



Organization of the Petroleum Exporting Countries



OPEC Monthly Oil Market Report

10 February 2022

Feature article:
Review of global oil demand trend

| | |
|---|-----|
| Oil market highlights | i |
| Feature article | iii |
| Crude oil price movements | 1 |
| Commodity markets | 7 |
| World economy | 10 |
| World oil demand | 26 |
| World oil supply | 34 |
| Product markets and refinery operations | 48 |
| Tanker market | 54 |
| Crude and refined products trade | 58 |
| Commercial stock movements | 64 |
| Balance of supply and demand | 69 |



Organization of the Petroleum Exporting Countries

Helferstorferstrasse 17, A-1010 Vienna, Austria

E-mail: [prid\(at\)opec.org](mailto:prid(at)opec.org)

Website: www.opec.org

Disclaimer

The data, analysis and any other information (the “information”) contained in the Monthly Oil Market Report the “MOMR”) is for informational purposes only and is neither intended as a substitute for advice from business, finance, investment consultant or other professional; nor is it meant to be a benchmark or input data to a benchmark of any kind. Whilst reasonable efforts have been made to ensure the accuracy of the information contained in the MOMR, the OPEC Secretariat makes no warranties or representations as to its accuracy, relevance or comprehensiveness, and assumes no liability or responsibility for any inaccuracy, error or omission, or for any loss or damage arising in connection with or attributable to any action or decision taken as a result of using or relying on the information in the MOMR. The views expressed in the MOMR are those of the OPEC Secretariat and do not necessarily reflect the views of its governing bodies or Member Countries. The designation of geographical entities in the MOMR, and the use and presentation of data and other materials, do not imply the expression of any opinion whatsoever on the part of OPEC and/or its Member Countries concerning the legal status of any country, territory or area, or of its authorities, or concerning the exploration, exploitation, refining, marketing and utilization of its petroleum or other energy resources.

Full reproduction, copying or transmission of the MOMR is not permitted in any form or by any means by third parties without the OPEC Secretariat’s written permission, however, the information contained therein may be used and/or reproduced for educational and other non-commercial purposes without the OPEC Secretariat’s prior written permission, provided that it is fully acknowledged as the copyright holder. The MOMR may contain references to material(s) from third parties, whose copyright must be acknowledged by obtaining necessary authorization from the copyright owner(s). The OPEC Secretariat or its governing bodies shall not be liable or responsible for any unauthorized use of any third party material(s). All rights of the MOMR shall be reserved to the OPEC Secretariat, as applicable, including every exclusive economic right, in full or per excerpts, with special reference but without limitation, to the right to publish it by press and/or by any communications medium whatsoever; translate, include in a data base, make changes, transform and process for any kind of use, including radio, television or cinema adaptations, as well as a sound-video recording, audio-visual screenplays and electronic processing of any kind and nature whatsoever.

Chairman of the Editorial Board

HE Mohammad Sanusi Barkindo Secretary General

Editor-in-Chief

Dr. Ayed S. Al-Qahtani Director, Research Division *email: aalqahtani(at)opec.org*

Editor

Behrooz Baikalizadeh Head, Petroleum Studies Department *email: bbaikalizadeh(at)opec.org*

Contributors

Crude Oil Price Movements

Yacine Sariahmed Senior Oil Price Analyst, PSD *email: ysariahmed(at)opec.org*

Commodity Markets

Angel Edjang Memba Financial Analyst, PSD *email: aedjangmemba(at)opec.org*

World Economy

Dr. Asmaa Yaseen Senior Modelling & Forecasting Analyst, PSD *email: ayaseen(at)opec.org*
Dr. Joerg Spitzzy Senior Research Analyst, PSD *email: jspitzzy(at)opec.org*

World Oil Demand

Dr. Sulaiman Saad Oil Demand Analyst, PSD *email: ssaad(at)opec.org*

World Oil Supply

Dr. Ali Akbar Dehghan Oil Supply Analyst, PSD *email: adehghan(at)opec.org*

Product Markets and Refinery Operations

Tona Ndamba Senior Refinery & Products Analyst, PSD *email: tndamba(at)opec.org*

Tanker Markets

Douglas Linton Senior Research Specialist, PSD *email: dlinton(at)opec.org*

Crude and Refined Products Trade

Douglas Linton Senior Research Specialist, PSD *email: dlinton(at)opec.org*

Stock Movements

Dr. Aziz Yahyai Senior Research Analyst, PSD *email: ayahyai(at)opec.org*

Technical Team

Nadir Guerer Senior Research Analyst, DRDO *email: nguerer(at)opec.org*
Dr. Aziz Yahyai Senior Research Analyst, PSD *email: ayahyai(at)opec.org*
Douglas Linton Senior Research Specialist, PSD *email: dlinton(at)opec.org*
Viveca Hameder Research Specialist, PSD *email: vhameder(at)opec.org*

Statistical Services

Boshra Alseiari, Head, Data Services Department; Mhammed Mouraia, Statistical Systems Coordinator; Pantelis Christodoulides (World Oil Demand, Stock Movements); Klaus Stoeger (World Oil Supply); Mohammad Sattar (Crude Oil Price Movements, Commodity Markets, Crude and Refined Products Trade); Mihni Mihnev (Product Markets and Refinery Operations); Justinas Pelenis (World Economy); Mansi Ghodsi (Tanker Market)

Editing and Design

Hasan Hafidh, Consultant, In-Charge of PR & Information Department; James Griffin; Maureen MacNeill; Scott Laury; Matthew Quinn; Timothy Spence; Carola Bayer; Andrea Birnbach; Hataichanok Leimlehner; Liane-Sophie Hamamciyan

Oil Market Highlights

Crude Oil Price Movements

Crude oil spot prices rebounded in January, compared to the previous month, as oil futures markets surged. Crude prices were supported by strong global oil market fundamentals amid dissipating fears about the impact of the COVID-19 Omicron variant and geopolitical risks, which raised concerns about near-term oil supply. The OPEC Reference Basket increased \$11.03, or 14.8%, to settle at \$85.41/b in January, its highest monthly value since September 2014. Similarly, crude oil futures prices increased on both sides of the Atlantic with the ICE Brent front month up \$10.77, or 14.4%, in January to average \$85.57/b and NYMEX WTI rising by \$11.29, or 15.7%, to average \$82.98/b. As a result, the Brent/WTI futures spread narrowed by 52¢ to an average of \$2.59/b. The market structure of all three crude benchmarks – ICE Brent, NYMEX WTI and DME Oman – strengthened significantly in January over the previous month as market perception of the outlook for the supply-demand balance improved. Hedge funds and other money managers turned more positive about oil prices, increasing net long positions to their highest level since last November.

World Economy

Results for 4Q21 have been reported for major economies, with particularly better-than-expected growth levels in the US and China. Consequently, the world GDP growth estimate for 2021 is revised up to 5.6% from 5.5% in the previous assessment. Global growth for 2022, however, remains unchanged at 4.2%. US GDP was reported at 5.7% for 2021, while the growth forecast for 2022 remains unchanged at 4%. Euro-zone economic growth for 2021 and 2022 remains at 5.2% and 3.9%, respectively. Japan's economic growth forecast for 2021 and 2022 is unchanged at 1.8% for 2021 and 2.2% for 2022. China's 2021 growth was reported at 8.1% and the forecast for 2022 remains at 5.6%. India's forecast for 2021 is unchanged at 8.8%, while the 2022 forecast was revised up to 7.2% from 7% previously, taking into account the acceleration in growth levels in 2H21 and an expected carry-over into 1H22. Russia's GDP growth forecast remains at 4% for 2021 and 2.7% for 2022. Brazil's economic growth forecast for 2021 is unchanged at 4.7% and remains at 1.5% for 2022. Key uncertainties remain the spread of COVID-19 variants and the effectiveness of vaccines, as well as the pace of vaccine rollouts worldwide. Moreover, supply chain bottlenecks and sovereign debt levels in many regions, together with rising inflationary pressures and the responses of central banks, also require close monitoring.

World Oil Demand

World oil demand growth in 2021 is revised up slightly by 17 tb/d, reflecting the latest data trends across the regions, to now stand at 5.7 mb/d. Both 3Q21 and 4Q21 figures for OECD Americas are revised higher, mainly as a result of the better performance in the US, confirming the upward revisions taken last month. Overall, non-OECD growth in 2021 increased by 3.1 mb/d while the OECD recorded growth of 2.6 mb/d. In the OECD, the US continued to be the major driver of oil demand, recording growth of 1.6 mb/d. In 2022, oil demand growth is expected at 4.2 mb/d unchanged from last month, with OECD and non-OECD projected to grow by 1.8 mb/d and 2.3 mb/d, respectively. In the OECD, optimism arises from economic growth with the supportive effects of fiscal and monetary policies expected to more than offset the negative effects from Omicron on oil demand. Industrial activities are also anticipated to accelerate, boosting diesel demand. Meanwhile, mobility has recovered substantially with domestic, regional and international flights already showing signs of recovery.

World Oil Supply

Non-OPEC liquids supply growth in 2021 is revised down by 0.06 mb/d to around 0.6 mb/d y-o-y, to average 63.6 mb/d. An upward revision, mainly to the US, was offset by downward revisions in the supply forecasts of other countries such as Brazil, China, Canada, Ecuador and the UK due to unexpected lower output in 4Q21. The 2021 oil supply forecast primarily sees growth in Canada, Russia, the US, China, Guyana, Argentina, Qatar and Norway, while output is projected to decline in the UK, Brazil, Colombia and Indonesia. For 2022, non-OPEC supply growth remained unchanged at 3.0 mb/d y-o-y, to average 66.6 mb/d. The main drivers of liquids supply growth are expected to be the US and Russia, followed by Brazil, Canada, Kazakhstan, Norway and Guyana. OPEC NGLs are forecast to grow by 0.1 mb/d both in 2021 and 2022 to average 5.1 mb/d and 5.3 mb/d, respectively. In January, OPEC crude oil production increased by 0.06 mb/d m-o-m, to average 27.98 mb/d, according to available secondary sources.

Product Markets and Refining Operations

Refinery margins on the US Gulf Coast versus WTI and in Singapore versus Oman showed strong performance in January, gaining \$1.42/b and 50¢/b, respectively, m-o-m, as global product inventory levels reached multi-year lows. However, in Europe refinery margins lost \$1.20/b versus Brent, as they were affected not only by higher crude prices, but also record-high natural gas prices, as nearly 80% of all European refineries depend on natural gas to power their plants. In all regions, the strongest positive margin contributor was gasoil, as inventories for that product continued to fall, leading to a higher premium relative to crude oil. At the same time, preliminary data shows global refinery runs rose only slightly, limited by a winter storm that affected operations in parts of the US, hampering a higher upturn in total refinery intakes.

Tanker Market

Coming off a year that saw multi-decade lows, dirty tanker spot freight rates began 2022 close to the bottom end of the five-year range, even as rising bunker fuel prices weighed on earnings. VLCC rates in particular continued to languish in the doldrums while Suezmax and Aframax rates came down from an improved performance at the end of last year. Clean spot freight rates also experienced a similar decline from a slight lift seen at the end 2021 driven by heating demand and weather-related delays that reduced tanker availability.

Crude and Refined Products Trade

Preliminary data shows US crude imports rose 3% m-o-m in January to average 6.5 mb/d, the highest since June 2021. US crude exports fell to the lowest since December 2018, averaging 2.4 mb/d in January. US product imports and exports fell to the lowest since May 2020, the month hit hardest by the pandemic. Meanwhile, the latest data for China shows the country's crude imports continued to recover from lows seen in October to reach a nine-month high of 10.9 mb/d in December. China's product exports contracted 24%, m-o-m, in December to the lowest since January 2017, amid government directives to limit the outflow of clean products. India's crude imports averaged 4.6 mb/d in December, the highest for the year, as refiners looked toward higher runs in 1Q22. India's product exports reached levels last seen in April 2020, with increases across all major products, except jet fuel, which remained at the still-high level seen in the previous month. Japan's crude imports have seen a 26% increase over the last two months to average 3.0 mb/d, the highest since December 2019, amid higher refinery runs to meet winter demand and increased use of crude for direct burning.

Commercial Stock Movements

Preliminary December data shows total OECD commercial oil stocks down by 31.2 mb m-o-m. At 2,725 mb, inventories were 311 mb lower than the same time a year earlier, 210 mb lower than the latest five-year average, and 202 mb below the 2015-2019 average. Within components, crude and products stocks fell m-o-m by 18.3 mb and 12.9 mb, respectively. At 1,330 mb, crude stocks in the OECD were 99 mb less than the latest five-year average and 100 mb below the 2015-2019 average. OECD product stocks stood at 1,395 mb, representing a deficit of 111 mb compared with the latest five-year average and 102 mb below the 2015-2019 average. In days of forward cover, OECD commercial stocks in December rose by 0.1 day m-o-m to stand at 61.1 days. This is 10.6 days below December 2020 levels, 2.9 days less than the latest five-year average and 1.3 days lower than the 2015-2019 average.

Balance of Supply and Demand

Demand for OPEC crude in 2021 is revised up by 0.1 mb/d from the last month's assessment to stand at 27.9 mb/d, around 5.0 mb/d higher than in 2020. Demand for OPEC crude in 2022 was also revised up by 0.1 mb/d from the last month's report at 28.9 mb/d, around 1.0 mb/d higher than in 2021.

Feature Article

Review of global oil demand trend

Global oil demand in 2021 saw a strong recovery, increasing by 5.7 mb/d, supported by a solid economic rebound. Oil demand growth was led by the non-OECD region, which saw an increase of 3.1 mb/d y-o-y, with China and India contributing the bulk of additional oil requirements. Oil demand in the OECD region also rebounded by a strong 2.6 mb/d y-o-y.

In the **OECD**, the Americas saw the largest growth among the sub-regions in 2021, growing by 1.7 mb/d, with gasoline leading in terms of product categories, and LPG even surpassing pre-pandemic levels. In OECD Europe, oil demand growth of 0.6 mb/d, y-o-y, was led by diesel for manufacturing and road transportation. OECD Asia Pacific grew by 0.4 mb/d, y-o-y, and saw strong demand from manufacturing and petrochemicals.

In the **non-OECD**, China and India saw a strong economic recovery, supporting demand for industrial/petrochemical feedstock, including naphtha and LPG. Moreover, rebounding mobility in both countries supported healthy demand for gasoline and diesel, mainly in transportation. China's oil demand grew by 1.0 mb/d y-o-y, while India saw an increase of 0.3 mb/d, y-o-y.

China's oil demand grew by 1.0 mb/d y-o-y, while India saw an increase of 0.3 mb/d, y-o-y.

Looking ahead, **global oil demand growth in 2022** is forecast at 4.2 mb/d to average 100.8 mb/d, surpassing the level seen in 2019 (**Graph 1**).

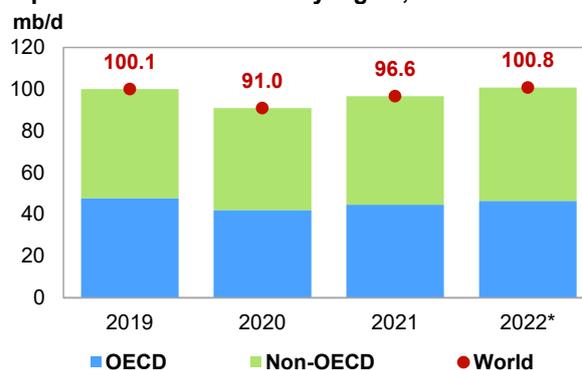
The **OECD** region is forecast to grow by 1.8 mb/d, although not yet reaching pre-pandemic levels in absolute volumes. OECD Americas is forecast to grow by 1.1 mb/d, driven by a continued improvement in mobility, as well as accelerated manufacturing activity and demand for petrochemical feedstock, driving consumption of gasoline, diesel oil and LPG. In OECD Europe, an expected pick-up in regional, local and international air traffic is projected to support the jet/kerosene demand in the region, while solid manufacturing activities, particularly from Germany and other big economies in the region, are expected to drive the demand for diesel (**Graph 2**). Overall, growth in the region is forecast at 0.6 mb/d. In OECD Asia Pacific, Japan announced subsidies for gasoline, which along with a healthy petrochemical sector are anticipated to support oil demand. The region is projected to grow by 0.2 mb/d in 2022.

The **non-OECD** region is forecast to grow by 2.3 mb/d in 2022, surpassing the pre-pandemic level of 2019 by around 2 mb/d for total demand. Within the region, China, India and Other Asia are the main drivers, making up more than two-thirds of the growth volumes. In China, the ongoing return of mobility is forecast to back gasoline demand, which is projected to grow by around 0.2 mb/d y-o-y, with diesel and jet/kerosene adding support. India is similarly expected to see added mobility resulting in forecast y-o-y growth of roughly 0.2 mb/d for gasoline and 0.1 mb/d for jet/kerosene, with upwardly revised economic growth for the country supporting diesel growth of around 0.1 mb/d. Outside Asia, resumption of international travel is likely to be a key driver of oil demand in the Middle East, with expected total demand growth forecast at 0.3 mb/d. Latin America oil demand is driven mainly by diesel and gasoline with overall oil demand forecast to grow by 0.2 mb/d y-o-y.

The **non-OECD** region is forecast to grow by 2.3 mb/d in 2022, surpassing the pre-pandemic level of 2019 by around 2 mb/d for total demand. Within the region, China, India and Other Asia are the main drivers, making up more than two-thirds of the growth volumes. In China, the ongoing return of mobility is forecast to back gasoline demand, which is projected to grow by around 0.2 mb/d y-o-y, with diesel and jet/kerosene adding support. India is similarly expected to see added mobility resulting in forecast y-o-y growth of roughly 0.2 mb/d for gasoline and 0.1 mb/d for jet/kerosene, with upwardly revised economic growth for the country supporting diesel growth of around 0.1 mb/d. Outside Asia, resumption of international travel is likely to be a key driver of oil demand in the Middle East, with expected total demand growth forecast at 0.3 mb/d. Latin America oil demand is driven mainly by diesel and gasoline with overall oil demand forecast to grow by 0.2 mb/d y-o-y.

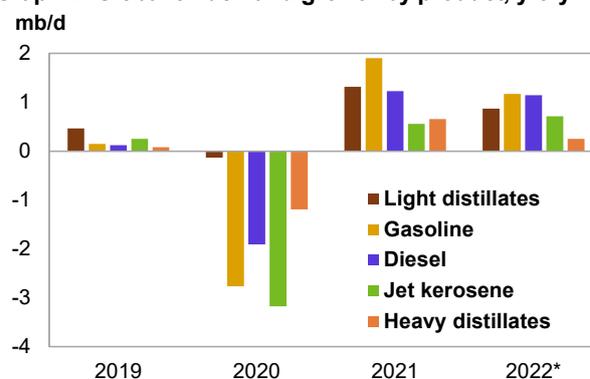
The main challenges for 2022 remain the containment of the COVID-19 pandemic and any resulting restrictive measures, supply chain disruptions, inflation, and labour shortages that could dampen economic growth. Nevertheless, upside potential to the forecast prevails, based on an ongoing observed strong economic recovery with the GDP already reaching pre-pandemic levels, supported by fiscal stimulus, and global trade levels reaching an all-time high in volume terms. Moreover, mobility is expected to gain further momentum, particularly with regard to the travel and tourism sector. Given the experience of the past two volatile years, vigilant monitoring of pandemic developments, along with a highly flexible approach, will remain key to successfully maintaining oil market stability.

Graph 1: Global oil demand by region, 2021-2022



Note: * 2022 = Forecast. Source: OPEC.

Graph 2: Global oil demand growth by product, y-o-y



Note: * 2022 = Forecast. Source: OPEC.

Table of Contents

| | |
|---|------------|
| Oil Market Highlights | iii |
| Feature Article | v |
| <i>Review of global oil demand trend</i> | v |
| Crude Oil Price Movements | 1 |
| Crude spot prices | 1 |
| The oil futures market | 3 |
| The futures market structure | 5 |
| Crude spreads | 6 |
| Commodity Markets | 7 |
| Trends in selected commodity markets | 7 |
| Investment flows into commodities | 9 |
| World Economy | 10 |
| OECD | 12 |
| Non-OECD | 17 |
| The impact of the US dollar (USD) and inflation on oil prices | 24 |
| World Oil Demand | 26 |
| OECD | 27 |
| Non-OECD | 30 |
| World Oil Supply | 34 |
| OECD | 36 |
| Non-OECD | 43 |
| OPEC NGLs and non-conventional oils | 45 |
| OPEC crude oil production | 46 |
| World oil supply | 47 |
| Product Markets and Refinery Operations | 48 |
| Refinery margins | 48 |
| Refinery operations | 49 |
| Product markets | 49 |
| Tanker Market | 54 |
| Spot fixtures | 54 |
| Sailings and arrivals | 54 |
| Dirty tanker freight rates | 55 |
| Clean tanker freight rates | 56 |

| | |
|---|-----------|
| Crude and Refined Products Trade | 58 |
| US | 58 |
| China | 59 |
| India | 60 |
| Japan | 61 |
| OECD Europe | 62 |
| Eurasia | 63 |
| Commercial Stock Movements | 64 |
| OECD | 64 |
| US | 65 |
| Japan | 66 |
| EU-14 plus UK and Norway | 67 |
| Singapore, Amsterdam-Rotterdam-Antwerp (ARA) and Fujairah | 68 |
| Balance of Supply and Demand | 69 |
| Balance of supply and demand in 2021 | 69 |
| Balance of supply and demand in 2022 | 70 |
| Appendix | 71 |
| Glossary of Terms | 77 |
| Abbreviations | 77 |
| Acronyms | 77 |

Crude Oil Price Movements

Crude oil spot prices soared in January compared to the previous month, with North Sea Dated rebounding by about 17% on a monthly average from December's level. Spot prices rose on robust physical crude market fundamentals and a rally in futures markets on the prospect of a healthier-than-anticipated global oil demand recovery and worries about several supply disruptions in December and January, along with tension in some major producing regions.

