57*	*21.19*	*21.21*	*20.82*
Europe	14.31	14.31	12.43	11.91	12.64	13.85	13.90	13.08	13.10	13.06	14.29	14.15	13.65
Asia Pacific	8.01	7.93	7.14	7.67	7.04	7.11	7.82	7.41	7.90	7.22	7.25	7.93	7.57
Total OECD	**47.73**	**47.78**	**42.13**	**42.40**	**44.05**	**45.79**	**46.77**	**44.77**	**45.77**	**45.26**	**47.23**	**47.84**	**46.53**
China	13.16	13.71	13.86	14.18	15.08	14.95	15.54	14.94	14.67	15.16	15.42	15.97	15.31
India	4.93	4.99	4.51	4.98	4.50	4.59	5.02	4.77	5.18	4.85	5.01	5.39	5.11
Other Asia	8.91	9.06	8.13	8.56	8.98	8.34	8.62	8.63	9.09	9.59	8.93	8.95	9.14
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	7.45	7.75	7.52	8.06	7.85	7.79	8.06	7.77	8.32	8.09	8.06
Africa	4.32	4.34	4.05	4.35	4.01	4.11	4.42	4.22	4.51	4.15	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	0.79	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**	**53.50**	**52.92**	**53.62**	**54.94**	**53.75**
(a) Total world demand	**99.20**	**100.20**	**91.19**	**94.05**	**95.60**	**97.65**	**100.31**	**96.92**	**99.28**	**98.19**	**100.85**	**102.77**	**100.29**
Y-o-y change	***1.34***	***1.00***	***-9.01***	***-0.69***	***11.75***	***6.03***	***5.83***	***5.74***	***5.23***	***2.59***	***3.19***	***2.47***	***3.36***
Non-OPEC liquids production													
Americas	24.02	25.82	24.71	24.11	25.19	25.22	26.17	25.18	25.89	26.31	26.96	27.47	26.66
of which US	*16.66*	*18.47*	*17.61*	*16.63*	*17.93*	*17.85*	*18.58*	*17.75*	*18.26*	*18.94*	*19.27*	*19.67*	*19.04*
Europe	3.84	3.70	3.89	3.95	3.51	3.81	3.78	3.76	3.70	3.59	3.79	4.13	3.80
Asia Pacific	0.41	0.52	0.52	0.51	0.45	0.55	0.52	0.51	0.49	0.54	0.56	0.54	0.53
Total OECD	**28.27**	**30.04**	**29.13**	**28.58**	**29.15**	**29.58**	**30.47**	**29.45**	**30.07**	**30.44**	**31.30**	**32.13**	**30.99**
China	3.98	4.05	4.15	4.30	4.34	4.33	4.26	4.31	4.49	4.41	4.35	4.43	4.42
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	6.08	6.03	5.94	5.97	6.09	5.83	5.96	6.15	6.28	6.21	6.43	6.27
Middle East	3.19	3.19	3.19	3.22	3.23	3.24	3.27	3.24	3.29	3.36	3.38	3.39	3.36
Africa	1.49	1.51	1.41	1.37	1.35	1.32	1.32	1.34	1.32	1.31	1.30	1.31	1.31
Russia	11.52	11.61	10.59	10.47	10.74	10.81	11.17	10.80	11.33	10.40	10.40	10.40	10.63
Other Eurasia	3.08	3.07	2.92	2.96	2.89	2.79	3.09	2.93	3.06	2.93	3.17	3.22	3.10
Other Europe	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.10
Total Non-OECD	**32.80**	**33.18**	**31.71**	**31.66**	**31.85**	**31.78**	**32.17**	**31.87**	**32.91**	**31.97**	**32.09**	**32.47**	**32.36**
Total Non-OPEC production	61.07	63.23	60.84	60.24	61.00	61.36	62.64	61.32	62.98	62.41	63.40	64.60	63.35
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 production	**63.41**	**65.59**	**62.99**	**62.52**	**63.28**	**63.64**	**64.92**	**63.60**	**65.37**	**64.80**	**65.79**	**67.00**	**65.74**
OPEC NGL + non-conventional oils	5.29	5.21	5.17	5.31	5.30	5.26	5.26	5.28	5.34	5.38	5.41	5.43	5.39
(b) Total non-OPEC liquids production and OPEC NGLs	**68.70**	**70.80**	**68.15**	**67.83**	**68.59**	**68.90**	**70.18**	**68.88**	**70.72**	**70.18**	**71.19**	**72.43**	**71.13**
Y-o-y change	***3.09***	***2.10***	***-2.65***	***-4.46***	***2.26***	***2.19***	***2.86***	***0.73***	***2.89***	***1.59***	***2.30***	***2.24***	***2.25***
OPEC crude oil production (secondary sources)	31.34	29.37	25.72	25.18	25.57	26.92	27.71	26.35	28.36				
Total liquids production	100.05	100.17	93.87	93.01	94.15	95.82	97.89	95.23	99.08				
Balance (stock change and miscellaneous)	0.84	-0.03	2.69	-1.04	-1.45	-1.83	-2.42	-1.69	-0.20				
OECD closing stock levels, *mb*													
Commercial	2,873	2,894	3,038	2,918	2,875	2,755	2,647	2,647	2,626				
SPR	1,552	1,535	1,541	1,546	1,524	1,513	1,484	1,484	1,439				
Total	**4,425**	**4,429**	**4,579**	**4,464**	**4,398**	**4,268**	**4,130**	**4,130**	**4,065**				
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**	**29.40**	**23.03**	**26.22**	**27.01**	**28.76**	**30.12**	**28.04**	**28.56**	**28.01**	**29.65**	**30.35**	**29.15**