The ORB value rose firmly in January, increasing by \$11.03 m-o-m, or 14.8%, to stand at \$85.41/b. This was on the back of higher ORB component-related crude benchmarks, and higher official selling prices (OSPs), along with a sharp increase in crude differentials of all qualities, amid a robust physical crude market.

Oil futures prices ended January substantially higher compared with the previous month, and major oil futures benchmarks hit their highest levels in seven years. In January, oil futures prices were driven up by strong global oil market fundamentals, as well as non-fundamental factors. Market sentiment improved and investors' perception of global oil supply and demand fundamentals shifted from worries about oversupply to the prospect of the oil market tightening amid easing concerns about the impact of the Omicron variant on demand and worries about a potential oil supply disruption. The ICE Brent front-month rose by \$10.77, or 14.4%, in January to average \$85.57/b, and NYMEX WTI increased by \$11.29, or 15.7%, to average \$82.98/b. DME Oman crude oil futures prices increased m-o-m in January by \$10.52, or 14.3%, to settle at \$83.92/b.

Hedge funds and other money managers turned bullish on oil prices in January, recovering parts of their combined futures and options net long positions after a sharp selloff seen the previous two months. Rising oil prices, along with easing concerns about the impact of the Omicron variant on oil demand and supply outages, prompted speculators to sharply raise their net long positions. Money managers were net buyers of about 140 mb between the week of 14 December and 25 January, a rise of 35.1%.

The market structure of the three main futures benchmarks strengthened in January and the calendar spread between the nearest futures contracts moved into deeper backwardation. This reflects the market's perception of stronger market fundamentals, specifically in the near term, as recent global oil supply developments pushed first-month contracts higher compared with forward months. The continuing decline in OECD commercial oil stocks for eight consecutive months in December added strength to price structures.

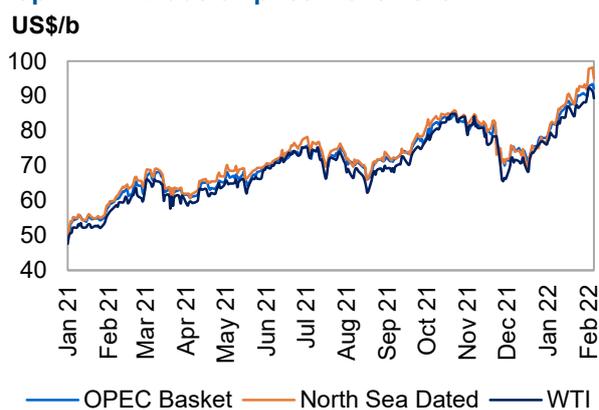
The sweet/crude differential widened significantly in Asia due to a sharp rise in the Brent-Dubai spread, as well as better performance by light and medium sweet crudes compared with heavier grades. High desulfurization costs due to high gas prices continued to add support to sweet crudes. On the US Gulf Coast (USGC), sweet/sour crude differentials also widened in January on a weaker sour crude market in the region. However, the spread narrowed in Europe as Urals values strengthened on firm demand from European refiners, while worries about a potential sour supply disruption in Eastern Europe added support.

Crude spot prices

Crude oil spot prices soared in January compared to the previous month with North Sea Dated rebounding about 17% on a monthly average from December levels. Spot prices were buoyed by robust physical crude oil market fundamentals and a rally in futures markets, on the prospect of healthier-than-anticipated global oil demand recovery and worries about several supply disruptions in December and January, along with tension in some major producing regions.

Market sentiment also improved on the back of easing COVID-19-related mobility restrictions in several European countries and the less severe impact of the Omicron variant on oil demand than previously anticipated.

Graph 1 - 1: Crude oil price movement



Sources: Argus, OPEC and Platts.

Crude Oil Price Movements

The physical crude market witnessed strong buying interest in January, specifically from European and Asian-Pacific refiners, to cover their February loading requirements amid recent global oil supply developments. Healthy refining margins in major refining hubs, mainly driven by strong middle distillate margins, also encouraged refiners to raise their intake and supported overall oil prices higher. Meanwhile, OPEC and non-OPEC producers in the Declaration of Cooperation (DoC) agreed to continue upward crude oil supply adjustments by 0.4 mb/d on a monthly basis in both February and March 2022, showing strong conformity to agreed production adjustments.

In January, North Sea Dated increased by \$12.51, or 16.9%, to an average of \$86.61/b. The WTI and Dubai first month rose respectively by \$11.29 and \$10.03, or 15.7% and 13.7%, to settle at \$83.16/b and \$83.34/b.

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

| OPEC Reference Basket (ORB) | Dec 21 | Jan 22 | Change | | Year-to-date | |
|-----------------------------|--------------|--------------|---------------|-------------|--------------|--------------|
| | | | Jan 22/Dec 21 | % | 2021 | 2022 |
| ORB | 74.38 | 85.41 | 11.03 | 14.8 | 54.38 | 85.41 |
| Arab Light | 75.49 | 86.15 | 10.66 | 14.1 | 54.78 | 86.15 |
| Basrah Light | 74.09 | 84.88 | 10.79 | 14.6 | 54.73 | 84.88 |
| Bonny Light | 74.43 | 86.85 | 12.42 | 16.7 | 55.01 | 86.85 |
| Djeno | 66.66 | 79.16 | 12.50 | 18.8 | 47.28 | 79.16 |
| Es Sider | 73.35 | 86.16 | 12.81 | 17.5 | 53.08 | 86.16 |
| Girassol | 75.16 | 88.28 | 13.12 | 17.5 | 55.84 | 88.28 |
| Iran Heavy | 74.68 | 85.59 | 10.91 | 14.6 | 54.38 | 85.59 |
| Kuwait Export | 75.38 | 86.28 | 10.90 | 14.5 | 54.83 | 86.28 |
| Merey | 54.89 | 63.58 | 8.69 | 15.8 | 37.40 | 63.58 |
| Murban | 74.57 | 85.11 | 10.54 | 14.1 | 54.93 | 85.11 |
| Rabi Light | 73.65 | 86.15 | 12.50 | 17.0 | 54.27 | 86.15 |
| Sahara Blend | 75.50 | 88.21 | 12.71 | 16.8 | 55.08 | 88.21 |
| Zafiro | 74.35 | 87.28 | 12.93 | 17.4 | 55.07 | 87.28 |
| Other Crudes | | | | | | |
| North Sea Dated | 74.10 | 86.61 | 12.51 | 16.9 | 54.73 | 86.61 |
| Dubai | 73.31 | 83.34 | 10.03 | 13.7 | 54.76 | 83.34 |
| Isthmus | 68.50 | 79.55 | 11.05 | 16.1 | 52.06 | 79.55 |
| LLS | 73.83 | 85.37 | 11.54 | 15.6 | 54.20 | 85.37 |
| Mars | 71.27 | 81.45 | 10.18 | 14.3 | 53.09 | 81.45 |
| Minas | 72.44 | 82.96 | 10.52 | 14.5 | 53.00 | 82.96 |
| Urals | 73.14 | 86.23 | 13.09 | 17.9 | 54.89 | 86.23 |
| WTI | 71.87 | 83.16 | 11.29 | 15.7 | 52.11 | 83.16 |
| Differentials | | | | | | |
| North Sea Dated/WTI | 2.23 | 3.45 | 1.22 | - | 2.62 | 3.45 |
| North Sea Dated/LLS | 0.27 | 1.24 | 0.97 | - | 0.52 | 1.25 |
| North Sea Dated/Dubai | 0.79 | 3.27 | 2.48 | - | -0.03 | 3.27 |

Sources: Argus, Direct Communication, OPEC and Platts.

The strength of the physical crude market was reflected in a sharp rise in the value of crude differentials in almost all regions, while several loading programmes sold out earlier than usual.

Crude differentials of light and medium sweet crude strengthened in January in all regions, including the North Sea, West African, Mediterranean and Caspian markets, with most light sweet crude differentials priced at premiums against the North Sea Dated benchmark in January, while some crude differentials rose to multi-year highs. Light crude differentials rose on strong demand in the Atlantic Basin on firm demand from European and Asian refiners, including China and India, and healthy light distillate margins. Supply disruptions in Libya and lower loading programmes for some crudes, including in the North Sea, added support.

North Sea crude differentials rose strongly in January on higher European demand and lower North Sea loading programmes. Forties and Ekofisk crude differentials rose by \$1.15/b and 98¢/b, respectively, on a monthly average in January to settle at a premium of \$1.38/b and \$2.27/b.

In the West African market, crude differentials of Bonny Light, Forcados, and Qua Iboe rose in January to their highest premiums against the Brent benchmark since at least March 2020, increasing on a monthly average to

premiums of \$1.04/b, \$1.42/b and \$1.13/b, respectively, to stand at \$1.44/b, \$2.14/b and \$2.02/b. The crude differential of medium-heavy sweet crude Cabinda also rose in January by 46¢ m-o-m to a premium of 80¢/b. In the Mediterranean, Saharan Blend averaged a premium of \$1.75/b, rising 74¢/b m-o-m, and Azeri Light rose 71¢ m-o-m to stand at an average of \$3.37/b. However, the CPC Blend differential weakened in January to a discount of 72¢/b on average, falling 38¢ m-o-m.

In the Middle East spot market, the value of Dubai-related grades rose firmly on strong demand from Asia-Pacific refiners, as well as widening Brent-Dubai crude differentials, which limited west-to-east arbitrage opportunities, thus supporting Dubai-related crude. The value of the Oman crude differential rose by 84¢ m-o-m in January to a premium of \$2.34/b.

On the USGC, Light Louisiana Sweet (LLS) strengthened in January, rising by 21¢ to average a premium of \$2.20/b to WTI, while Mars crude differentials weakened, falling by \$1.21 on a monthly average to a discount of \$1.73/b.

OPEC Reference Basket (ORB)

Along with a jump in major crude oil benchmarks, the **ORB** value rose firmly in January, increasing by \$11.03 m-o-m, or 14.8%, to stand at \$85.41/b. This was on the back of higher ORB component-related crude benchmarks and higher OSPs, along with a sharp increase in crude differentials of all qualities, amid a robust physical crude market. Compared with the previous year, the ORB was up \$31.03, or 57.1%, from \$54.38/b in 2020, to average \$85.41/b so far this year.

All **ORB component** values rose in September, with West and North African Basket components – Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro – rising \$12.71, or 17.3% m-o-m on average to \$86.01/b. Multiple region destination grades – Arab Light, Basrah Light, Iran Heavy, and Kuwait Export – increased m-o-m by \$10.82, or 14.4% on average, to settle at \$85.73/b. Murban crude rose m-o-m by \$10.54, or 14.1% on average, to settle at \$85.11/b. The Mery component also increased m-o-m by \$8.69, or 15.8% on average, to settle at \$63.58/b.

The oil futures market

Crude oil futures prices ended January substantially higher compared with the previous month. In January, oil futures prices were driven up by both strong global oil market fundamental and non-fundamental factors.

Oil prices recovered from December lows as market sentiment improved and investors' perception of strong global oil supply and demand fundamentals shifted from worries about oversupply to the prospect of tightening in the oil market fundamentals. Market sentiment turned positive, as fears about the negative impact of the rapid surge of the COVID-19 Omicron variant on demand dissipated, and data showed that the new variant is less severe than previously anticipated. This prompted many countries, including European countries, to ease COVID-related restrictions. Meanwhile, global oil demand data showed a resilient recovery, and the physical crude market showed signs of strong fundamentals. In its January monthly report, the IEA expressed more optimistic demand outlooks, increasing its world oil demand estimates for both 2021 and 2022. Moreover, oil futures prices were largely supported by concerns over oil supply in the short term amid several supply outages and disruptions in December and January, including in Kazakhstan, Libya, Canada and Ecuador, in addition to rising geopolitical risks in other major oil-producing regions, such as Eastern Europe and the Middle East.

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

| Crude oil futures | Dec 21 | Jan 22 | Change | | Year-to-date | |
|----------------------------|--------|--------|---------------|-------|--------------|-------|
| | | | Jan 22/Dec 21 | % | 2021 | 2022 |
| NYMEX WTI | 71.69 | 82.98 | 11.29 | 15.7 | 52.10 | 82.98 |
| ICE Brent | 74.80 | 85.57 | 10.77 | 14.4 | 55.32 | 85.57 |
| DME Oman | 73.40 | 83.92 | 10.52 | 14.3 | 54.95 | 83.92 |
| Spread | | | | | | |
| ICE Brent-NYMEX WTI | 3.11 | 2.59 | -0.52 | -16.7 | 3.22 | 2.59 |

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

Data showing a further decline in OECD commercial oil stocks, including in the US, added upward pressure on oil prices. According to US Energy Information Administration (EIA) weekly data, US crude oil stocks declined by about 18 mb between the weeks of 3 December 2021 and 28 January 2022. In mid-January, US crude stocks fell to their lowest point since October 2018.

Crude Oil Price Movements

Meanwhile, speculative activity also increased, with money managers sharply raising net long positions to their highest point since last November, betting on tight market fundamentals. A sharp appreciation in the US dollar value against a basket of major currencies in the second half of January, as well as volatility in equity markets and market expectations for a rate increase from the US Federal Reserve, were largely offset by a bullish outlook for global oil supply/demand fundamentals.

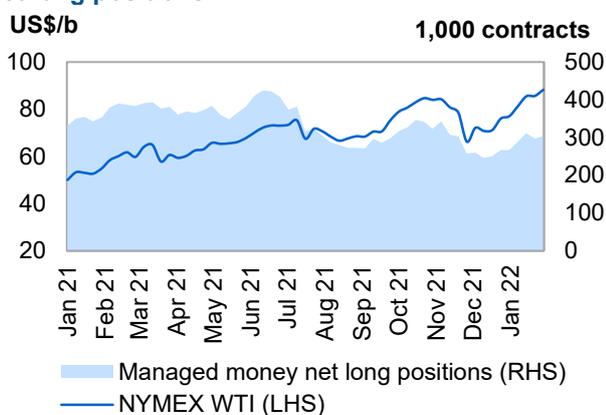
The ICE Brent front-month rose by \$10.77, or 14.4%, in January to average \$85.57/b, and NYMEX WTI increased by \$11.29, or 15.7%, to average \$82.98/b. Y-t-d, ICE Brent was \$30.25, or 54.7%, higher at \$85.57/b, while NYMEX WTI was higher by \$30.88, or 59.3%, at \$82.98/b, compared with the same period a year earlier. DME Oman crude oil futures prices increased m-o-m in January by \$10.52, or 14.3%, to settle at \$83.92/b. Y-t-d, DME Oman was higher by \$28.97, or 52.7%, at \$83.92/b.

On 9 February, ICE Brent stood at \$91.55/b and NYMEX WTI at \$89.66/b.

The **NYMEX WTI crude front-month discount to the same ICE Brent futures month** narrowed in January by 52¢ to \$2.59/b, its lowest monthly average since November, as the NYMEX WTI benchmark performed better than ICE Brent. The US market was supported by a decline in US crude oil stocks, specifically at Cushing, Oklahoma, the delivery point of the WTI futures contract, to just above 30 mb in the week to 28 January. The WTI price at Cushing, Oklahoma, signals the need for more oil inflow from other regions. Bullish speculative activity also contributed to pushing NYMEX WTI higher, as the long/short speculative ratio jumped to about 13 in the week to 25 January. However, the North Sea Dated premium to WTI Houston widened in January by 88¢ m-o-m, to average \$1.94/b, due to firm North Sea crude values, which were supported by the strong value of light sweet crude in the Atlantic Basin, including in the North Sea, Mediterranean and West African markets, amid strong physical crude fundamentals. Meanwhile, in the USGC, domestic demand for crude eased slightly in January. According to weekly EIA data, refiner net input of crude oil in US Petroleum Administration for Defense District 3 (PADD3) fell to an average of about 8.3 mb/d in the fourth week of January, compared with an average of about 8.5 mb/d in December. In the week of 28 January, the refiner net input of crude oil in PADD3 stood at 8.1 mb/d, the lowest level since October.

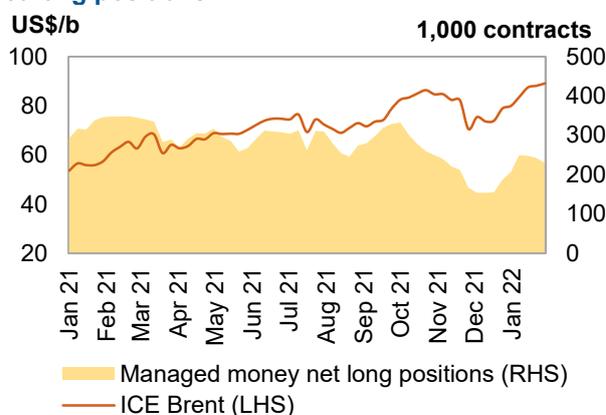
Hedge funds and other money managers turned bullish again on oil prices in January, recovering parts of their combined futures and options net long positions after a sharp selloff took place over the previous two months. Rising oil prices, along with easing concerns about the impact of the Omicron variant on oil demand and supply outages, prompted speculators to sharply raise their net long positions. Geopolitical tensions in several major oil-producing regions probably induced speculators to bet on strong global oil market fundamentals. A large rise in long positions in January, along with higher open interest, contributed to pushing oil futures prices higher. Money managers were more optimistic about the NYMEX WTI contract compared with ICE Brent, amid a sharp decline in Cushing crude stocks and signs of a tightening market in PADD2. Money managers were net buyers of about 140 mb between the weeks of 14 December and 25 January, a rise of 35.1%. By the end of the week of 25 January, hedge funds and other money managers held net long positions of 539,959 lots in the two main crude oil futures and options contracts.

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



Sources: CFTC, CME and OPEC.

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



Sources: ICE and OPEC.

Money managers increased their combined futures and options net long positions in ICE Brent by 54,863 contracts, or 29.2%, to reach 242,517 lots between the week of 28 December and 25 January, according to the ICE Exchange. During the same period, gross long positions rose by 50,033 lots, or 19.0%, to 313,823 contracts, while gross short positions declined by 4,830 lots, or 6.3%, to 71,306 contracts.

Hedge funds and other money managers also raised net long positions in January related to NYMEX WTI by 30,602 lots, or 11.5%, to stand at 297,442 lots in the week of 25 January. This was due to a decline in short positions by 21,171 lots, or 45.6%, to 25,277 contracts, and a rise of 9,431 lots, or 3.0%, in long positions to 322,719 contracts, according to the US Commodity Futures Trading Commission (CFTC).

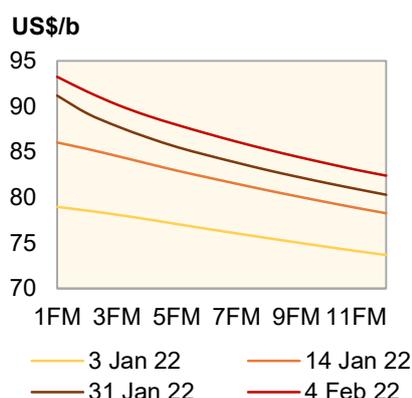
The **long-to-short ratio** of speculative positions in the ICE Brent contract rose in January, increasing from about 3:1 in late December to about 4:1 in the week of 25 January. Similarly, the NYMEX WTI long-to-short ratio rose to about 13:1 in the week to 25 January, compared with 7:1 in late December. **Total futures and options open interest volumes** on the two exchanges rose significantly in January, increasing by 12.7%, or 666,173 lots, to stand at 5.9 million contracts in the week ending 25 January.

The futures market structure

The **market structure** of the three main futures benchmarks strengthened in January and the calendar spread between the nearest futures contracts moved into deeper backwardation. This reflects the market perception of stronger market fundamentals, specifically in the near term, as recent global oil supply developments pushed first-month contracts higher compared with forward months. A continuing decline in OECD commercial oil stocks for eight consecutive months in December also added strength to the market structure.