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													
Americas	-	-	-	-	-	-	-	-	-	-0.10	0.02	0.04	-0.01
of which US	-	-	-	-	-	-	-	-	*0.20*	*-0.10*	*0.02*	*0.04*	*0.04*
Europe	-	-	-	-	-	-	-	-	0.12	-	-	-	0.03
Asia Pacific	-	-	-	-	-	-	-	-	-0.06	-	-	-	-0.01
Total OECD	**-**	**-**	**-**	**-**	**-**	**-**	**0.01**	**-**	**0.06**	**-0.10**	**0.02**	**0.04**	**0.01**
China	-	-	0.10	0.10	0.10	0.10	0.10	0.10	0.10	-0.10	0.14	0.14	0.07
India	-	-	-	-	-	-	-	-	-	0.03	0.04	0.04	0.03
Other Asia	-	-	-	-	-	-	-	-	-0.05	-	-	-	-0.01
Latin America	-	-	-	-	-	-	-	-	-0.01	-	-	-	-
Middle East	-	-	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.09	-0.09	-0.09	-0.09
Africa	-	-	-	-	-	-	-	-	0.01	0.01	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Eurasia	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-0.02	-	-	-	-
Total Non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-0.06**	**-0.15**	**0.09**	**0.09**	**-**
(a) Total world demand	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-0.25**	**0.11**	**0.13**	**-**
Y-o-y change	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***-0.25***	***0.11***	***0.13***	**-**
Non-OPEC liquids production													
Americas	-	-	0.02	0.02	0.02	0.02	0.04	0.03	0.14	0.02	-0.05	-0.01	0.03
of which US	-	-	-	-	-	-	*0.01*	-	*0.04*	-	*-0.02*	*-0.02*	-
Europe	-	-	-	-	-	-	-	-	-0.03	-0.15	-0.01	-	-0.05
Asia Pacific	-	0.01	-	0.01	-	0.02	0.01	0.01	-	-	0.02	0.01	0.01
Total OECD	**-**	**0.01**	**0.02**	**0.02**	**0.02**	**0.04**	**0.05**	**0.04**	**0.11**	**-0.12**	**-0.03**	**-**	**-0.01**
China	-	-	-	-	-	-	-	-	0.01	0.10	-	-	0.03
India	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-0.01	-	-	-
Latin America	-	-	-	-	-	-	-	-	0.01	0.07	0.04	0.04	0.04
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-0.28	-0.36	-0.34	-0.25
Other Eurasia	-	-	-	-	-	-0.01	-	-	-	-0.13	-	-	-0.03
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	**-**	**-**	**-**	**-**	**-**	**-0.01**	**-**	**-**	**0.02**	**-0.24**	**-0.32**	**-0.29**	**-0.21**
Total Non-OPEC production	-	0.01	0.02	0.02	0.02	0.04	0.05	0.03	0.13	-0.37	-0.35	-0.29	-0.22
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC liquids production	**-**	**0.01**	**0.02**	**0.02**	**0.02**	**0.04**	**0.05**	**0.03**	**0.13**	**-0.37**	**-0.35**	**-0.29**	**-0.22**
OPEC NGL + non-conventional oils	-	-	0.12	0.21	0.18	0.09	0.08	0.14	0.11	0.12	0.12	0.12	0.12
(b) Total non-OPEC liquids production and OPEC NGLs	**-**	**0.01**	**0.14**	**0.23**	**0.20**	**0.12**	**0.13**	**0.17**	**0.24**	**-0.25**	**-0.23**	**-0.17**	**-0.10**
Y-o-y change	***0.01***	***0.01***	***0.13***	***0.09***	***0.07***	***-0.01***	***-0.01***	***0.04***	***0.02***	***-0.45***	***-0.35***	***-0.30***	***-0.27***
OPEC crude oil production (secondary sources)	-	-	-	-	-	-	-	-	0.01				
Total liquids production	-	0.01	0.14	0.23	0.20	0.12	0.13	0.17	0.25				
Balance (stock change and miscellaneous)	-	0.01	0.14	0.23	0.21	0.13	0.13	0.17	0.25				
mb													
Commercial	-	-	-	-	1	-	2	2	5				
SPR	-	-	-	-	-	-	-	-	-13				
Total	**-**	**-**	**-**	**-**	**1**	**-**	**2**	**2**	**-8**				
Oil-on-water	-	-	-	-	-	-	-	-	-				
Days of forward consumption in OECD, *days*													
Commercial onland stocks	-	-	-	-	-	-	-	-	-				
SPR	-	-	-	-	-	-	-	-	-				
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**				
Memo items													
(a) - (b)	**0.00**	**-0.01**	**-0.14**	**-0.23**	**-0.21**	**-0.13**	**-0.13**	**-0.17**	**-0.24**	**-0.01**	**0.34**	**0.30**	**0.10**

*Note: * This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the May 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**	**2,647**	**2,982**	**3,217**	**3,182**	**3,038**	**2,918**	**2,875**	**2,755**	**2,647**	**2,626**
Americas	1,522	1,615	1,466	1,583	1,719	1,691	1,615	1,570	1,543	1,508	1,466	1,417
Europe	978	1,043	857	1,033	1,099	1,079	1,043	1,002	974	892	857	891
Asia Pacific	394	380	324	366	400	411	380	346	358	355	324	318
OECD SPR	**1,535**	**1,541**	**1,484**	**1,537**	**1,561**	**1,551**	**1,541**	**1,546**	**1,524**	**1,513**	**1,484**	**1,439**
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	467
Asia Pacific	416	414	409	416	416	417	414	413	413	408	409	406
OECD total	**4,429**	**4,579**	**4,130**	**4,519**	**4,779**	**4,733**	**4,579**	**4,464**	**4,398**	**4,268**	**4,130**	**4,065**
Oil-on-water	**1,033**	**1,148**	**1,202**	**1,187**	**1,329**	**1,174**	**1,148**	**1,138**	**1,131**	**1,169**	**1,202**	**1,225**
Days of forward consumption in OECD, days												
OECD onland commercial	**69**	**68**	**57**	**79**	**76**	**74**	**72**	**66**	**63**	**59**	**58**	**58**
Americas	67	67	58	79	76	73	71	64	62	60	59	57
Europe	79	80	63	94	85	86	88	79	70	64	65	68
Asia Pacific	55	51	43	55	59	56	50	49	50	45	41	44
OECD SPR	**37**	**35**	**34**	**41**	**37**	**36**	**36**	**35**	**33**	**32**	**32**	**32**
Americas	28	26	24	32	29	28	28	26	25	25	24	23
Europe	39	37	35	44	38	39	41	39	35	35	37	36
Asia Pacific	58	56	54	63	62	57	54	59	58	52	52	56
OECD total	**107**	**104**	**91**	**120**	**113**	**110**	**108**	**101**	**96**	**91**	**90**	**90**