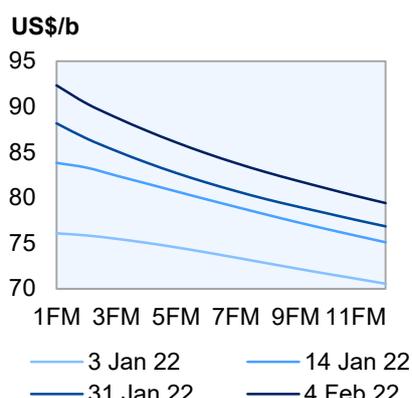
The forward curve of global benchmark **ICE Brent** steepened notably in January with the ICE Brent M1-M6 backwardation rising in late January to its highest point since September 2013. Prompt prices rose more than forward contracts, strongly buoyed by concerns about potential lower supply due to outages and geopolitical risks amid robust global oil supply and demand fundamentals. Furthermore, strong crude oil demand, specifically in the Atlantic Basin, and from Asian and European refiners and traders for February and March loadings, also contributed to supporting the market structure. The ICE Brent M1-M3 spread widened on average in January by \$1.12, from a backwardation of 56¢/b in December to a backwardation of \$1.68/b. The ICE Brent M1-M6 backwardation also widened in January to settle at \$3.97 on average, compared with backwardation of \$1.74/b the previous month.

Graph 1 - 4: ICE Brent forward curves



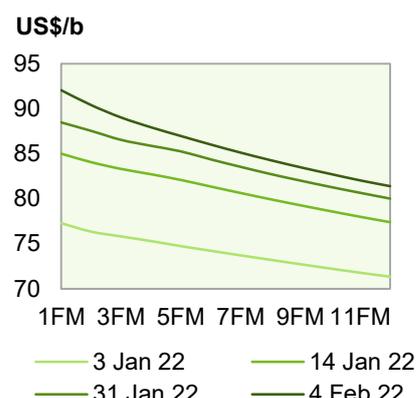
Sources: ICE and OPEC.

Graph 1 - 5: NYMEX WTI forward curves



Sources: CME and OPEC.

Graph 1 - 6: DME Oman forward curves



Sources: DME and OPEC.

In the US, the backwardation structure of **NYMEX WTI** also strengthened amid resilient US oil demand and firm market fundamentals, specifically around the Cushing, Oklahoma, trading hub, which translated into a sharp decline in Cushing crude stocks to 30 mb, according to weekly EIA data. A decline in US crude stocks by 18 mb since early December added support. The NYMEX WTI M1-M3 spread widened to a backwardation of \$1.68/b on monthly average in January, compared with a backwardation of 58¢/b one month earlier.

The **DME Oman** and **Dubai** price structure moved into deeper backwardation last month on signs of accelerating oil market rebalancing in the east Suez region. Hefty crude demand from Asia Pacific refiners for sour crude in the Middle East spot market amid narrow west-to-east arbitrage economics, coupled with easing concerns about the impact of Omicron on demand, pushed first-month prices sharply higher compared with forward month contracts, resulting in steepening the backwardation structure. On a monthly average, the DME Oman M1-M3 widened 60¢ in January to a backwardation of \$1.69/b, compared with a backwardation of \$1.10/b in December.

Crude Oil Price Movements

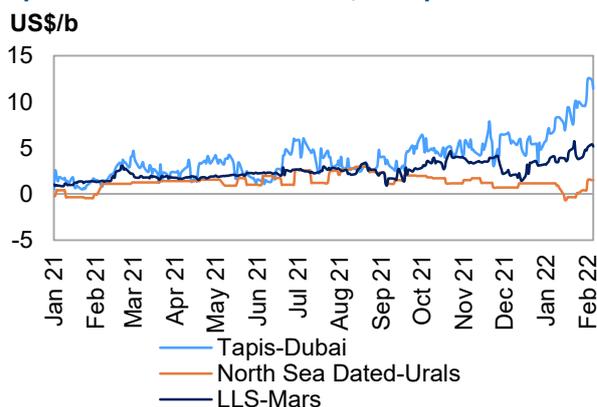
The physical market showed a stronger backwardation structure, reflecting strong crude demand in the spot market and a substantial lessening of the supply overhang. Regarding the M1/M3 structure, the North Sea Brent M1/M3 backwardation widened in January on a monthly average of \$1.53 to \$1.91/b. In the US, the WTI M1/M3 backwardation also widened in January by \$1.15 to \$1.67/b, compared with a backwardation of 52¢/b in December. The Dubai M1/M3 monthly average spread was in a backwardation of \$2.06/b in January, widening from a backwardation of \$1.58/b last December.

Crude spreads

The **sweet/ crude differential** widened significantly in Asia mainly due to a sharp rise in the Brent-Dubai spread, as well as better performance among light and medium sweet crudes compared with heavier varieties. High desulfurization costs due to high gas prices continued to add support to sweet crudes, as refiners were tempted to maximize sweeter grades in their blends. In the USGC, sweet/sour crude differentials also widened in January on a weaker sour crude market in the region, while a strong light sweet market in the Atlantic Basin lent support to light sweet crude values in the USGC. However, in Europe, the spread narrowed as Urals values strengthened on firm demand from European refiners for the grade, while worries about potential sour supply disruptions in Eastern Europe added support.

In **Europe**, despite a sharp rise in light sweet crude prices in January, specifically in Northwest Europe, the value of sour crude Urals increased more than for North Sea Dated, resulting in a narrowing spread between Urals and North Sea Dated. However, Urals differentials remained priced at a discount to North Sea Dated. Urals crude values improved significantly in January in both Northwest Europe and the Mediterranean amid firm demand from European refiners and supportive regional fuel oil margins. A sharp rise in Johan Sverdrup's crude value also added support to Urals. Worries about geopolitical developments in Eastern Europe probably resulted in higher demand for Urals for January and February loadings.

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



Sources: Argus, OPEC and Platts.

The North Sea Dated-Urals spread fell to a premium of 38¢/b in January, narrowing by 58¢ m-o-m, from a premium of 96¢/b in December. Urals crude differentials in Northwest Europe and the Mediterranean also rose in January by 21¢ and 60¢, respectively, to average a discount of \$1.11/b and 34¢/b to North Sea Dated.

In **Asia**, the Tapis/Dubai spread widened in January by \$2.43 to average \$8.05/b compared with \$5.62/b in December. The value of light sweet crude in the east Suez market was firmly supported by strong demand amid a wider Brent-Dubai spread that made importing similar sweet Brent-related crude from the Atlantic Basin less economically attractive. A sharp rise in light sweet crude values in the Atlantic Basin added additional support to light sweet crude, like Tapis, in Asia. The Brent-Dubai front-month exchange of futures-for-swaps (EFS Dubai) widened further on a monthly average in January, by 93¢, to \$3.87/b, compared with \$2.94/b in December. Moreover, better performance in light and middle distillate products, specifically diesel, compared with heavier distillates, like high sulphur fuel oil, and high desulfurization cost due to high gas prices, contributed to widening the sweet/sour crude differential.

In the **USGC**, the LLS premium over medium sour Mars widened in January by \$1.36/b m-o-m, to \$3.92/b. Light sweet crude values like LLS were supported by strengthening light distillate margins compared with fuel oil margins, along with a higher value for similar grade qualities in the Atlantic Basin, as well as firm demand from foreign buyers. Meanwhile, the sour crude market on the USGC coast was under pressure on lower demand from domestic refiners and additional sour crude supply from the US Strategic Petroleum Reserve (SPR).

Commodity Markets

Selected commodity prices recovered from last month's decline, driven by a surge in energy index prices. The non-energy index increased for the second consecutive month, propelled by increased demand for agricultural oils. Base metals staged a late rally in the second half of January and posted a net increase m-o-m. In the precious metals group, high inflation rates in the US and EU have increased the safe haven appeal of this group.

The surge in selected commodity prices prompted activity in the paper market as average open interests increased m-o-m and money managers increased their average net length positions in the same period, signalling strong bullish sentiment towards commodities.

Commodity prices continue to trend upwards y-o-y but volatility remains amid uncertainties around supply and geopolitical developments. The impact of the COVID-19 pandemic on commodities has been reduced as lockdowns and mobility restrictions have been eased even in the face of record-breaking cases, but the Omicron variant remains a wild card. In the western hemisphere, vaccine roll-outs have helped commodity demand recover, but governments have not completely ruled out lockdowns or other restrictions, thus maintaining uncertainty around demand. In the Asian markets, China's zero-tolerance policy towards COVID-19 and the rapid spread of the Omicron variant posed a threat to oil demand, particularly in the run-up to the Lunar New Year holiday and the Winter Olympic Games.

Trends in selected commodity markets

The **energy price index** rose by 8% from December 2021 to January 2022 following a recovery in crude oil and US natural gas prices, but were partially offset by a decline in EU natural gas prices. Meanwhile, coal prices jumped for the second consecutive month. The energy index continues to trend upwards y-o-y and has jumped to a 73.6% average, driven mainly by a 56.5% recovery in crude oil prices in the same period.

The **non-energy index** gained 4.7% m-o-m on the back of a surge in demand for agricultural oils and weaker supply of base metals. The index continues to trend higher and has jumped by 20.5% y-o-y.

Table 2 - 1: Commodity prices

| Commodity | Unit | Monthly averages | | | % Change Jan 22/Dec 21 | Year-to-date | |
|-------------------------|-----------|------------------|---------------|---------------|---------------------------|---------------|---------------|
| | | Nov 21 | Dec 21 | Jan 22 | | 2021 | 2022 |
| Energy* | Index | 114.74 | 111.42 | 120.34 | 8.0 | 69.31 | 120.34 |
| Coal, Australia | US\$/mt | 157.48 | 169.65 | 196.95 | 16.1 | 86.83 | 196.95 |
| Crude oil, average | US\$/b | 79.92 | 72.87 | 83.92 | 15.2 | 53.60 | 83.92 |
| Natural gas, US | US\$/mbtu | 5.02 | 3.73 | 4.33 | 16.1 | 2.67 | 4.33 |
| Natural gas, Europe | US\$/mbtu | 27.62 | 38.03 | 28.26 | -25.7 | 7.27 | 28.26 |
| Non-energy* | Index | 115.40 | 116.94 | 122.43 | 4.7 | 101.63 | 122.43 |
| Base metal* | Index | 125.18 | 125.21 | 133.22 | 6.4 | 99.71 | 133.22 |
| Precious metals* | Index | 140.54 | 136.82 | 139.13 | 1.7 | 145.12 | 139.13 |

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

Sources: World Bank and OPEC.

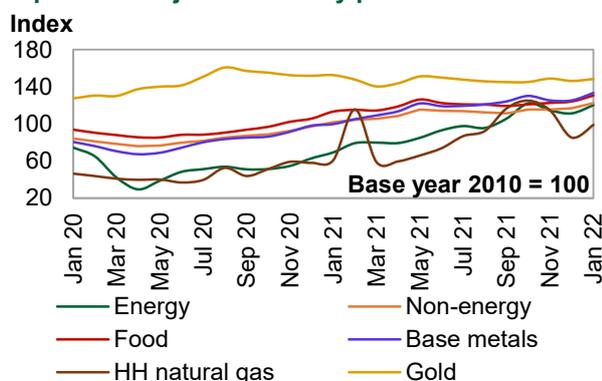
Average crude oil prices increased 15.2% m-o-m with support from strong market fundamentals. Crude oil prices continue to trend upwards y-o-y as declining US stocks continue to signal a tighter oil market and therefore adding upward pressure on prices.

Henry Hub natural gas prices bounced back following their decline in December. The average price increased 16.1% m-o-m amid colder weather across the US and supply constraints that led to an increase in draws. Data from the EIA shows that US working gas storages went from 3,341 bcf in December 2021 to 2,806 bcf in January 2022, a 16% decline m-o-m. Y-o-y, prices continue to trend upwards and have increased by 59.3%. During the same period last year, weekly average inventories were at 3,021 bcf and have declined by 7.1%.

Natural gas prices in Europe have receded significantly over the past four weeks, nearing their lowest levels this winter following record-high inflows of LNG from Asia. The average **Title Transfer Facility price** went from \$38/mmbtu in December 2021 to \$28.3/mmbtu in January 2022, a 25.5% decline m-o-m. However, tightness around gas balances compounded by geopolitical developments in the region, and high winter demand continue to put upward pressure on gas prices.

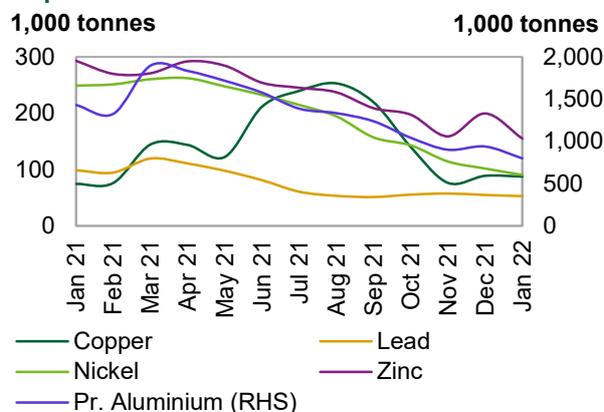
Australian thermal coal prices jumped for the second consecutive month and increased 16.1% m-o-m as the Indonesian ban on coal exports remained in place for the entire month of January, adding pressure to supply tightness. As of 1 February 2022, the Indonesian government lifted its export ban on coal, so it remains to be seen what impact this decision will have on future coal prices.

Graph 2 - 1: Major commodity price indices



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

Graph 2 - 2: Inventories at the LME



Sources: LME, Thomson Reuters and OPEC.

The **base metal price index** was essentially flat last month due to mixed movements within the index, but increased 6.4% m-o-m following announcements by China in late January 2022 to keep interest rates low to help boost investment in sectors like manufacturing.

The manufacturing sectors in Europe and China have been struggling to remain profitable due to the sharp increases in operating expenses associated with higher energy prices. According to data from Haver Analytics, the purchasing managers index (PMI) declined 3.2% m-o-m in emerging markets whereas in advanced economies the decline was about 0.4% in the same period. Additionally, data from the London Metal Exchange (LME) shows that stock levels across the group declined m-o-m, signalling tightness around supply and adding additional upward pressure on the index.

Aluminium prices continue to climb and jumped 11.5% m-o-m as monthly average inventories declined. Data from the LME shows that average aluminium stocks went from 937,684.5 mt in December 2021 to 878,431.5 mt in January 2022, a 6.3% m-o-m decline. Geopolitical developments have also put upward pressure on aluminium prices since Russia is one of the world's biggest producers. Additionally, the recent Indonesian export ban on coal added upward pressure to aluminium prices as coal is the main energy source used to power aluminium production plants in China.

Average monthly copper prices rebounded to 2.4% m-o-m. Increases in copper prices were supported by the physical market as average inventories declined 88,950 mt in December 2021 to 87,650 mt in January 2021, a 1.5% decline m-o-m according to data from the LME.

To cap off the group of **base metals**, **lead prices** increased 1.6% m-o-m, supported by a drop in stocks; average stocks declined from 52,475 mt in December 2021 to 52,475 mt in January 2022, a 3.8% decline. **Zinc prices** increased for the second consecutive month and jumped to 5.9% as inventories declined from 199,575 mt in December 2021 to 155,075 tons in January 2022, a 22.3% decline.

In the group of **precious metals**, the index climbed back 1.7% m-o-m following its decline the previous month. Gold prices increased 1.4% m-o-m amid high inflation in the US and the EU region, thereby increasing gold's safe haven appeal. Silver and platinum increased 2.8% and 5.2% respectively m-o-m. The index declined 4.1%, y-o-y, as safe haven demand has been steadily decreasing amid announcements by the US Federal Reserve of increased interest rates in the near term.

Investment flows into commodities

Money managers' net length positions increased m-o-m as short positions declined significantly in the same period. The upward trend of commodity prices has shifted money managers' focus to supply uncertainties across commodities amid geopolitical developments. Total open interest across selected commodities increased by 4.9% m-o-m while money managers' total long positions increased 6.8% and short positions declined 14.7% in the same period, signalling bullish sentiment towards commodities.

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

| Selected commodity | Open interest | | Net length | | | |
|--------------------|---------------|--------|------------|-----|--------|-----|
| | Dec 21 | Jan 22 | Dec 21 | %OI | Jan 22 | %OI |
| Crude oil | 2,512 | 2,673 | 256 | 10 | 291 | 11 |
| Natural gas | 1,174 | 1,160 | -34 | -3 | 6 | 0 |
| Gold | 653 | 692 | 88 | 13 | 96 | 14 |
| Copper | 181 | 203 | 14 | 8 | 26 | 13 |

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

Sources: CFTC and OPEC.

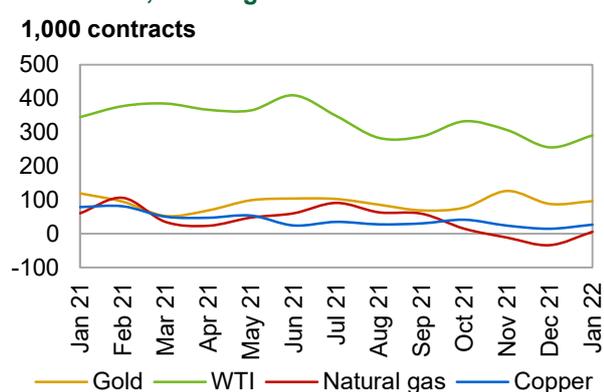
Total Crude Oil (WTI) Open Interest (OI) increased 6.4% m-o-m. Money managers' long positions increased 4.6% m-o-m while short positions declined by an impressive 38.7% in the same period. The m-o-m increase in OIs amid price increases indicates a strong bullish sentiment towards crude oil.

Total Henry Hub's natural gas OI receded for the second consecutive month and declined by 1.1% m-o-m; The upside potential is that money managers increased their long position by 7% m-o-m while decreasing their short positions by 12.4% in the same period. The m-o-m decline in OIs amid increases in prices indicates bearish sentiment towards natural gas.

Gold's OI rebounded from the previous month's decline and increased by 6.1% m-o-m. Money managers increased their long positions by 1.9% m-o-m while decreasing their short position by 10.9% in the same period. The m-o-m increase in OIs amid increase in prices indicates a strong bullish sentiment towards gold.

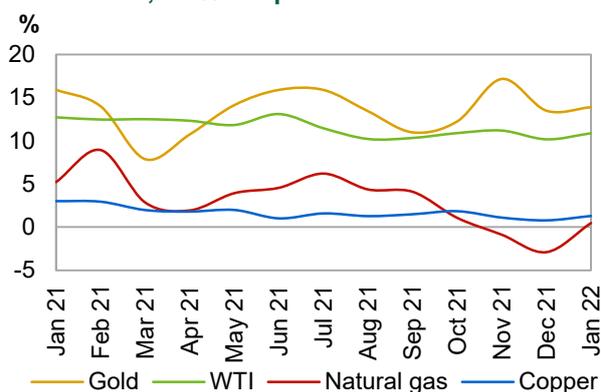
Copper's OI increased 12.6% m-o-m, supported by a strong physical market. Money managers' long positions increased 20% m-o-m while short positions declined 5% in the same period. The m-o-m increase in OIs amid increase in prices indicates strong bullish sentiment towards copper.

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

The global economy continues to recover despite the Omicron wave, monetary tapering efforts and reduced fiscal stimulus. The latter two developments are basically the outcome of sound underlying growth. Hence, the changes in 2022 GDP growth numbers are limited this month. With the Omicron variant not having as negative an impact as previous COVID-19 waves, the pace of the world economy is forecast to again accelerate towards 2Q22. In addition, numerous FY 2021 estimates published in January are now taken into account. Most 4Q21 data was slightly better than expected, especially in the US and China. This lifted the GDP growth estimate for 2021 to 5.6% from 5.5% in the previous month. The OPEC Secretariat's 2022 economic growth forecasts have already anticipated some seasonal effect from COVID-19 with slowing activity during the northern hemisphere winter and challenges stemming from supply chain bottlenecks. Hence, the global GDP growth forecast for 2022 remains unchanged at 4.2%.

The underlying growth assumptions for 2022 have not changed materially from last month. The forecast assumes limited economic impact from the newly identified Omicron sub-variant in 1Q22 and an accelerating rebound in economic activity towards 2Q22. It remains to be seen if the COVID-19 situation worsens again, potentially leading to lockdowns and a slowdown in mobility, which would impact both economic growth and oil demand. Some COVID-19-related seasonality towards 4Q22 is again taken into account, similar to the slowdowns in economic activity that were seen in 2020 and 2021.

In general, numerous uncertainties continue to challenge current growth levels, but upside potential could lead to stronger-than-anticipated growth. The major uncertainty that will require close monitoring is the near-term path of COVID-19. Other factors that could dampen the recovery are ongoing supply chain disruptions and labour shortages in different parts of the world, mainly in the service sector but also affecting logistics. It should be noted, however, that global output stands above the 2019 level and global trade in volume terms has reached all-time highs. Consequently, the strong demand recovery in combination with supply chain and labour market limitations could lead to a sustained rise in inflation and accelerated tapering by major central banks, resulting in rising interest rates and hence slowing investment. The recovery could also be challenged by very high sovereign debt levels that could cause a considerable burden for the fiscal health of many economies. Upside potential could come from the additional fiscal stimulus measures in the US in combination with a successful containment of COVID-19, which could lead to a further pick-up in global consumption and investment.

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

| | World | OECD | US | Euro-zone | UK | Japan | China | India | Brazil | Russia |
|-----------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 2021 | 5.6 | 5.2 | 5.7 | 5.2 | 6.7 | 1.8 | 8.1 | 8.8 | 4.7 | 4.0 |
| Change from previous month | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| 2022 | 4.2 | 3.6 | 4.0 | 3.9 | 4.1 | 2.2 | 5.6 | 7.2 | 1.5 | 2.7 |
| Change from previous month | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |

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

Source: OPEC.

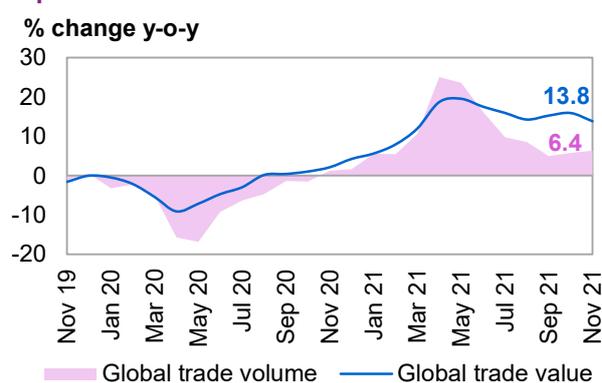
Update on latest global developments

The latest output measures, labour market indicators and lead indices point to a continued pattern of solid growth, especially in advanced economies. Commodity exporting economies benefit from this momentum, which is also an important support factor for the current global economic recovery. The manufacturing sector has held up relatively well, despite the supply chain disruptions and labour market tightness. A more pronounced effect from the ongoing pandemic can be seen in the services sector, especially the contact-intensive areas like leisure and hospitality, while travel and transportation remain significantly impacted. Positive momentum can be seen in the slightly better-than-expected 4Q21 GDP results that were recently reported for the US and China. Hence, the global economy seems to be well supported and remained above average pre-pandemic growth levels in 2021 thanks to unprecedented fiscal and monetary stimulus despite the Omicron wave that has gained pace. While Omicron, in combination with ongoing supply chain bottlenecks, seems to have negatively impacted the economic dynamic in the US and Euro-zone and to some extent China, the impact of this variant seems to be less than expected, based on the experience with earlier variants.

The pandemic has caused severe disruptions in the global economy with a massive impact on **supply chains, labour markets, and hence inflation**. As the pandemic continues, these issues have caused a volatile pattern in economic growth. Inflationary pressures have remained and have become an important issue, primarily in the US and the Euro-zone given the importance of the US dollar and the Euro. Quantitative easing (QE) efforts in combination with the strong underlying global demand and supply chain bottlenecks have brought about new concerns about the impact of inflation as it is becoming persistent in major economies. To curtail the potential long-lasting impact of inflation, the major central banks have made announcements about adjusting their QE programmes and have all started considering the reduction of their very accommodative **monetary policies**, making significant decisions particularly at the G4 central bank meetings in January and February. While the US Federal Reserve announced a faster tapering of ongoing reductions in QE measures and that key policy rates are likely to rise in 2022, the European Central Bank (ECB) said it would start to gradually reduce its QE measures in March 2022 and did not rule out more interest rate hikes before 2023, a shift in tone compared to previous announcements. The Bank of England (BoE) has been the most aggressive among major central banks and lifted rates a second time at its latest February meeting. The BoE's QE measures also ended in 2021. The Bank of Japan (BoJ), with the largest monetary stimulus and an extensive history of QE policies, has announced a reduction of pandemic-related QE measures, but will continue its general ultra-loose monetary policy and non-pandemic-related QE measures. Rising inflation led central banks in Brazil and Russia to further hike interest rates, likely impacting the progress of their recoveries in 2022. While India also experienced rising inflation in 2021, price rises have retracted to more reasonable levels in recent months, in line with the central bank's expectations, allowing it not to hike interest rates to the time being.

Global trade has been an important driver in the ongoing global recovery, although it has been impacted by supply chain disruptions amid strong demand. In a positive sign, world trade volumes increased by 6.4% y-o-y in November, compared with 5.7% y-o-y growth in October, based on the CPB World Trade Monitor Index provided by the CPB Netherlands Bureau for Economic Policy Analysis. Trade in value terms rose by 13.8% y-o-y, in November, compared with 15.9% y-o-y in October.

Graph 3 - 1: Global trade



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

Near-term global expectations

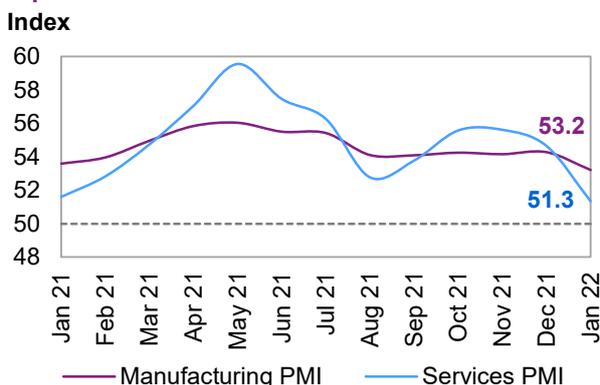
The global economic growth forecast anticipates accelerated momentum towards 2Q22, similar to the last two years, as a COVID-19 seasonality is forecast to lead to a lessening of social-distancing measures in the northern hemisphere in 2Q22 and 3Q22. The US and the Euro-zone are again expected to experience a solid rebound from relatively lower 1Q22 growth. Momentum in China is also forecast to gain traction following lockdown measures in 1Q22 that are expected to weigh on growth. Furthermore, India is expected to see strong 2H21 growth carry over into 2022. This will, however, very much depend on COVID-19-related developments. The current growth momentum is based on the assumption of a relatively similar quarterly growth pattern that was seen in 2020 and 2021 and taking into account relatively improved COVID-19 management, with the necessity of only limited social-distancing measures. Positively, the global vaccination rollout gained pace and has already prevented a more severe impact from new variants. It is furthermore expected that newly updated vaccines will be more effective in reducing the impact of Omicron and possibly new variants. In addition, new medicines for treating COVID-19 will likely be approved soon that will also lessen the impact of COVID-19. Finally, the world has quickly adapted and the impact of the challenges stemming from COVID-19 are far less disruptive than they were before.

However, as long as the pandemic has a disruptive impact on **supply chains and inflation**, the global economic momentum will remain volatile. While some economic production and logistic indicators currently imply a gradual improvement in the supply chain, and inflation is likely to be of a more sustained nature. After the first wave of COVID-19, inflation was primarily driven by temporary factors spurred by pent-up demand and temporary supply chain bottlenecks. That primarily pushed up prices in transportation as well as the leisure and hospitality sector. A more sustained effect has now started to kick in through a rise in wages and salaries in combination with an increase in rents or rent-equivalent prices, especially in the developed economies. These effects are forecast to have a more sustained impact in the coming months and it remains to be seen if

inflation will retract as much as is currently assumed by market participants. Furthermore, the efforts related to the energy transition are important to consider as they seem to have gained pace recently and will likely have an inflationary effect through tax increases, especially on fossil fuels. With these developments taken together, inflation is expected to remain and likely to be above consensus levels on a global basis. These pressures may further lead central banks, especially the US Fed and the ECB, to envisage a more aggressive tightening and key interest rate cycle than is currently foreseen.

Global purchasing managers' indices (PMIs) for both the manufacturing and services sectors point to some slowdown in 1Q22, while this trend has been much more accentuated in the services sector. The global manufacturing PMI stood at 53.2 in January, compared with 54.3 in 4Q21. The global services sector PMI stood at 51.3, four index points lower than in 4Q21, when a level of 55.3 was recorded. This indicates some slowdown in the services sector due to a tightening labour market and a likely slowdown stemming from additional social-distancing measures across the globe that were stepped up at the end of the year and in January due to Omicron.

Graph 3 - 2: Global PMI



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

With some minor adjustments, especially upward revisions in full year data from the US and China, the 2021 **GDP growth** forecast was revised up to 5.6% from 5.5%. Growth levels in 2022 are forecast to normalize at lower levels and to remain relatively divergent. GDP growth in 2022 is forecast at 4.2%, unchanged from the previous month. This implies that, among other issues, COVID-19-related challenges will not derail the recovery. Moreover, it is assumed that inflation will retract somewhat and will not continue at the high levels seen in 2H21, particularly in the US and the Euro-zone.

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

| | World |
|-----------------------------------|------------|
| 2021 | 5.6 |
| Change from previous month | 0.1 |
| 2022 | 4.2 |
| Change from previous month | 0.0 |

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

OECD

OECD Americas

US

Update on the latest developments

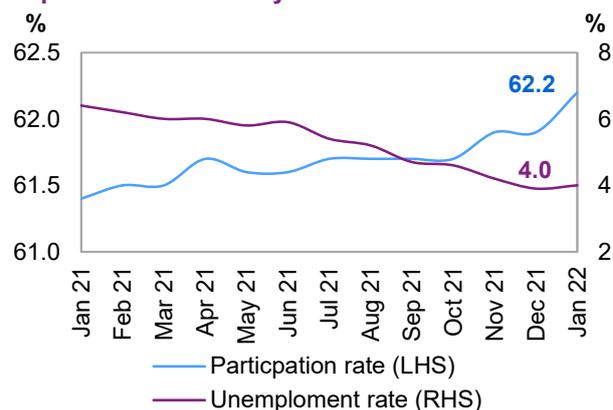
The latest data from December and preliminary data from the beginning of the year point at **ongoing solid momentum**, albeit slightly impacted by the latest Omicron wave. Moreover, an ongoing supply-chain shortage, especially for semi-conductor related industries and continued tightness in the labour market may also have impacted the economic growth abilities in the most recent months. Despite this COVID-19 related impact, 4Q21 GDP growth was reported at a very strong level in the first available estimate by the Bureau of Economic Analysis (BEA). 4Q21 GDP growth was reported at 6.9% q-o-q on a seasonally adjusted annualized rate (SAAR), compared with 2.3% q-o-q SAAR in 3Q21. Central bank policies pursue a continued tapering of the extraordinary COVID-19 related stimulus measures, which originally stood at monthly \$120 billion quantitative easing measures. This is expected to end in March, when the first key interest rate rise will materialise. This policy, or an even more aggressive path in the near-term, is very much guided by the latest **inflation** number, which has reached 7.1% y-o-y in December, after reaching 6.9% y-o-y in November. The strongest appreciation came once again from the sub-sector of transportation, pointing to the possibility of a transitory effect after the reopening of the economy. Prices in the transportation sector rose by 21.4% y-o-y in December, compared with 21.3% y-o-y in November. Excluding the volatile components of energy and food, inflation stood at 5.5% y-o-y in December, compared with 5% y-o-y in November.

Consumer confidence continued at a solid level in January and retracted only very slightly. The index provided by the Conference Board fell to 113.8 in January, from 115.2 in December.

The **unemployment rate** rose only a little to stand at 4% in January, compared with 3.9% in December. The **participation rate** remained low compared to pre-pandemic levels but improved considerably, standing at 62.2% in January, compared with 61.9% in December. The participation rate before the pandemic stood at almost 63%.

Non-farm payrolls improved at a higher rate in January than expected, marking an increase of 467,000 job additions compared with an upwardly revised increase of 510,000 in December. With ongoing tightness in the labour market, wage developments need close monitoring as they could materially lift inflation. Hourly earnings rose further by 5.7% y-o-y in January, compared with 4.9% y-o-y in December, continuing a rising trend substantially above pre-COVID-19 yearly growth of between 2% and 3%.

Graph 3 - 3: US monthly labour market



Sources: Bureau of Labor Statistics and Haver Analytics.

Near-term expectations

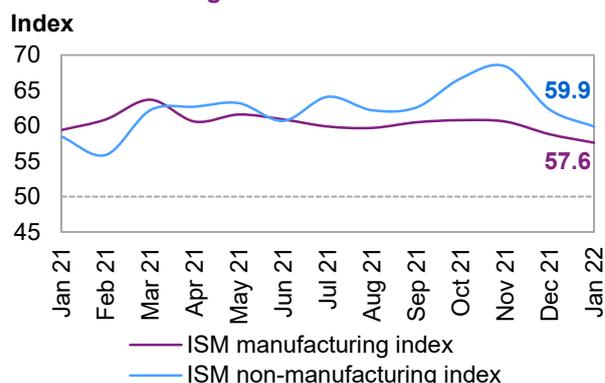
The latest **Omicron wave is forecast to have impacted 1Q22 US growth**, however, when observing the relatively solid growth path in 4Q22 at the start of this wave and considering the falling hospitalisation rates, the impact is forecast to be limited. Another factor that may have provided upside to 2022 growth is the still undecided infrastructure stimulus that under the label of “Build Back Better”, should have had the ability to lift growth at a magnitude of about 0.2 percentage points in 2022. Some slow-down is expected to materialise in 1Q22, but the underlying momentum seems to remain buoyant, according to the latest release of labour market data. The main uncertainties in the short-term will be the path of the Fed’s monetary policy tightening, the development of COVID-19 in the US and further fallouts stemming from labour market tightness and supply-chain bottlenecks. Upside could come from an agreement on further fiscal stimulus in Congress, a faster-than-expected improving labour market and, in this connection, a quick recovery in contact-intensive sectors, which over the last months have been particularly impacted by COVID-19. In general, some shift from the currently strong manufacturing sector to the services sector is expected to materialise by the end of 1Q22.

US inflation is at the centre of an ongoing global inflation debate, given the importance of US interest rates and consequent repercussions an interest rate rise cycle may have on capital markets, global investment and the US dollar value. Inflationary momentum is forecast to decelerate somewhat in the coming months, though the magnitude of the retraction remains to be seen. Reopening effects, including rising demand for leisure, hospitality and transportation after the 2020 and 2021 lockdowns may wane and supply chain bottlenecks are gradually easing. However, a rise in wages and salaries, as well as rent and rent equivalents, which accounts for around 40% of US core inflation, may keep inflation at above the 2% to 2.5% range easily and the current momentum and expectations point at an expected inflation average for the full year of more than 4%. Also, potentially rising taxes on fossil fuel-related energy products due to the energy transition may further lift inflationary trends. Hence, while the Fed’s near-term path in hiking interest rates and tapering quantitative easing measures has been well communicated, numerous uncertainties remain. Three rate hikes seem to be likely, but there is the uncertainty about the magnitude of this rate hikes. An around 1.5 percentage points rate rise in key interest rates is possible and has been considered in the Secretariat’s forecast.

In terms of **quarterly growth** developments, 1Q22 GDP growth is forecast at 3% q-o-q SAAR. In 2Q22, growth is forecast to reach 4% q-o-q SAAR, followed by a slight slowdown to 3.4% q-o-q SAAR in 3Q22. Growth in 4Q22 is expected to reach 2.1% q-o-q SAAR.

December PMI levels, as provided by the Institute for Supply Management (ISM), point to an ongoing recovery, albeit at a slowing rate amid the latest COVID-19 developments, continued labour market tightness and the political challenges facing the implementation of a further fiscal stimulus package. The index level for the services sector, representing around 70% of the US economy, retracted significantly for the second consecutive month to stand at 59.9 in January, compared with 62.3 in December and 68.4 in November. The manufacturing PMI also fell in January to stand at 57.6, after 58.8 in December and 60.6 in November.

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



Sources: Institute for Supply Management and Haver Analytics.

By taking into consideration actual data for 4Q21, the **2021 US GDP growth** estimate was revised up to 5.7% from 5.5%. **2022's** GDP growth forecast remained unchanged to stand at 4%.

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

| | US |
|-----------------------------------|------------|
| 2021 | 5.7 |
| Change from previous month | 0.2 |
| 2022 | 4.0 |
| Change from previous month | 0.0 |

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

OECD Europe

Euro-zone

Update on the latest developments

Growth in the **Euro-zone surprised to the upside throughout 2021**. Growth in 2Q21 and 3Q21 was stronger than expected and provides a good guideline for the growth dynamic for this year. 4Q21 growth was impacted by the lockdown measures that were implemented in 4Q21 and grew at 1.2% q-o-q SAAR, as reported by Eurostat, the Euro-zone's statistical office. This follows growth of 9.4% q-o-q SAAR in 3Q21 and growth of 9.1% q-o-q SAAR in 2Q21. This momentum towards the summer-spending season contributed mostly to the strong full-year growth of 2021 as 1Q21 growth was even negative, standing at -0.8% q-o-q SAAR. It seems the combination of fiscal stimulus and accommodative monetary policy continued to support consumption and investment throughout the year. The global trade recovery has been another supportive factor in 2021, especially for major exporters such as Germany, France and Italy.

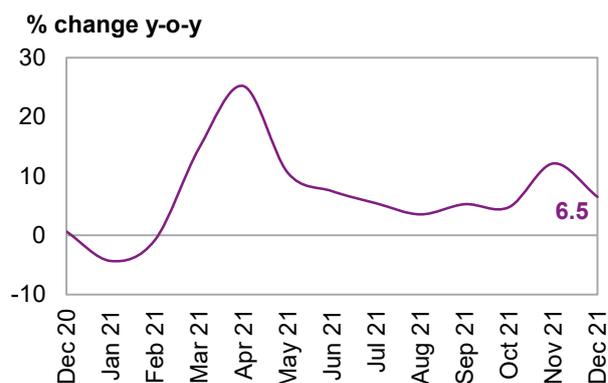
Inflation continued rising further in December and January, following the rising trend seen in November and October. In the meantime the European Central Bank (ECB) did shift its tone towards monetary tapering and rising interest rates. It is not ruling out a rate hike in 2022. Inflation in the Euro-zone rose to 5.1% y-o-y in January, compared with 5% in December and 4.9% y-o-y in November. When excluding volatile items such as food and energy, inflation stood at 2.5% y-o-y in January, compared with 2.7% y-o-y in December and 2.6% y-o-y in November. Positively, supported by ECB monetary easing, lending to the private sector by financial institutions continued expanding again in December, rising by a further 3.5% y-o-y, after reaching 3.3% y-o-y in November and 2.8% y-o-y in October.

The **labour market** continued to see improvements. According to the latest numbers from Eurostat, the unemployment rate stood at 7% in December, after 7.1% in December and compared with 7.3% in October.

Retail sales continued rising strongly on a yearly basis in value terms, with growth of 6.5% y-o-y in December, after 12.1% y-o-y seen in November and 4.7% y-o-y in October. On a monthly basis, December saw a decline of 2.5% m-o-m, compared with a rise of 1.2% m-o-m in November.

Industrial production declined in November, falling by 1.2% y-o-y, compared with a small rise of 0.4% y-o-y in October and 3.9% y-o-y in September. This translates into a monthly rise of 2.3% m-o-m in November, compared with a monthly decline of 1.3% m-o-m in October and 0.9% m-o-m in September.

Graph 3 - 5: Euro-zone retail sales



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

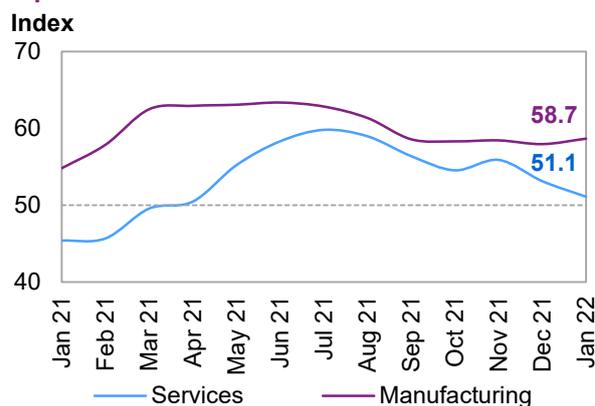
Near-term expectations

As the growth dynamic in the Euro-zone has surprised to the upside in the last year and also in 4Q21, the **momentum is forecast to carry over into 2022**, albeit at a lower level as growth rates will normalise on a year to year comparison. 1Q22 growth, as it was seen as well in 4Q21, will see a limited impact from COVID-19 due to the Omicron variant. It is, however, expected that after relatively lower growth in winter, activity will gain pace again. Hence, this seasonality of COVID-19 leads to accelerated momentum in 2Q22 and 3Q22. Meanwhile, the ECB has announced ongoing monetary support for the economy, which is expected to be only gradually reduced throughout 2022. However, taking the latest comments from the ECB into consideration a rate-hike this year cannot be ruled out any more and has even become more likely. With this, the near-term GDP growth assumptions have not changed. It is anticipated that COVID-19 containment efforts in 2022 will be effective enough to avoid derailment of the economy. Moreover, supply chain issues are expected to be temporary in nature, gradually ease and not negatively impact growth. Importantly, no further major lockdown measures are forecast in the Euro-zone for 2022.

With these assumptions, 1Q22 growth is forecast to rise by 2.4% q-o-q SAAR, impacted by the requirement for social distancing due to the rise in COVID-19 infections. A considerable gain in momentum is expected for 2Q22 of 3.6% q-o-q SAAR. This momentum is also forecast to gain pace for all of 2H22, reaching growth of 4.1% in 3Q22 and 3.6% q-o-q SAAR in 4Q22.