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

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

Non-OPEC liquids production and OPEC NGLs	2018	2019	2020	3Q21	4Q21	2021	Change 21/20	1Q22	2Q22	3Q22	4Q22	2022	Change 22/21
US	16.7	18.5	17.6	17.8	18.6	17.8	0.1	18.3	18.9	19.3	19.7	19.0	1.3
Canada	5.3	5.4	5.2	5.4	5.6	5.5	0.3	5.6	5.4	5.7	5.8	5.6	0.2
Mexico	2.1	1.9	1.9	1.9	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OECD Americas	**24.0**	**25.8**	**24.7**	**25.2**	**26.2**	**25.2**	**0.5**	**25.9**	**26.3**	**27.0**	**27.5**	**26.7**	**1.5**
Norway	1.9	1.7	2.0	2.1	2.0	2.0	0.0	2.0	1.9	2.1	2.3	2.1	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	0.9	0.0
Denmark	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD	0.7	0.7	0.7	0.8	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
OECD Europe	**3.8**	**3.7**	**3.9**	**3.8**	**3.8**	**3.8**	**-0.1**	**3.7**	**3.6**	**3.8**	**4.1**	**3.8**	**0.0**
Australia	0.3	0.5	0.5	0.5	0.5	0.4	0.0	0.4	0.5	0.5	0.5	0.5	0.0
Other Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	**0.4**	**0.5**	**0.5**	**0.6**	**0.5**	**0.5**	**0.0**	**0.5**	**0.5**	**0.6**	**0.5**	**0.5**	**0.0**
Total OECD	**28.3**	**30.0**	**29.1**	**29.6**	**30.5**	**29.4**	**0.3**	**30.1**	**30.4**	**31.3**	**32.1**	**31.0**	**1.5**
China	**4.0**	**4.1**	**4.2**	**4.3**	**4.3**	**4.3**	**0.2**	**4.5**	**4.4**	**4.3**	**4.4**	**4.4**	**0.1**
India	**0.9**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.0**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.0**
Brunei	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Indonesia	0.9	0.9	0.9	0.8	0.8	0.9	0.0	0.9	0.8	0.8	0.8	0.8	0.0
Malaysia	0.7	0.7	0.6	0.6	0.6	0.6	0.0	0.6	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	0.0
Vietnam	0.3	0.3	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Asia others	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Other Asia	**2.8**	**2.7**	**2.5**	**2.3**	**2.4**	**2.4**	**-0.1**	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**	**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	0.7	0.1
Brazil	3.3	3.6	3.7	3.7	3.5	3.6	-0.1	3.7	3.7	3.7	3.9	3.8	0.2
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	0.5	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	0.3	0.0	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**	**6.2**	**6.3**	**6.2**	**6.4**	**6.3**	**0.3**
Bahrain	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	1.0	1.0	1.0	1.0	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	0.0
Syria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yemen	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0
Middle East	**3.2**	**3.2**	**3.2**	**3.2**	**3.3**	**3.2**	**0.0**	**3.3**	**3.4**	**3.4**	**3.4**	**3.4**	**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	0.1	0.0
Chad	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Egypt	0.7	0.7	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Ghana	0.2	0.2	0.2	0.2	0.2	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	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Sudans	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Africa other	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
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**	**10.4**	**10.4**	**10.4**	**10.6**	**-0.2**
Kazakhstan	1.9	1.9	1.8	1.7	2.0	1.8	0.0	2.0	1.8	2.0	2.0	2.0	0.1
Azerbaijan	0.8	0.8	0.7	0.7	0.7	0.7	0.0	0.7	0.8	0.8	0.8	0.8	0.1
Eurasia others	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.3	0.3	0.3	0.3	0.0
Other Eurasia	**3.1**	**3.1**	**2.9**	**2.8**	**3.1**	**2.9**	**0.0**	**3.1**	**2.9**	**3.2**	**3.2**	**3.1**	**0.2**
Other Europe	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
Total Non-OECD	**32.8**	**33.2**	**31.7**	**31.8**	**32.2**	**31.9**	**0.2**	**32.9**	**32.0**	**32.1**	**32.5**	**32.4**	**0.5**
Non-OPEC	61.1	63.2	60.8	61.4	62.6	61.3	0.5	63.0	62.4	63.4	64.6	63.4	2.0
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**	**65.4**	**64.8**	**65.8**	**67.0**	**65.7**	**2.1**
OPEC NGL	5.2	5.1	5.1	5.2	5.2	5.2	0.1	5.2	5.3	5.3	5.3	5.3	0.1
OPEC Non-conventional	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OPEC (NGL+NCF)	**5.3**	**5.2**	**5.2**	**5.3**	**5.3**	**5.3**	**0.1**	**5.3**	**5.4**	**5.4**	**5.4**	**5.4**	**0.1**
Non-OPEC & OPEC (NGL+NCF)	**68.7**	**70.8**	**68.2**	**68.9**	**70.2**	**68.9**	**0.7**	**70.7**	**70.2**	**71.2**	**72.4**	**71.1**	**2.3**