The Euro-zone's December **PMI** pointed to ongoing momentum in the manufacturing and services sectors, albeit reflecting a slow-down in activity in the services sector due to COVID-19. The PMI for services, the largest sector in the Euro-zone, fell to 51.1 in January, following a level of 53.1 in December and 55.9 in November. The manufacturing PMI rose slightly to stand at 58.7 in January, after 58 in December and 58.4 in November.

Graph 3 - 6: Euro-zone PMIs



Sources: IHS Markit and Haver Analytics.

With the confirmation of lower growth in 4Q21, the **GDP growth estimate for 2021 remains unchanged** to stand at 5.2%.

GDP growth in **2022** is forecast to slow, similar to other OECD economies, though remaining at 3.9%, unchanged from November's MOMR.

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

| | Euro-zone |
|-----------------------------------|------------|
| 2021 | 5.2 |
| Change from previous month | 0.0 |
| 2022 | 3.9 |
| Change from previous month | 0.0 |

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

OECD Asia Pacific

Japan

Update on latest developments

Most recent economic indicators continue to support the estimate of solid momentum in 4Q21 and 1Q22, although the current quarter may be impacted by Omicron and consequently decelerating momentum in global trade. As Japan entered 4Q21 in a largely improved situation, with vaccination rates, now above 80%, consumer confidence held up well. Additionally, most leading business sentiment indicators point to a recovery in 4Q21 and an ongoing, albeit lower trend in 1Q22. Considering 4Q21 improvements in the US, exports should also be well supported in 4Q21, although they may be impacted negatively by anticipated softening in 1Q22. In addition, ongoing fiscal and monetary stimulus is forecast to support the recovery in 4Q21 and 1H22.

After **industrial production (IP)** declined significantly on a yearly basis in October and September, a strong rebound became visible in November and December. After having fallen by 2.6% y-o-y in October and 2.3% y-o-y in September, it recovered well to stand at 3.5% y-o-y in November and 2.7% y-o-y in December. Closely correlated to IP, **exports** in December rose considerably as well, showing a growth level of 17.5% y-o-y, after rising by 20.5% y-o-y in November, all on a non-seasonally adjusted basis.

Retail sales rose as well in December, at a rate of 1.5% y-o-y, after rising by 2% y-o-y in November and 0.8% y-o-y in October. The rising trend in 4Q21 comes after a declining trend in 3Q21, which was seemingly impacted by the emergency measures implemented to counter rising infection rates.

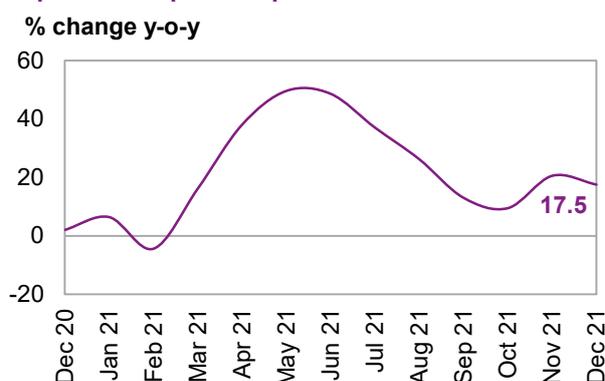
Consumer confidence retracted slightly, but remained at a sound level. The consumer confidence index level, as reported by the Cabinet Office, stood at 36.6 in January, following a level of 38.9 in December and 39.3 in November. While it points to some slowing activity in January, domestic consumption is forecast to remain well supported.

Near-term expectations

The **Japanese economy is forecast to continue rebounding in 2022**, after a pick-up in the growth dynamic seemed to have materialised towards the end of last year and a rather lacklustre growth dynamic was seen in most of 2021. This momentum is anticipated to be supported by pent-up demand after considerable social distancing efforts were necessary up to 3Q21. Ongoing fiscal and monetary stimulus, along with continuing momentum in global trade, a very important aspect for the Japanese economy, are factors that continue to lift growth in the current year. The depth of the growth dynamic remains to be seen, with many market observers forecasting strong growth for the current year, up to more than 3% growth over the year. However, it seems 1Q22 growth in Japan will also be impacted by the latest Omicron wave, in combination with an expected slowdown in trading activity with its two major trading partners, the US and China, as they are also expected to witness some slowing momentum in 1Q22. Moreover, growth in Japan has been at around 2% of pre-pandemic levels, so it remains to be seen if growth can reach a significantly higher level. Contrary to its OECD peer economies, inflation remains low and the Bank of Japan (BoJ), along with the government, will be able to continue their stimulus efforts.

As reported by Japan's statistical office, 1Q21 GDP declined by 2.9% q-o-q SAAR. Despite lockdown measures in 2Q21, growth was reported to have recovered, reaching 2% q-o-q SAAR. As reported, quarterly growth in 3Q21 declined significantly, falling by 3.6% q-o-q SAAR. Supported by high vaccination rates, fiscal stimulus and an ongoing recovery in global trade, 4Q21 is estimated to rebound significantly, reaching 8.3% q-o-q SAAR. Taking into consideration a strong rebound in 4Q21 GDP growth and consequent carry-over of the growth dynamic into 2022, the **GDP growth** forecast for 2022 remains largely unchanged. GDP growth for 1Q22 is forecast to stand at 2.3% q-o-q SAAR and move towards 1% q-o-q SAAR entering 4Q22.

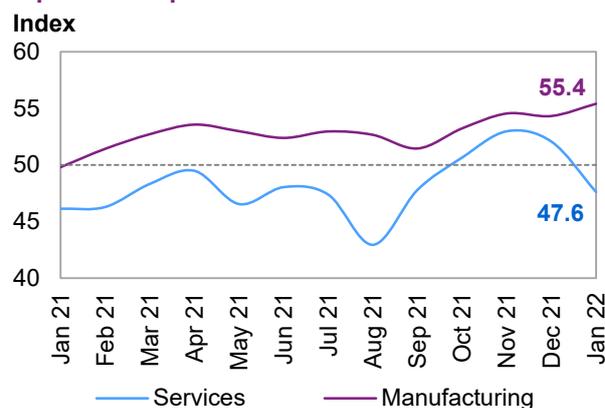
Graph 3 - 7: Japan's exports



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

Ongoing economic momentum is also reflected in **January PMI numbers**, albeit with somewhat of a retraction in the services sector. The services sector PMI, which constitutes around two-thirds of the Japanese economy, fell back significantly to stand at 47.6, clearly below the growth-indicating level of 50. This compares with 52.1 in December, and 53 in November. The manufacturing PMI rose slightly, confirming strong momentum in global manufacturing and the Japanese growth dynamic in this area. The PMI index for the manufacturing sector reached 55.4 in January, compared with 54.3 in December and 54.5 in November.

Graph 3 - 8: Japan's PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

The **2021 GDP growth** forecast remains at 1.8%, anticipating a strong recovery in 4Q21. In addition to the ongoing recovery in external trade, GDP growth is expected to remain supported by domestic demand in the near term, although COVID-19-related developments remain influential. Ongoing stimulus measures are expected to support a recovery in private household consumption and investment, leading to a carry-over of 4Q21 momentum into 2022. GDP growth for **2022** remains at 2.2%, unchanged from the previous month. However, COVID-19-related

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

| | Japan |
|-----------------------------------|------------|
| 2021 | 1.8 |
| Change from previous month | 0.0 |
| 2022 | 2.2 |
| Change from previous month | 0.0 |

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

developments, and most recently the Omicron variant, pose a downside risk to the expected recovery.

Non-OECD

China

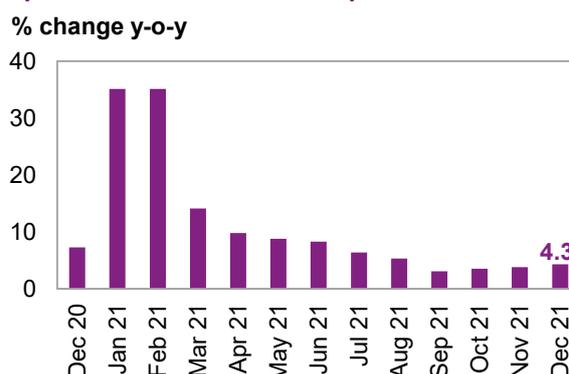
Update on the latest developments

China's real GDP expanded by 8.1% y-o-y in 2021, the fastest expansion in a decade, with the economy growing by 4.0% y-o-y in 4Q21 and by 4.9% y-o-y in 3Q21. However, China's recovery momentum might slow as both private consumption and supply could remain disrupted due to the "zero-COVID-19" policy that authorities decided to apply in 2022. Moreover, the real estate downturn could affect consumption. The macroeconomic policy response to the slower growth might be more accommodative. Private consumption represented 65.4% of China's 2021 GDP growth, compared with 54.3% in 2020, yet household spending kept lagging behind the recovery due to the "zero-COVID-19" policy as well as consumer uncertainty and fears about COVID-19 developments. Indeed, retail trade growth slowed to 1.7% y-o-y in December 2021 from 3.9% y-o-y in the prior month, marking the lowest growth since August 2020, as consumption weakened due to sporadic COVID-19 outbreaks.

Industrial production in China expanded by 4.3% y-o-y in December 2021, accelerating from 3.8% growth in the previous month. The current uptick was supported by a recovery in energy production and moderation of raw materials prices. For the first 11 months of 2021, industrial production expanded by 10.1% y-o-y. Indeed, manufacturing investment was on the high side due to robust external demand, government incentives and improved profitability.

The latest data on external demand suggests that the trade surplus widened sharply to \$94.46 billion in December 2021 from \$75.8 billion in December 2020. **Exports** expanded by \$340.50 billion, marking growth of 20.9% y-o-y, while imports grew at a softer rate of 19.5% to \$246.04 billion.

Graph 3 - 9: China's industrial production



Sources: China National Bureau of Statistics and Haver Analytics.

China's **trade surplus** with the US stood at \$39.23 billion in December and \$396.58 billion over 2021, representing a 25% increase compared with 2020.

On the inflationary pressure front, government efforts to secure supply helped China's CPI drop to 1.5% y-o-y in December from 2.3% in November. On a monthly basis, consumer prices unexpectedly declined by 0.3%, after seeing a 0.4% gain in November. Similarly, producer price inflation eased to 10.3% y-o-y in December from 12.9% in November, marking the lowest rate since August. On a monthly basis, producer prices dropped by 1.2% compared with November. Over the whole of 2021, PPI inflation stood at 8.1% y-o-y.

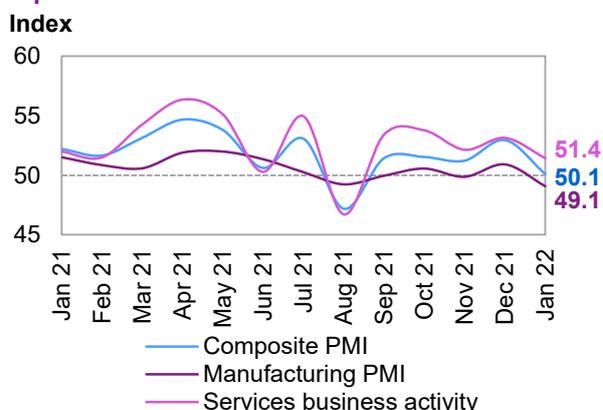
On the policy front, the People's Bank of China (PBOC) cut its key lending rates for corporate and household loans. The one-year loan prime rate (LPR) was cut by 10 bps to 3.7%, following a 5-bp cut in December, and the 5-year LPR was slashed by 5 bps to 4.60%, the first reduction since April 2020. The current series of reductions reflect policymakers' efforts to cushion the slowdown in the economic recovery due to multiple headwinds, including new COVID-19 outbreaks as well as the surging cost of raw materials.

Near-term expectations

The slow pace of growth in local macroeconomic activity in China might continue in the short term considering the strict COVID-19 measures. However, economic policy might be relatively loose yet the property sector deleveraging might continue as government housing control policies are weighing on property investment. The easing of electricity shortages may help reduce the disruptions in manufacturing output. Policymakers might face a critical challenge in finding the right balance between controlling the latest COVID-19 outbreak and maintaining normal economic activity. In the meantime, policymakers have signalled a front-loaded policy suggesting that growth might be further supported by fiscal stimulus in the form of infrastructure spending and tax cuts, while the PBOC will maintain ample liquidity and robust credit growth. Moreover, the PBOC's recent move to slash the policy rate is another growth driver as is a move to support the weakening household sector due to the downturn in the property sector.

Recent **PMI** indices mirrored the slowdown in economic recovery. Indeed, the manufacturing PMI dropped below the threshold level of 50 points to 49.1 in January 2021, pointing to the second contraction in factory activity in three months. Similarly, the services PMI fell to 51.4 in January 2022 from 53.1 in December 2021 as new order growth eased.

Graph 3 - 10: China's PMI



Sources: Caixin, IHS Markit and Haver Analytics.

China's real **GDP growth forecast for 2022** remains unchanged from the last MOMR at 5.6%, taking into account the numerous uncertainties challenging the current growth levels, especially the near-term path of COVID-19, the deleveraging property sector as well as the supply chain bottlenecks.

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

| | China |
|-----------------------------------|------------|
| 2021 | 8.1 |
| Change from previous month | 0.1 |
| 2022 | 5.6 |
| Change from previous month | 0.0 |

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

Other Asia

India

Update on the latest developments

India's economy has been rebounding at a slow pace amid the lingering impact of the Delta and Omicron variants. Urban consumption contributed to limiting the downside as auto sales data suggested a contraction of 6.6% m-o-m seasonally adjusted in November primarily due to a decline in two-wheeler sales, which are more representative of rural demand.

On the policy front, the unveiled expansionary budget for fiscal year 2022/23 (April-March) projects a fiscal deficit equivalent to 6.4% of nominal GDP and indicates a moderate narrowing compared with 2021/22. The budget suggests that policy-makers are striving to improve the quality of government expenditure through significant capital spending while curtailing subsidy spending.

Recent **Industrial production** growth was the smallest seen since the sector started to recover in March 2021 as output expanded only by 1.4% y-o-y in November, a slowdown from upwardly revised growth of 4% in October. The sharp slowdown in industrial growth took place amid a backdrop of several factors, including the fading impact of a low base of comparison from the corresponding period in 2020. Supply chain disruptions associated with higher-cost raw materials also constrained manufacturing activity. On a monthly basis, industrial output dropped by 4.7%, following upwardly revised growth of 5.1% in October.

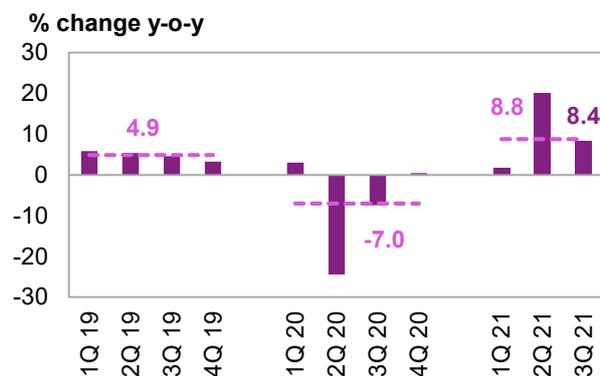
On the employment front, pressure on the labour market increased as the **unemployment rate** jumped to 8.0% in December 2021 from 7.0% in November.

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)** jumped to 5.6% in December from 4.9% in November, recording the highest rate since July and remaining within the central bank's 2-6% target range for the sixth-consecutive month. On a monthly basis, consumer prices fell by 0.36% in December, the first decline in 11 months. The **Whole Price Index (WPI)** inched down to 13.6% in December from 14.2% the previous month. On a monthly basis, wholesale prices fell to 0.35% in December from growth of 1.56% in November.

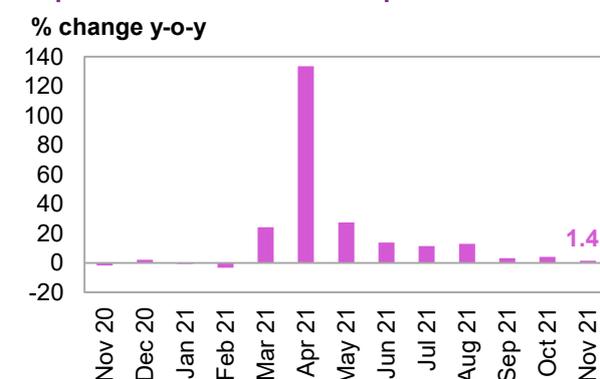
On the monetary policy front, the Reserve Bank of India (RBI) kept the **repo rate** at 4% in December and the reverse repo rate at 3.4%, maintaining an accommodative monetary policy stance to support the economic recovery and help mitigate the negative impacts of COVID-19.

Graph 3 - 11: India's GDP quarterly growth



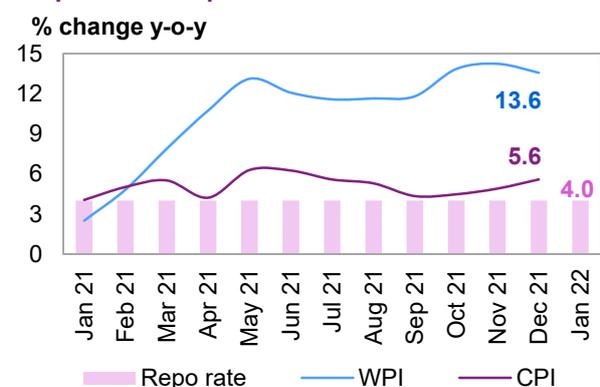
Sources: National Informatics Centre (NIC) and Haver Analytics.

Graph 3 - 12: India's industrial production



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

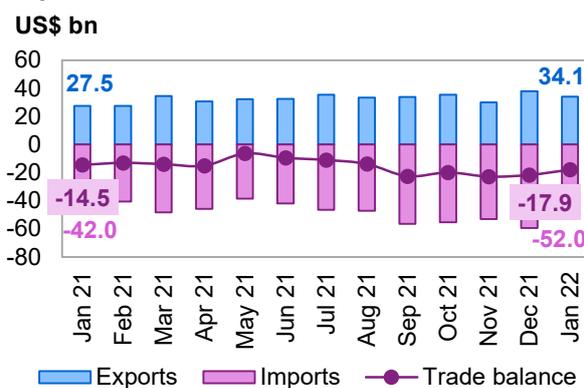
Graph 3 - 13: Repo rate and inflation in India



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

On the external demand outlook, preliminary data indicated that India's **trade deficit** widened to \$17.94 billion in January 2022 from \$14.49 billion in January 2021. Imports increased by 23.7% to \$52.0 billion on higher purchases of electronic goods. Exports rose by 23.7% to \$34.1 billion amid higher sales of gems and jewellery.

Graph 3 - 14: India's trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

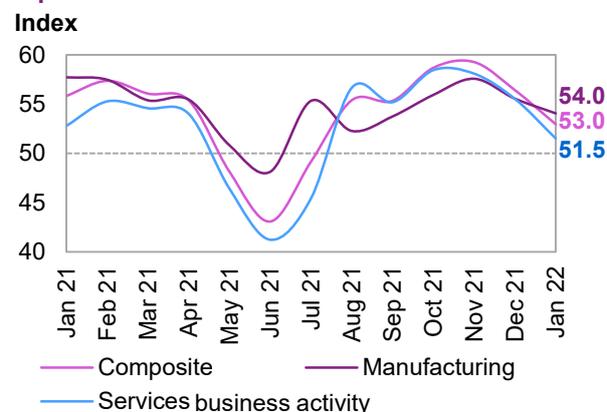
Near-term expectations

India's short-term economic outlook remained cautious amid uncertainties related to the near-term path of COVID-19 and Omicron entering 1Q22 considering the rapid rise in daily COVID cases and the test positivity rate. Nevertheless, the Omicron variant is weaker compared to its predecessors and thus unlikely to lead to substantial increases in hospitalizations, suggesting that most states might relax COVID-19 restrictions.

In the meantime, January's **PMI indices** mirrored a cautious outlook as the **manufacturing PMI** dropped to 54.0 from 55.5 December recording the weakest growth in the sector since September 2021 amid COVID-19 disruptions.

Similarly, the **services PMI** dropped to 51.5 in January 2022 from 55.5 in December 2021. Additionally, sentiment in both the services and manufacturing sectors has weakened amid inflationary pressures and increasing labour supply disruptions due to increasing infections.

Graph 3 - 15: India's PMIs



Sources: IHS Markit and Haver Analytics.

For this month's MOMR, **India's 2021 GDP growth forecast** was kept unchanged at 8.8%, while the 2022 real GDP growth forecast was revised up to 7.2%, addressing the upside potential supported by increasing vaccination rates as well as the anticipated fiscal support.

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

| | India |
|-----------------------------------|------------|
| 2021 | 8.8 |
| Change from previous month | 0.0 |
| 2022 | 7.2 |
| Change from previous month | 0.2 |

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

Latin America

Brazil

Update on latest developments

Brazil's recovery slowed in 4Q21 amid the sharp increases in overall prices and hikes in borrowing costs that have weighed on the economy. Demand side indicators such as retail sales fell 4.2% y-o-y in November 2021, contracting for the fourth straight month. Yet on m-o-m seasonally adjusted terms, retail activity grew 0.6% following upwardly revised 0.2% growth in October. Nevertheless, the latest retail data continues to point to weak consumer purchasing power as households struggle to deal with high inflation.