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

Table 11 - 5: World rig count, units

World rig count	2019	2020	2021	Change 2021/20	2Q21	3Q21	4Q21	1Q22	Apr 22	May 22	Change May/Apr
US	944	436	475	39	452	498	559	634	694	719	25
Canada	134	90	133	43	73	151	161	195	103	93	-10
Mexico	37	41	45	4	42	43	48	44	44	43	-1
OECD Americas	**1,116**	**567**	**654**	**87**	**568**	**694**	**770**	**874**	**843**	**857**	**14**
Norway	17	16	17	1	18	17	18	16	19	17	-2
UK	15	6	8	2	8	9	8	7	8	11	3
OECD Europe	**74**	**59**	**58**	**-1**	**59**	**59**	**61**	**58**	**63**	**65**	**2**
OECD Asia Pacific	**29**	**22**	**23**	**1**	**21**	**28**	**25**	**22**	**20**	**23**	**3**
Total OECD	**1,219**	**648**	**735**	**87**	**648**	**781**	**856**	**954**	**926**	**945**	**19**
Other Asia*	221	187	174	-13	170	181	182	185	180	186	6
Latin America	128	58	91	33	89	93	105	111	117	110	-7
Middle East	68	57	57	0	56	57	59	60	60	62	2
Africa	55	43	42	-1	39	47	49	57	55	54	-1
Other Europe	14	12	9	-3	7	9	9	9	8	9	1
Total Non-OECD	**486**	**357**	**373**	**16**	**362**	**385**	**404**	**422**	**420**	**421**	**1**
Non-OPEC rig count	**1,705**	**1,005**	**1,108**	**103**	**1,010**	**1,166**	**1,260**	**1,376**	**1,346**	**1,366**	**20**
Algeria	45	31	26	-5	27	24	31	30	28	34	6
Angola	4	3	4	1	4	4	5	6	6	6	0
Congo	3	1	0	-1	0	0	1	1	1	0	-1
Equatorial Guinea**	1	0	0	0	0	0	1	1	1	0	-1
Gabon	7	3	2	-1	1	3	4	2	3	3	0
Iran**	117	117	117	0	117	117	117	117	117	117	0
Iraq	74	47	39	-8	36	42	45	46	46	48	2
Kuwait	46	45	25	-20	23	25	23	27	27	28	1
Libya	14	12	13	1	12	14	14	15	7	2	-5
Nigeria	16	11	7	-4	5	10	7	8	11	11	0
Saudi Arabia	115	93	62	-31	62	59	64	70	70	78	8
UAE	62	54	42	-12	44	39	42	38	47	48	1
Venezuela	25	24	25	1	25	25	25	25	25	25	0
OPEC rig count	**529**	**441**	**362**	**-79**	**356**	**361**	**380**	**386**	**389**	**400**	**11**
World rig count* **	**2,234**	**1,446**	**1,470**	**24**	**1,366**	**1,527**	**1,640**	**1,762**	**1,735**	**1,766**	**31**
of which:											
Oil	1,788	1,125	1,162	37	1,076	1,212	1,316	1,405	1,379	1,393	14
Gas	415	275	275	0	257	281	293	329	328	342	14
Others	31	46	33	-13	33	34	31	28	28	31	3

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

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

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

Totals may not add up due to independent rounding.

Sources: Baker Hughes and OPEC.

Glossary of Terms

Abbreviations

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

Acronyms

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

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

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

OPEC Basket average price

US$/b

up 8.23 in May

May 2022	113.87
April 2022	105.64
Year-to-date	**102.80**

May OPEC crude production

mb/d, according to secondary sources

down 0.18 in May

May 2022	28.51
April 2022	28.68

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	8.3
2022	3.5	2.9	3.0	3.0	1.6	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	65.7	2.1
OPEC NGLs	5.3	0.1	OPEC NGLs	5.4	0.1
Difference	**28.0**	**5.0**	**Difference**	**29.2**	**1.1**

OECD commercial stocks

mb

	Apr 21	Feb 22	Mar 22	Apr 22	Apr 22/Mar 22
Crude oil	1,422	1,255	1,284	1,293	9.3
Products	1,492	1,368	1,342	1,335	–7.5
Total	**2,914**	**2,623**	**2,626**	**2,628**	**1.8**
Days of forward cover	65.1	58.3	58.0	57.4	–0.6

Next report to be issued on 12 July 2022.