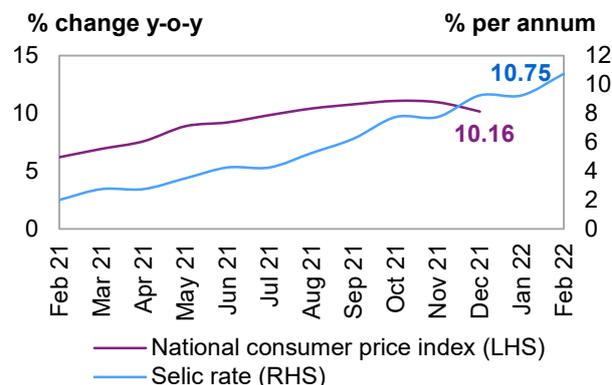
Similar to the demand side, leading supply-side indicators were down, with December's industrial production posting a fifth straight monthly drop of 5% y-o-y despite signs of recovery in the durable goods and auto sectors.

Brazil's unemployment rate eased slightly to 11.6% in the three months to November 2021. The jobless rate fell for a seventh consecutive month as the number of unemployed dropped to 12.4 million and the number of people with jobs increased to 94.9 million.

Inflation eased to 10.16% y-o-y in December 2021 from the 18-year high of 10.96% y-o-y in November 2021. This was the first decrease in the inflation rate since May 2020, taking into account the low base effect, as consumer prices for housing and utilities rose at a slower pace. On a monthly basis, consumer prices decreased by 0.80% compared to 0.12% in the previous month.

In response to inflationary concerns, the central bank in February raised the **Selic rate** for the eighth time as it unanimously decided to raise the rate by 150 basis points to 10.75%. The forecasts from the monetary authorities suggest that inflation in 2022 could come close to 5.4%, above the central bank target of 5%.

Graph 3 - 16: Brazil's inflation vs. interest rate



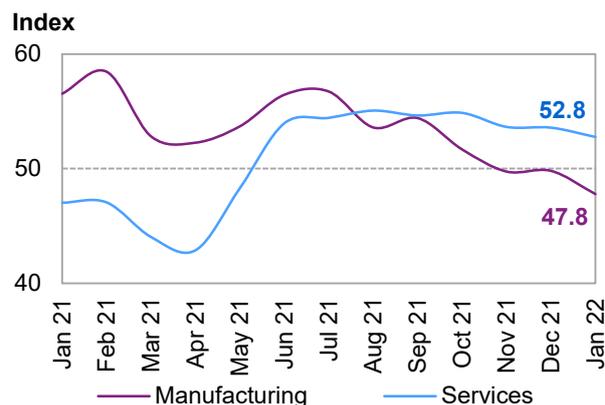
Sources: Banco Central do Brasil, Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

Near-term expectations

The slowdown in economic activity is more likely to continue in 1Q22 due to the elevated inflation rate, which could continue to be a major drag on the economic recovery. Meanwhile, monetary policy would be highly contractionary and tighter credit conditions could slow domestic demand at a time when fiscal support might be relaxed marginally due to high public debt levels. Moreover, political uncertainty related to the 2022 election along with the ongoing global supply disruptions as well as a new wave of COVID-19 are major uncertainties that could dampen the 2022 outlook.

Recent **PMI readings** confirmed a weakening recovery in the private sector. The manufacturing PMI dropped to 47.8 in January 2022 from 49.8 in December 2021, as both sales and output retreated due to weak, inflation-induced demand and resurging coronavirus infections. Similarly, the services PMI declined in January to 52.8 from 53.6 in December 2021, but pointed to the eighth month of expansion in the services sector amid the resumption of postponed events and the easing of pandemic-related restrictions.

Graph 3 - 17: Brazil's PMIs



Sources: IHS Markit and Haver Analytics.

Considering the recent developments, the **GDP growth forecast** for 2021 and 2022 remains the same as in the last MOMR at 4.7% and 1.5%, respectively. Uncertainty remains high and tends more to the downside due to heightened concerns over higher inflation, high fiscal stress following COVID-19 support efforts, and most importantly developments related to the pandemic both domestically and globally. Political uncertainties associated with the upcoming 2022 election have also been taken into consideration.

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

| | Brazil |
|----------------------------|--------|
| 2021 | 4.7 |
| Change from previous month | 0.0 |
| 2022 | 1.5 |
| Change from previous month | 0.0 |

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

Africa

South Africa

Update on the latest developments

South Africa's major economic activities slowed significantly amid travel restrictions and cancellations by foreign tourists. Recent demand indicators showed that private consumption dropped by 2.4% q-o-q in 3Q21, as a result of lower expenditures on durable and non-durable goods. Manufacturing production contracted by 0.7% y-o-y in November 2021, following a downwardly revised 8.5% y-o-y decline in October. Meanwhile, public spending rose by 0.1% q-o-q in 3Q21. On a positive note, South Africa registered a goods trade surplus of R440.8bn in 2021, which was significantly more than the R271.6bn surplus recorded in 2020.

The annual inflation rate accelerated further to 5.9% y-o-y in December 2021, from 5.5% in November, and moved closer to upper limit of the South African Reserve Bank's inflation target of 3 to 6%. On a monthly basis, the consumer price index edged up by 0.6%, the most in five months. To keep inflation expectations well anchored, the South African Reserve Bank lifted the benchmark repo rate by an additional 25 bps to 4% at its January 2022 meeting. Meanwhile, the central bank GDP growth projections were unchanged at 1.7% for 2022 and 1.8% for 2023, while it indicted a gradual normalization in 1Q22 and into 2023 and 2024.

Near-term expectations

Despite the relaxation of COVID-19 containment measures by ending the nightly curfew, South Africa's economic recovery might remain slow considering the severe impact of the pandemic on employment, business profits and fiscal accounts, as well as recent political instability. In the meantime, the seasonally-adjusted Absa Purchasing Managers' Index increased to 57.1 in January 2022 from 54.1 in December 2021. This was the sharpest expansion in manufacturing as business activity, exports and inventories surged amid the higher demand for goods following the relaxation of domestic COVID-19 restrictions and the lifting of travel bans imposed by several trading partners.

South Africa's **GDP forecast** for 2021 and 2022 is kept unchanged from last month's MOMR at 4.5% and 2.5%, respectively. The uncertainty surrounding this forecast remains high especially with regard to the near-term COVID-19 trends as well as high inflation and unemployment levels. Potential upside factors include post-pandemic planning priorities such as investment and job creation.

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

| | South Africa |
|-----------------------------------|--------------|
| 2021 | 4.5 |
| Change from previous month | 0.0 |
| 2022 | 2.5 |
| Change from previous month | 0.0 |

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

Russia and Central Asia

Russia

Update on the latest developments

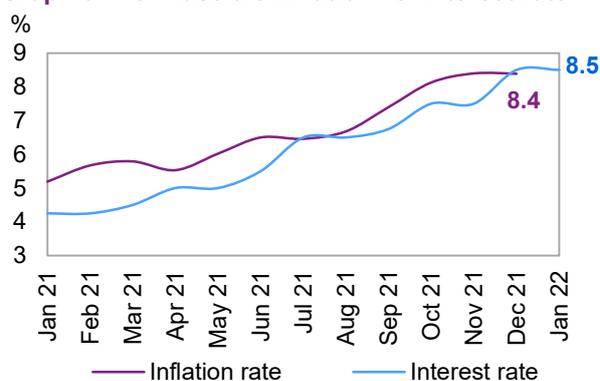
Despite the recent political concerns and severe COVID-19 wave, Russia's economic recovery remains on track, supported by commodity prices. Labour market indicators suggested less pressure as the unemployment rate remained unchanged in November 2021 from the previous month at 4.3%, marking the lowest rate since August 2019. Meanwhile, industrial production expanded 6.1% y-o-y in December 2021, easing from an upwardly revised 7.6% growth in November 2021. For 2021, industrial output expanded 5.9% y-o-y.

On the consumption side, the consumer confidence index improved slightly to -15 in December from -16 in November. Meanwhile, retail sales growth eased to 3.1% y-o-y in November 2021 from 4.1% y-o-y in October 2021 reflecting the week-long mini-lockdown in early November. Moreover, the fiscal handouts provided prior to the Duma elections in September ended. Real income growth eased to only 0.6% in November from 2% in October, maintaining positive growth despite rising headline inflation.

On the inflation front, the **consumer price index** fell slightly to 8.39% y-o-y in December 2021, from 8.40% in November 2021. In 2021, inflation rose to a level that is more than twice the central bank's target of 4%, amid the rapid economic recovery, labour shortages across many industries and ongoing supply chain disruptions. Moreover, food prices could increase further in 2022 following a weaker-than-expected agricultural season.

In response to these inflationary pressures, the Russian central bank raised its **benchmark policy rate** by 100 bps to 8.5% in December 2021, the highest since September 2021. A further key rate increase at its upcoming meeting is most likely considering the monetary policy stance to reduce inflation to 4.0-4.5% by late 2022.

Graph 3 - 18: Russia's inflation vs. interest rate



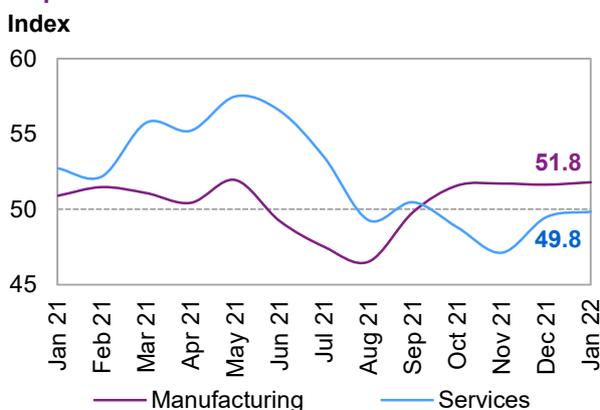
Sources: Federal State Statistics Service, Central Bank of Russia and Haver Analytics.

Near-term expectations

Supported by the improvement in fossil fuel prices, the short-term economic outlook is more resilient and optimistic. However, the uncertainties related to elevated inflation could add another downside risk, as it could lead to secondary effects, such as a lowering of individual savings and exports. In the meantime, political developments might mainly impact Russian financial markets as it already led to a sharp 3% depreciation of the rouble between the end of December and end of January. However, Russia foreign reserves could continue to grow considering that the federal government continues fiscal consolidation.

Recent **PMI** indicators signalled slow growth in private business activity. Indeed, the manufacturing index inched up to 51.8 in January 2022 from 51.6 in the previous month. The recent reading marked the fourth straight month of expansion in the manufacturing sector, amid steady growth in output and new orders. Likewise, the services PMI increased to a four-month high of 49.8 in January 2022 from 49.5 in December 2021. However, the index has been within contraction territory for four straight months amid further COVID-19 restrictions.

Graph 3 - 19: Russia's PMI



Sources: IHS Markit and Haver Analytics.

Considering the developments in fossil fuels, Russia's 2021 and 2022 **GDP forecasts** have been kept unchanged from last month at 4.0% and 2.7%, respectively. These forecasts might be lowered considering the uncertainties related to the trajectory of Omicron infections, the overall increase in prices, and recent political developments

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

| | Russia |
|-----------------------------------|------------|
| 2021 | 4.0 |
| Change from previous month | 0.0 |
| 2022 | 2.7 |
| Change from previous month | 0.0 |

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

OPEC Member Countries

Saudi Arabia

Over 2021, Saudi Arabia's non-oil sector build up a strong recovery momentum as the PMI index remained well above the 50 no-change mark throughout the year and averaged 55.8. Moreover, credit to the private sector surged by 15.4% y-o-y in 2021 amid the government's large-scale measures to secure lending throughout 2020 to non-oil industries which were affected by COVID-19 restrictions. However, the Omicron variant and fear of fresh restrictions may slow this recovery. Recent PMI indices already reflect this sentiment,

as the IHS manufacturing PMI dropped to 53.2 in January 2022 from 53.9 in December 2021. Looking forward, the possible end of the pandemic and rising oil prices might support a further recovery and stabilisation of economic activities.

Nigeria

Following eight months of decline, recent inflation data suggested that Nigeria's annual inflation rate edged up to 15.6% y-o-y in December 2021 from 15.4% y-o-y in November 2021 amid a slight acceleration in food prices linked to the increase in demand during the festive season. On a monthly basis, consumer prices inched up by 1.82% following a 1.08% increase in November 2021. In 2021, annual price inflation averaged 17.0%, up from 13.2% in 2020. Despite the latest uptick in headline inflation, in January 2022, the Central Bank of Nigeria kept its monetary policy rate steady at a six-year low of 11.5%. The decision aims to shore up the country's recovery from the economic impacts of COVID-19. Meanwhile, the Stanbic IBTC Bank Nigeria PMI dropped to 53.7 in January of 2022 from of 56.4 in December 2021, amid the softest improvement in business conditions. Nevertheless, business sentiment remained optimistic amid plans to expand economic operations, especially in the oil sector as the new Dangote oil refinery is expected to come online towards the end of 2022.

The United Arab Emirates (UAE)

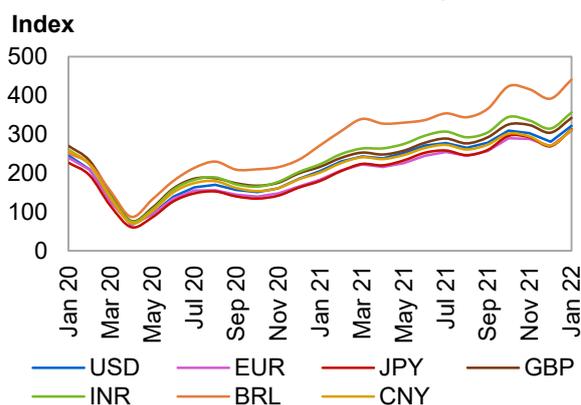
Recently released official data by Statistics Centre Abu Dhabi suggested that non-oil exports grew by 5.4% y-o-y to about \$19.4 billion in the first 11 months of 2021. Other recent indicators point to a strong performance in the domestic economy. According to Dubai Land Department, in 2021, the economy recorded 84,196 property transactions, valued at Dh300bn, the highest annual value in its history. Nevertheless, the IHS Markit UAE PMI dropped to 54.1 in January 2022 from December 2021 of 55.6 remarking the weakest growth in non-oil activities since September 2021, as rising COVID-19 cases hindered demand growth. Nevertheless, non-oil economic activities are likely to sustain a steady economic recovery, supported by the government reforms to ease investment and trade, as well as the resurgent oil prices.

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

During the last two months, the **US dollar (USD)** surged on the back of consecutive announcements of increase interest rates in the near term by the US Federal Reserve. However, the USD momentum has slowed as record high inflation has caught up with dollar appreciation and further eroded the value of the USD against major currencies. From December 2021 to January 2022, the USD declined on average by 0.1% against the Euro, 2% against the Pound Sterling, 1.4% against the Indian Rupee, 0.2% against the Chinese Yuan, and 2% against the Brazilian Real in the same period.

The appreciation of the USD against the Japanese Yen increased for the second consecutive month. The USD gained 1.1% on average m-o-m as the Bank of Japan continues to hold firm on increasing interest rates.

Graph 3 - 20: ORB crude oil price index compared with different currencies (base January 2016 = 100)

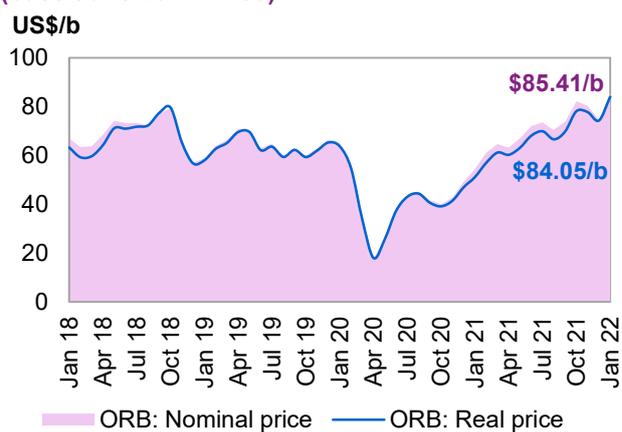


Sources: IMF and OPEC.

In **nominal terms**, accounting for inflation, the price of the ORB increased 14.8%, from \$74.38/b in December 2021 to reach \$85.41/b in January 2022.

In **real terms** (excluding inflation) the ORB increased 13.1% to \$84.05/b from a revised \$74.33/b (base June 2017=100) the previous month.

Graph 3 - 21: Impact of inflation and currency fluctuations on the spot ORB price (base June 2017 = 100)



Source: OPEC.

World Oil Demand

In 2021, world oil demand substantially outpaced 2020's historically low levels with an increase of 5.7 mb/d, yet it remained below pre-pandemic levels. In terms of the main regions, growth in the non-OECD was at 3.1 mb/d, higher than additional requirements in the OECD, which were at 2.6 mb/d. Following declines in 1Q21, world oil demand grew at historic levels y-o-y during 2Q21 on top of a record low baseline during 2020. World oil demand during 3Q21 and 4Q21 proved to be substantially more resilient than previously anticipated and was strongly supported by increasing mobility and various government stimulus programs across the world. In the OECD, the US continued to be the major driver of oil demand by recording strong growth of 1.6 mb/d y-o-y, mostly supported by demand for personal mobility, manufacturing feedstock, notably for the petrochemical industry, as well as other service sector-related activities, such as air travel and supply chain processes. In the OECD, the strong industrial sector induced economic growth, while vaccination programs and other COVID-19 management measures led to the relaxation of stringent COVID-19 containment measures. These factors backed demand for both transportation and industrial fuels in the OECD region, particularly in major consuming countries. In the non-OECD, China's oil demand grew resiliently as the transportation and industrial sectors fuelled additional requirements backed by strong economic growth. In India, solid economic growth backed by increasing mobility supported gasoline demand.

In 2022, oil demand growth is expected at 4.2 mb/d unchanged from the previous month. In most European countries, lockdowns and other restrictions are easing. Similarly, in the US, the COVID-19 pandemic has been well contained through vaccinations and other containment measures. As most world economies are expected to grow stronger, the near-term prospects for world oil demand are certainly on the bright side. The main contributors in 2022 world oil demand are gasoline and diesel, which are anticipated to account for around half of the forecasted world oil demand growth. Similarly, as global airline travel continues to be rejuvenated, particularly in the US, Europe, China and the Middle East, demand for jet kerosene will grow further and continue to recover. Petrochemical demand in Asia Pacific, notably in Japan and South Korea, will boost demand for light distillates, notably naphtha. Finally, LPG demand will also rise in 2022 as the household and industrial sectors continue to pick up, particularly in non-OECD Asia, India and China.

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

| World oil demand | 2020 | 1Q21 | 2Q21 | 3Q21 | 4Q21 | 2021 | Change 2021/20 | |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------------|
| | | | | | | | Growth | % |
| Americas | 22.44 | 22.73 | 24.33 | 24.74 | 24.89 | 24.19 | 1.74 | 7.76 |
| <i>of which US</i> | 18.35 | 18.65 | 20.21 | 20.39 | 20.56 | 19.96 | 1.61 | 8.79 |
| Europe | 12.43 | 11.91 | 12.63 | 13.84 | 13.64 | 13.02 | 0.58 | 4.69 |
| Asia Pacific | 7.14 | 7.67 | 7.04 | 7.11 | 7.72 | 7.39 | 0.25 | 3.47 |
| Total OECD | 42.02 | 42.31 | 44.00 | 45.70 | 46.26 | 44.59 | 2.57 | 6.12 |
| China | 13.52 | 13.79 | 14.55 | 14.52 | 15.21 | 14.52 | 1.00 | 7.39 |
| India | 4.51 | 4.94 | 4.50 | 4.59 | 5.12 | 4.79 | 0.28 | 6.18 |
| Other Asia | 8.13 | 8.56 | 8.98 | 8.34 | 8.62 | 8.63 | 0.50 | 6.10 |
| Latin America | 6.01 | 6.25 | 6.16 | 6.46 | 6.35 | 6.30 | 0.29 | 4.88 |
| Middle East | 7.55 | 7.95 | 7.77 | 8.24 | 7.99 | 7.99 | 0.44 | 5.90 |
| Africa | 4.08 | 4.37 | 4.08 | 4.15 | 4.40 | 4.25 | 0.17 | 4.10 |
| Russia | 3.39 | 3.65 | 3.42 | 3.63 | 3.76 | 3.61 | 0.23 | 6.70 |
| Other Eurasia | 1.07 | 1.23 | 1.24 | 1.09 | 1.28 | 1.21 | 0.14 | 12.70 |
| Other Europe | 0.70 | 0.78 | 0.72 | 0.73 | 0.79 | 0.75 | 0.06 | 8.29 |
| Total Non-OECD | 48.96 | 51.52 | 51.43 | 51.74 | 53.52 | 52.06 | 3.10 | 6.33 |
| Total World | 90.97 | 93.83 | 95.43 | 97.44 | 99.77 | 96.65 | 5.67 | 6.23 |
| Previous Estimate | 90.98 | 93.83 | 95.43 | 97.41 | 99.75 | 96.63 | 5.66 | 6.22 |
| Revision | 0.00 | 0.00 | 0.00 | 0.03 | 0.02 | 0.01 | 0.02 | 0.02 |

Note: * 2021 = Estimation. 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 | % |
| Americas | 24.19 | 24.04 | 25.42 | 25.77 | 25.70 | 25.24 | 1.06 | 4.37 |
| of which US | 19.96 | 19.69 | 21.07 | 21.36 | 21.28 | 20.86 | 0.90 | 4.50 |
| Europe | 13.02 | 12.63 | 13.22 | 14.49 | 14.16 | 13.63 | 0.61 | 4.72 |
| Asia Pacific | 7.39 | 7.91 | 7.22 | 7.25 | 7.83 | 7.55 | 0.17 | 2.26 |
| Total OECD | 44.59 | 44.58 | 45.86 | 47.50 | 47.69 | 46.43 | 1.84 | 4.12 |
| China | 14.52 | 14.64 | 15.44 | 15.00 | 15.65 | 15.18 | 0.66 | 4.57 |
| India | 4.79 | 5.48 | 4.82 | 4.97 | 5.44 | 5.18 | 0.39 | 8.16 |
| Other Asia | 8.63 | 9.25 | 9.59 | 8.93 | 8.95 | 9.18 | 0.55 | 6.38 |
| Latin America | 6.30 | 6.49 | 6.33 | 6.61 | 6.51 | 6.48 | 0.18 | 2.85 |
| Middle East | 7.99 | 8.30 | 8.01 | 8.49 | 8.22 | 8.26 | 0.27 | 3.34 |
| Africa | 4.25 | 4.54 | 4.21 | 4.27 | 4.53 | 4.39 | 0.14 | 3.23 |
| Russia | 3.61 | 3.75 | 3.47 | 3.68 | 3.81 | 3.68 | 0.07 | 1.81 |
| Other Eurasia | 1.21 | 1.30 | 1.29 | 1.12 | 1.32 | 1.26 | 0.05 | 3.72 |
| Other Europe | 0.75 | 0.80 | 0.73 | 0.74 | 0.81 | 0.77 | 0.02 | 2.18 |
| Total Non-OECD | 52.06 | 54.55 | 53.90 | 53.82 | 55.23 | 54.37 | 2.32 | 4.45 |
| Total World | 96.65 | 99.13 | 99.75 | 101.32 | 102.92 | 100.80 | 4.15 | 4.30 |
| Previous Estimate | 96.63 | 99.13 | 99.75 | 101.28 | 102.90 | 100.79 | 4.15 | 4.30 |
| Revision | 0.01 | 0.00 | 0.00 | 0.03 | 0.02 | 0.01 | 0.00 | 0.00 |

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

OECD

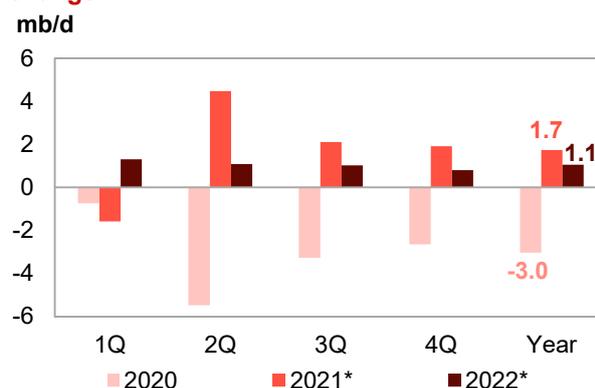
OECD Americas

Update on the latest developments

Oil demand in OECD Americas continued to gain momentum amid the spread of the Omicron variant and lower economic growth in November. In OECD Americas, US latest monthly November data implied strong growth of 1.9 mb/d y-o-y, with levels slightly below pre-COVID-19 levels. November's firm oil demand growth in the US is mostly supported by rising demand for personal mobility, manufacturing feedstock for the petrochemical industry as well as other service sector-related activities, such as air travel and supply chain activities. Gasoline is the main driver of November's US oil demand growth, driven by increases in travel-related activities. Despite rising Omicron cases, stimulus programs from the US government supported mobility, which is still holding up, and consumers seem to be coming out of the pandemic in good shape.

The Federal Highway Administration reported that motorists in the US drove around 279 billion vehicle miles in November, up 28 billion vehicle miles from November 2020. These factors supported increases in demand for gasoline of 1.0 mb/d y-o-y, with demand almost reaching pre-COVID-19 levels. LPG demand declined in November y-o-y, while naphtha demand remained flat, y-o-y. Colder weather conditions in November as compared to historical norms and the same month in 2020 resulted in increasing heating needs, which supported diesel demand, growing by 0.3 mb/d, y-o-y. Diesel demand growth during November reflected also strong manufacturing activities. The manufacturing activity index in the US grew by 5% in November, marking the largest monthly increase since January 2019. Among transportation fuels, jet kerosene remains the most affected by the COVID-19 pandemic. However, its demand shows signs of resilience, growing by 0.4 mb/d y-o-y. Seasonality affects traditional travel patterns in the US during winter less than in summer. Lifting bans on international flights has boosted jet kerosene demand. The International Air Transport Association (IATA) reports that domestic air traffic in November improved as compared to October, partly due to a strong Thanksgiving holiday related traffic.

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



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

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

| By product | Nov 20 | Nov 21 | Change Nov 21/Nov 20 | |
|----------------|--------------|--------------|----------------------|------------|
| | | | Growth | % |
| LPG | 3.43 | 3.38 | -0.05 | -1.5 |
| Naphtha | 0.18 | 0.19 | 0.01 | 2.7 |
| Gasoline | 8.00 | 8.99 | 0.99 | 12.3 |
| Jet/kerosene | 1.13 | 1.50 | 0.37 | 32.7 |
| Diesel | 3.88 | 4.17 | 0.30 | 7.6 |
| Fuel oil | 0.21 | 0.43 | 0.22 | 107.7 |
| Other products | 2.20 | 2.22 | 0.02 | 0.9 |
| Total | 19.03 | 20.89 | 1.85 | 9.7 |

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

Near-term expectations

Current trends in OECD Americas oil demand backed by many indicators, imply that the near-term oil demand prospects are on the optimistic side. Widespread vaccinations and the mild effects of the Omicron variant in terms of hospitalizations and loss of life have left oil demand largely unscathed. Furthermore, economic stimulus programs in the US and the expected economic growth recovery have supported improvements in manufacturing output and air traffic. Lastly, the supply chain bottlenecks are also expected to ease soon. These factors are expected to support OECD Americas oil demand, which is projected to appreciably increase in 2022. Gasoline demand will remain healthy, as mobility activities are expected to continue improving. Furthermore, the manufacturing and petrochemical sectors in the US and the region are expected to also push the demand for LPG and diesel higher. Finally the likely continuing removal of travelling restrictions will further contribute towards improving demand for jet kerosene. Some risks to the downside pertain also and relate to the appearance of new COVID-19 variants, the growth in economy, as well as fuel substitution.

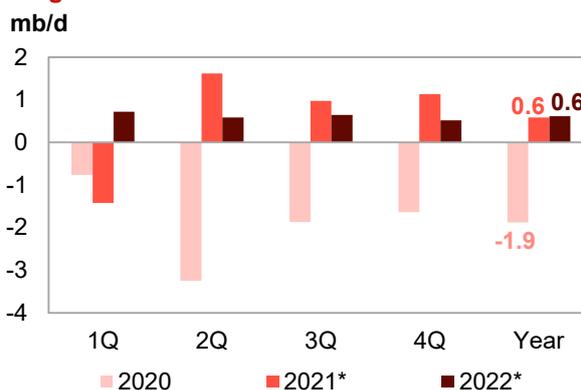
OECD Europe

Update on the latest developments

Latest available **November** data imply robust **oil demand in OECD Europe**, particularly supported by transportation and industrial fuels, and despite the Omicron outspread. Oil demand grew in November by 1.8 mb/d, y-o-y, after collapsing by approximately the same volumes in the same month of 2020 and reached almost pre-COVID-19 levels. Diesel, and its utilization in the transportation and industrial sectors, is the main driver of oil demand, constituting about half of total oil demand growth, also stemming from a low historical baseline. Higher natural gas prices encouraged fuel switching and supported diesel demand in the industrial sector. Most of the diesel demand comes from the European Big 4 oil consumers – Germany, Italy, France and the UK – as a result of increasing manufacturing. Light distillates demand grew also y-o-y, in line with healthy industrial activities in the region.

Europe is the region leading the global seasonal mobility recovery, as optimism builds over demand growth. Indicators have shown that the driving season proved to be very impressive in Europe as most countries have removed restrictions and travel has increased. Consequently, gasoline demand grew by 0.5 mb/d in November y-o-y. Jet kerosene requirements also recorded an appreciable rise of 0.3 mb/d, supported by a recovery in air travel, with increasing domestic, regional and international flights. The IATA suggest that in November 2021, international traffic in Europe recorded significant improvements over the previous month.

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



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

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

| By product | Nov 20 | Nov 21 | Change Nov 21/Nov 20 | |
|----------------|-------------|-------------|----------------------|-------------|
| | | | Growth | % |
| LPG | 0.39 | 0.39 | 0.01 | 1.5 |
| Naphtha | 0.57 | 0.62 | 0.06 | 9.9 |
| Gasoline | 0.92 | 1.14 | 0.22 | 23.7 |
| Jet/kerosene | 0.39 | 0.50 | 0.11 | 28.8 |
| Diesel | 2.92 | 3.29 | 0.37 | 12.6 |
| Fuel oil | 0.15 | 0.15 | 0.00 | 2.7 |
| Other products | 0.49 | 0.48 | -0.01 | -1.0 |
| Total | 5.82 | 6.58 | 0.76 | 13.0 |

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

The Omicron variant seems to be less severe than previous variants, leading to easing measures across the region. A considerable number of countries have already removed or have announced that they will remove COVID-19 measures. In addition, widespread lockdowns in the region will very unlikely reappear in the foreseeable future. Optimism arises also from a forecasted strong economic growth in 2022. Additionally, supportive effects of sound fiscal and monetary policies in the region's economy will more than offset whatever negative effects Omicron may have on oil demand. Consequently, indications imply positive oil demand developments in the region for 2022. Transportation fuels will be the main driver of growth, while jet kerosene demand is expected to further recover in 2022, supported by improving travel activities. The industrial sector is expected to support diesel demand, which is projected to further increase in 2022. Downside risks for 2022 OECD Europe oil demand pertain to new COVID-19 variants, as well as to economic challenges in regard to high national debt levels, as well as fuel substitution.

OECD Asia Pacific

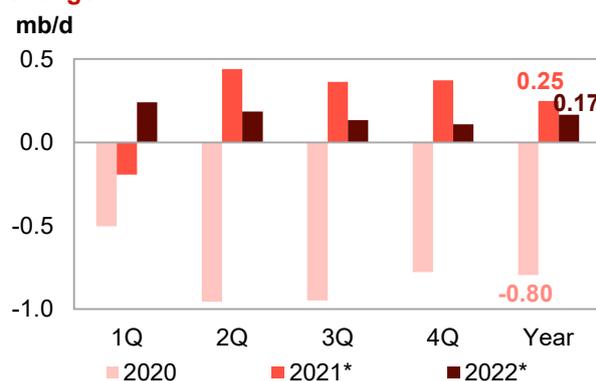
Update on the latest developments

OECD Asia-Pacific oil demand in November rose by almost 0.3 mb/d y-o-y, after posting an increase of 0.5 mb/d in October, mainly supported by strong naphtha demand, which grew for the ninth consecutive month. Asia Pacific oil demand remained lower than November 2019 due to lower transportation fuel levels, and jet kerosene in particular. The demand growth in November originated mostly in Japan and South Korean, in line with increasing economies and healthy industrial and manufacturing activities.

The strength in naphtha came on the back of its demand as feedstock for steam cracker operators in light of high LPG prices and continued healthy petrochemical margins. Naphtha stood above pre-pandemic levels by nearly 0.2 mb/d compared to

October 2019. At the same time, LPG demand decreased y-o-y in October due to the preference to consume naphtha in the petrochemical sector. Manufacturing activity is the main driver of GDP growth in the two countries. Data from Haver Analytics shows that the index of manufacturing output in Japan and South Korea increased in November, m-o-m. These factors helped boost exports of manufactured goods, which also drove private consumption and construction investment higher.

Gains in naphtha demand during November have been partly offset by declining requirements in the demand for almost all other petroleum product categories – residual fuel being the exception. Transportation fuels demand, notably gasoline diesel and jet kerosene declined as a result of localized COVID-19 containment measures, while residual fuel requirements grew in line with additional needs in the industrial sector. Oil demand grew also in Australia, y-o-y as a result of increasing mobility and following a long lockdown during the colder weather season. Latest preliminary December 2021 demand data, as released by Japan's Ministry

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

Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

of Economy, Trade and Industry (METI) indicate an increase of 0.1 mb/d y-o-y, mainly driven by rising light distillates and residual fuel oil demand.

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

| By product | Dec 20 | Dec 21 | Change Growth | Dec 21/Dec 20 % |
|----------------|-------------|-------------|---------------|-----------------|
| LPG | 0.49 | 0.52 | 0.03 | 6.3 |
| Naphtha | 0.72 | 0.80 | 0.08 | 11.7 |
| Gasoline | 0.83 | 0.80 | -0.02 | -2.7 |
| Jet/kerosene | 0.66 | 0.58 | -0.07 | -11.4 |
| Diesel | 0.80 | 0.81 | 0.01 | 1.6 |
| Fuel oil | 0.23 | 0.27 | 0.04 | 17.8 |
| Other products | 0.21 | 0.24 | 0.03 | 13.8 |
| Total | 3.93 | 4.04 | 0.10 | 2.6 |

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

Near-term expectations

OECD Asia Pacific economies, notably Japan and South Korea are expected to grow in 2022. With accelerated vaccination rates, easing supply chain bottlenecks and sound monetary and investment policies, oil demand in the region is also expected to record gains. Japan started implementing subsidies from 29 January on selected petroleum products prices, while in South Korea, investment-friendly fiscal and monetary policies in this year are anticipated to boost manufacturing and construction activities. Consequently, naphtha, gasoline and diesel are expected to mostly contribute to rising 2022 oil requirements. Similarly, jet kerosene demand will take advantage of expected increases in international air travel, particularly to the US where an embargo on international flight travel has been lifted. New unforeseen COVID-19 variants, as well as fuel substitution are the main factors pointing to downside risks.

Non-OECD

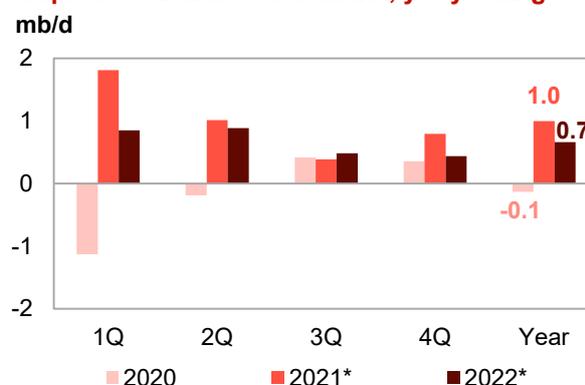
China

Update on the latest developments

Chinese oil demand regained its momentum in **December** after a slight slowdown in oil demand growth during November and as a result of localized COVID-19 containment measures in some parts of the country. Robust economic growth of 4% amid stronger-than-expected industrial production in December are the two major drivers for oil demand in China during this month, while pertaining stricter travel restrictions weakened air travel. Available December data imply that China oil demand grew by 1.1 mb/d y-o-y, with demand exceeding pre-COVID-19 levels.

December 2021 oil demand growth was largely driven by gasoline and diesel. Gasoline demand grew by 0.3 mb/d, while diesel requirements were higher by 0.2 mb/d y-o-y. Similarly, a strong recovery in industrial and petrochemical activities supported the December demand for naphtha and LPG, with demand for the two fuels growing by 0.4 mb/d in total, y-o-y. Jet kerosene demand performed sluggishly in December and declined by 0.1 mb/d y-o-y. Jet kerosene demand was drawn down by declines in air traffic in China as the number of daily passenger flights remain far below the normal pre-pandemic levels. Demand for residual fuel oil also increased in December, y-o-y.

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



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

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

| By product | Dec 20 | Dec 21 | Change Dec 21/Dec 20 | |
|----------------|--------------|--------------|----------------------|------------|
| | | | Growth | % |
| LPG | 2.21 | 2.39 | 0.18 | 8.1 |
| Naphtha | 1.92 | 2.15 | 0.23 | 12.2 |
| Gasoline | 2.92 | 3.20 | 0.28 | 9.5 |
| Jet/kerosene | 0.93 | 0.82 | -0.11 | -12.3 |
| Diesel | 3.01 | 3.20 | 0.19 | 6.2 |
| Fuel oil | 0.29 | 0.39 | 0.10 | 36.4 |
| Other products | 2.08 | 2.30 | 0.22 | 10.5 |
| Total | 13.36 | 14.45 | 1.09 | 8.1 |

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

Sources: Argus Global Markets, China OGP (Xinhua News Agency), Facts Global Energy, JODI, National Bureau of Statistics China and OPEC.

Near-term expectations

China oil demand is also expected to grow robustly in 2022 in line with projected economic growth and with risks being balanced towards the upside and downside. The anticipated economic growth, flourishing industrial, as well as transportation and residential sectors are the main factors pointing to the upside. On the other hand, zero COVID-19 policies, associated restrictions and travel bans may cap demand in the near future in combination with fuel substitution notably in the transportation sector. Early indications in January this year imply that domestic gasoline demand remains pressured by the resurgence of COVID-19 across six provinces and the detection of the Omicron variant in parts of China. The latter posed some concerns over the travel demand for the upcoming Lunar New Year holiday (31 January-6 February) and the Winter Olympics (4-20 February in Beijing).

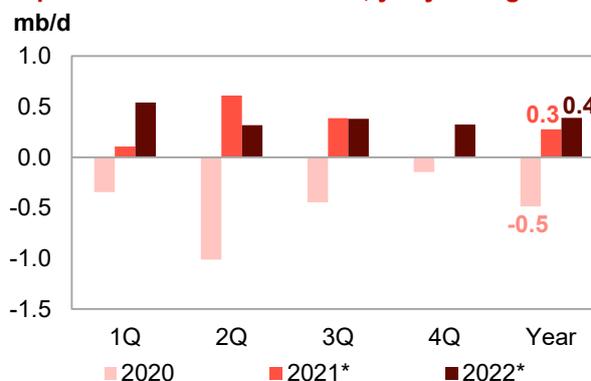
India

Update on the latest developments

Latest available **December Indian data** show marginal oil demand growth of 20 tb/d y-o-y. Extreme weather conditions during November, with some spill over effects in December, and COVID-19 containment measures in parts of the country dampened oil demand. Light distillate demand declined and almost partially offset gains in demand for jet kerosene, gasoline and diesel. The latter petroleum product category accounts for the larger share of India's oil demand, and was supported by healthy industrial and construction activities, as well as improving mobility. Gasoline demand grew in December y-o-y in line with the holiday season and rising private mobility. LPG demand fell in December y-o-y, on top of high demand during the same month in 2020. Jet kerosene requirements in December increased, y-o-y, owing to the resumption of international flights into India and the low historical baseline.

The recovery of petroleum products in India continued its upward trend. Diesel demand in December almost reached pre-pandemic levels, while gasoline requirements surpassed pre-COVID-19 levels already in 2020 for the first time and continued to rise. The demand for gasoline has consistently been above pre-COVID-19 levels in 2021. LPG also exceeded pre-pandemic levels due to its heavy utilization in the residential and transportation sectors, while jet kerosene demand remains to-date well below pre-COVID-19 levels.

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



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

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

| By product | Dec 20 | Dec 21 | Change Dec 21/Dec 20 | |
|----------------|-------------|-------------|----------------------|------------|
| | | | Growth | % |
| LPG | 0.98 | 0.97 | -0.02 | -1.8 |
| Naphtha | 0.29 | 0.28 | -0.01 | -2.4 |
| Gasoline | 0.84 | 0.87 | 0.03 | 3.6 |
| Jet/kerosene | 0.15 | 0.17 | 0.03 | 17.6 |
| Diesel | 1.83 | 1.85 | 0.03 | 1.5 |
| Fuel oil | 0.23 | 0.24 | 0.00 | 1.2 |
| Other products | 0.83 | 0.78 | -0.04 | -5.3 |
| Total | 5.15 | 5.17 | 0.02 | 0.3 |

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

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

Near-term expectations

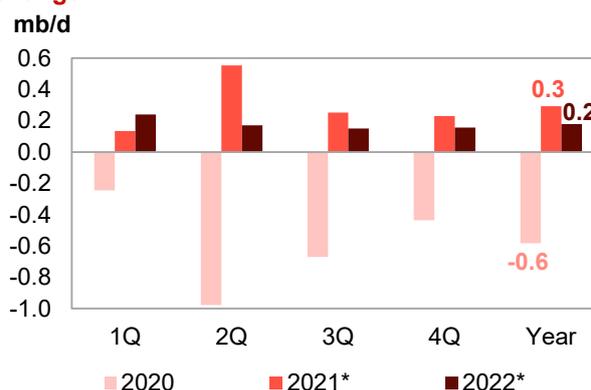
During 2022, the forecasted economic growth remains strong, with most of the growth expected to be driven by the manufacturing sector. Naturally, economic growth will also positively impact other sectors, such as the transportation and residential sectors. Accordingly, 2022 oil demand is projected to increase robustly, y-o-y. Rising oil demand will be supported by increasing requirements in all main petroleum product categories. Gasoline demand will rise, in line with stronger private and commercial mobility. Continuing resilience of the vibrant Indian manufacturing sectors will support demand for diesel in 2022. Similarly, evidence from the gradual resumption of domestic and international flights indicate that demand for jet kerosene will gradually recover. Finally, LPG utilization will support slight gains in 2022 demand. Some downside risks pertain and relate to rising COVID-19 cases, new variants and their associated containment measures, as well as fuel substitution.

Latin America

Update on the latest developments

November oil demand in Latin America rose by 0.1 mb/d y-o-y, slightly lower than previous months. Oil demand in Brazil declined slightly for November and December, y-o-y. In both months, gains in gasoline, diesel, jet kerosene and naphtha demand have been more than offset by declines in ethanol and LPG requirements. Oil demand in Argentina grew robustly during November, y-o-y, particularly supported by firm gasoline and diesel requirements. In general, oil demand in the region remains on a positive trajectory, supported by good performance of transportation and industrial fuels. Demand for the majority of petroleum product categories exceeded pre-pandemic levels - except jet kerosene, which still lags.

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



Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

Near-term expectations

In line with of a forecasted GDP growth, oil demand in Latin America is projected to remain on a growing trajectory during 2022. Oil demand will be positively impacted by rising mobility, industrial and manufacturing activities, and hence gasoline, diesel and, to some extent, jet kerosene will dominate additional oil requirements. There are, however, also some downside risks associated with the region's oil demand in 2022. The COVID-19 pandemic developments may negatively influence mobility, industrial activities, the general economy and consequently oil demand. The projected oil demand growth for 2022 remains, however, positive, yet below the 2021 growth levels, which came after the historic decline during 2020.

Middle East

Update on the latest developments

In the **Middle East**, the latest available **November 2021** data implies a y-o-y increase of 0.3 mb/d, higher than the growth seen in October, and with demand levels slightly exceeding those during the pre-pandemic period. November 2021 oil demand grew across most countries of the region and was dominated by robust gasoline, diesel and to a lesser extent jet kerosene requirements.

Strong economic recoveries saw some countries' non-oil GDP even exceed pre-pandemic levels; these developments supported the domestic effective demand and spending on major projects. Furthermore, the continuous recovery of mobility and industrial activities supported demand for gasoline and diesel in the region.

Demand for jet kerosene continues to recover in the region, lagging however behind the performance of other fuels, and partly supported by the resumption of international flights in the region.

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

| By product | Dec 20 | Dec 21 | Change Dec 21/Dec 20 | |
|----------------|-------------|-------------|----------------------|------------|
| | | | Growth | % |
| LPG | 0.05 | 0.05 | 0.00 | -4.5 |
| Gasoline | 0.49 | 0.50 | 0.02 | 3.1 |
| Jet/kerosene | 0.04 | 0.06 | 0.01 | 31.5 |
| Diesel | 0.47 | 0.51 | 0.03 | 7.3 |
| Fuel oil | 0.60 | 0.53 | -0.08 | -13.0 |
| Other products | 0.35 | 0.40 | 0.06 | 16.0 |
| Total | 2.01 | 2.05 | 0.04 | 1.9 |

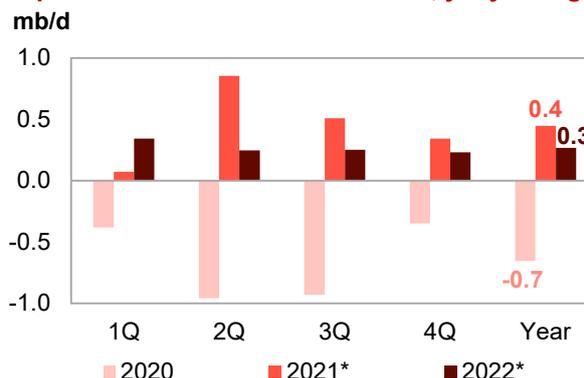
Note: Totals may not add up due to independent rounding.

Sources: JODI and OPEC.

Near-term expectations

The near-term expectations for Middle East oil demand are optimistic. The management of the COVID-19 pandemic seems to be successful, eliminating to-date the majority of containment measures and favouring mobility and oil demand growth. The expected local and international travel demand are likely to boost gasoline and jet kerosene requirements during 2022. Similarly, construction activities on large projects in the region are expected to support diesel and residual fuel oil demand in the current year. Overall, the prospects for 2022 oil demand in the region are bright, with only some minor risks related to the COVID-19 pandemic and the economies of some countries in the region.

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



Note: * 2021 = Estimation and 2022 = Forecast.

Source: OPEC.

World Oil Supply

Non-OPEC liquids supply growth in 2021 (including processing gains of 0.13 mb/d) is revised down by 0.06 mb/d to around 0.6 mb/d y-o-y, and average 63.6 mb/d for the year. The upward revisions, mainly to the US, were offset by downward revisions in the supply forecasts of other countries such as Brazil, Canada, China, Ecuador and UK, due to unexpected lower output in 4Q21. The US liquids supply forecast was revised upwards to show growth of 0.15 mb/d y-o-y, following an upward revision to production estimates in 4Q21, due to a continued production recovery in the Gulf of Mexico (GoM) and steady monthly growth in the main shale plays, particularly in the Permian and Bakken. On the other hand, Brazilian ethanol and biofuel production was revised down in all quarters. Lower-than-expected production in China and production outages in Canada also lowered the 4Q21 estimate. The 2021 oil supply forecast primarily sees growth in Canada, Russia, China, the US, Guyana, Norway, Qatar and Argentina, while output is projected to decline in the UK, Brazil, Colombia and Indonesia.

Non-OPEC supply growth for 2022 remained broadly unchanged at 3.02 mb/d y-o-y, and is forecast to average 66.6 mb/d. Upward revisions to the supply forecast were mainly in OECD Europe. The main drivers of liquids supply growth are expected to be the US (1.03 mb/d) and Russia (0.98 mb/d), followed by Brazil, Canada, Norway, Kazakhstan and Guyana.

OPEC NGLs and non-conventional liquids production in 2021 is unchanged from the previous assessment to show growth of 0.1 mb/d y-o-y for an average of 5.1 mb/d. Growth of 0.1 mb/d y-o-y is forecast in 2022 for an average of 5.3 mb/d. OPEC-13 crude oil production in January increased by 0.06 mb/d m-o-m to average 27.98 mb/d, according to available secondary sources.

Preliminary non-OPEC liquids production in January, including OPEC NGLs, is estimated to have grown by 0.65 mb/d m-o-m to average 70.71 mb/d, up by 2.3 mb/d y-o-y. As a result, preliminary data indicates that global oil supply in January grew by 0.71 mb/d m-o-m to average 98.69 mb/d, up by 4.75 mb/d y-o-y.

Non-OPEC liquids production growth in 2021 was revised down by 63 tb/d from the previous month's assessment to average 0.61 mb/d.

In the OECD, a minor downward revision of 38 tb/d in 4Q21 was partially offset by an upward revision of 11 tb/d in 3Q21, which led to a minor downward revision of 7 tb/d for the year in the region.

Canada and the UK saw the main downward revisions with 17 tb/d and 6 tb/d, respectively, while the US was revised up by 21 tb/d for the year.

The non-OECD supply forecast for 2021 was revised down by 56 tb/d, mainly due to downward revisions in Brazil, China and Ecuador by 28 tb/d, 18 tb/d and 9 tb/d, respectively.

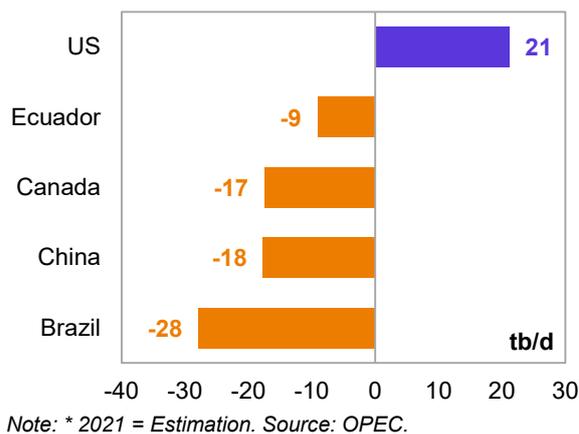
The **non-OPEC supply growth forecast for 2022** remained unchanged from the previous month's assessment to average 3.02 mb/d.

The main upward revision was seen in OECD Europe, of which the UK saw the largest adjustment.

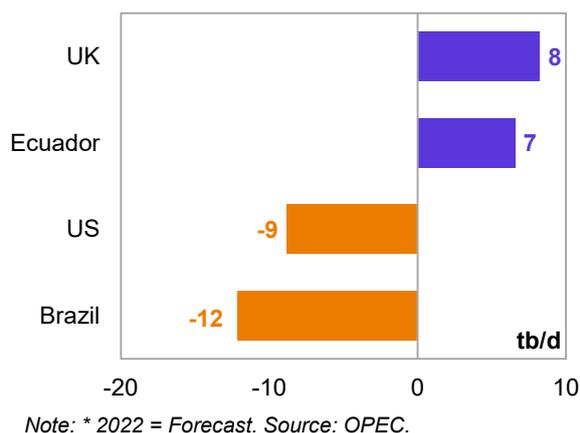
This month's upward revisions were slightly more than offset by downward adjustments, mainly in Brazil.

With these revisions, the non-OPEC absolute liquids supply forecast for 2022 was revised down by 58 tb/d to average 66.61 mb/d, while in terms of growth, it remained unchanged at 3.02 mb/d.

Graph 5 - 1: Major revisions to annual supply change forecast in 2021*, MOMR Feb 22/Jan 22



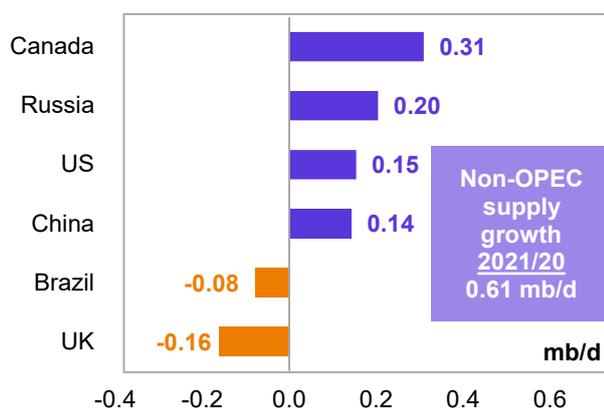
Graph 5 - 2: Major revisions to annual supply change forecast in 2022*, MOMR Feb 22/Jan 22



Key drivers of growth and decline

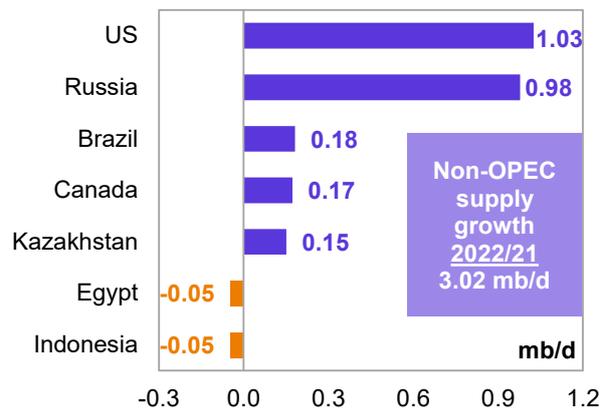
The **key drivers of non-OPEC liquids supply growth in 2021** are estimated to have been Canada, Russia, the US, China, Guyana and Norway, while output is estimated to have declined in the UK, Brazil and Colombia.

Graph 5 - 3: Annual liquids production changes for selected countries in 2021*



Note: * 2021 = Estimation. Source: OPEC.

Graph 5 - 4: 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, Russia, Brazil, Canada, Kazakhstan, Norway and Guyana, while oil production is projected to decline, mainly in Indonesia and Egypt.

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 | % |
| Americas | 24.70 | 24.10 | 25.17 | 25.20 | 26.21 | 25.17 | 0.48 | 1.93 |
| of which US | 17.61 | 16.63 | 17.93 | 17.85 | 18.61 | 17.76 | 0.15 | 0.87 |
| Europe | 3.90 | 3.96 | 3.52 | 3.81 | 3.81 | 3.77 | -0.12 | -3.19 |
| Asia Pacific | 0.52 | 0.50 | 0.45 | 0.53 | 0.53 | 0.50 | -0.02 | -3.27 |
| Total OECD | 29.12 | 28.56 | 29.13 | 29.54 | 30.55 | 29.45 | 0.33 | 1.15 |
| China | 4.16 | 4.30 | 4.34 | 4.33 | 4.25 | 4.30 | 0.14 | 3.44 |
| India | 0.77 | 0.76 | 0.75 | 0.75 | 0.74 | 0.75 | -0.01 | -1.78 |
| Other Asia | 2.51 | 2.52 | 2.46 | 2.33 | 2.36 | 2.42 | -0.09 | -3.55 |
| Latin America | 6.04 | 5.94 | 5.97 | 6.09 | 5.82 | 5.96 | -0.08 | -1.37 |
| Middle East | 3.19 | 3.22 | 3.23 | 3.24 | 3.27 | 3.24 | 0.05 | 1.46 |
| Africa | 1.41 | 1.37 | 1.35 | 1.32 | 1.32 | 1.34 | -0.07 | -5.21 |
| Russia | 10.59 | 10.47 | 10.74 | 10.81 | 11.16 | 10.80 | 0.20 | 1.93 |
| Other Eurasia | 2.91 | 2.96 | 2.89 | 2.79 | 3.08 | 2.93 | 0.02 | 0.57 |
| Other Europe | 0.12 | 0.12 | 0.11 | 0.11 | 0.11 | 0.11 | -0.01 | -4.66 |
| Total Non-OECD | 31.71 | 31.65 | 31.85 | 31.77 | 32.13 | 31.85 | 0.15 | 0.46 |
| Total Non-OPEC production | 60.82 | 60.21 | 60.98 | 61.32 | 62.68 | 61.30 | 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 | 62.97 | 62.49 | 63.26 | 63.60 | 64.96 | 63.58 | 0.61 | 0.97 |
| Previous estimate | 62.97 | 62.51 | 63.28 | 63.62 | 65.15 | 63.65 | 0.67 | 1.07 |
| Revision | 0.00 | -0.02 | -0.02 | -0.02 | -0.19 | -0.06 | -0.06 | -0.10 |

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

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

| Non-OPEC liquids production | 2021 | 1Q22 | 2Q22 | 3Q22 | 4Q22 | 2022 | Change 2022/21 | |
|--|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------------|
| | | | | | | | Growth | % |
| Americas | 25.17 | 26.14 | 26.11 | 26.48 | 26.86 | 26.40 | 1.23 | 4.87 |
| of which US | 17.76 | 18.48 | 18.68 | 18.83 | 19.14 | 18.79 | 1.03 | 5.77 |
| Europe | 3.77 | 3.87 | 3.75 | 3.81 | 4.13 | 3.89 | 0.12 | 3.08 |
| Asia Pacific | 0.50 | 0.54 | 0.54 | 0.53 | 0.53 | 0.53 | 0.03 | 5.86 |
| Total OECD | 29.45 | 30.55 | 30.39 | 30.82 | 31.53 | 30.82 | 1.37 | 4.66 |
| China | 4.30 | 4.31 | 4.31 | 4.35 | 4.43 | 4.35 | 0.04 | 1.02 |
| India | 0.75 | 0.73 | 0.75 | 0.78 | 0.80 | 0.77 | 0.01 | 1.59 |
| Other Asia | 2.42 | 2.44 | 2.41 | 2.39 | 2.38 | 2.41 | -0.01 | -0.39 |
| Latin America | 5.96 | 6.25 | 6.20 | 6.14 | 6.35 | 6.23 | 0.27 | 4.61 |
| Middle East | 3.24 | 3.34 | 3.34 | 3.36 | 3.36 | 3.35 | 0.11 | 3.40 |
| Africa | 1.34 | 1.29 | 1.27 | 1.25 | 1.22 | 1.25 | -0.09 | -6.38 |
| Russia | 10.80 | 11.49 | 11.83 | 11.88 | 11.88 | 11.77 | 0.98 | 9.05 |
| Other Eurasia | 2.93 | 3.10 | 3.13 | 3.17 | 3.22 | 3.15 | 0.22 | 7.61 |
| Other Europe | 0.11 | 0.11 | 0.11 | 0.10 | 0.10 | 0.10 | -0.01 | -6.90 |
| Total Non-OECD | 31.85 | 33.05 | 33.34 | 33.42 | 33.74 | 33.39 | 1.54 | 4.83 |
| Total Non-OPEC production | 61.30 | 63.60 | 63.73 | 64.24 | 65.27 | 64.21 | 2.91 | 4.75 |
| Processing gains | 2.28 | 2.39 | 2.39 | 2.39 | 2.39 | 2.39 | 0.11 | 4.91 |
| Total Non-OPEC liquids production | 63.58 | 65.99 | 66.13 | 66.63 | 67.66 | 66.61 | 3.02 | 4.75 |
| Previous estimate | 63.65 | 66.01 | 66.19 | 66.70 | 67.74 | 66.66 | 3.02 | 4.74 |
| Revision | -0.06 | -0.02 | -0.07 | -0.07 | -0.08 | -0.06 | 0.00 | 0.01 |

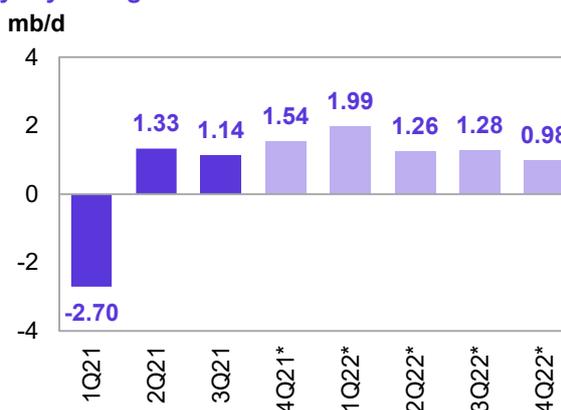
Note: * 2021 = Estimation and 2022 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

OECD

OECD liquids production in 2021 is forecast to increase by 0.33 mb/d y-o-y to average 29.45 mb/d, revised down by 7 tb/d m-o-m owing to a downward revision of 12 tb/d in the production forecast for OECD Europe, which is now projected to decline by 0.12 mb/d to average 3.77 mb/d. OECD Americas is forecast to grow by 0.48 mb/d, with an average supply of 25.17 mb/d. OECD Asia Pacific is forecast to decline by 0.02 mb/d y-o-y to average 0.50 mb/d.

For 2022, oil production in the OECD is forecast to increase by 1.37 mb/d y-o-y to average 30.82 mb/d, revised up by 9 tb/d compared to a month earlier, amid an upward revision to OECD Europe by 14 tb/d.

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



Note: * 4Q21-4Q22 = Forecast. Source: OPEC.

Based on these revisions, OECD Americas is forecast to grow by 1.23 mb/d to average 26.40 mb/d. Oil production in OECD Europe and OECD Asia Pacific is anticipated to grow by 0.12 mb/d and 0.03 mb/d y-o-y to average 3.89 mb/d and 0.53 mb/d, respectively.

OECD Americas

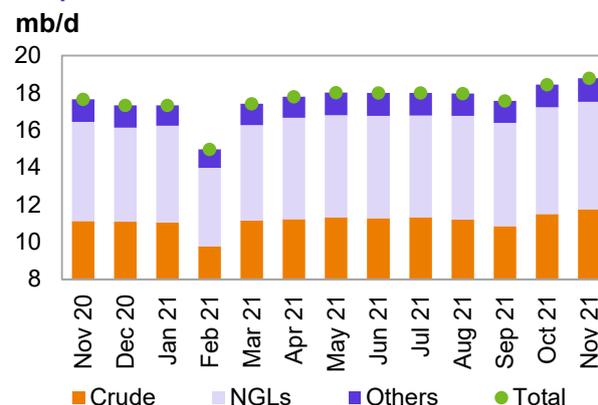
US

US liquids production rose in November 2021 by 0.34 mb/d m-o-m to average 18.78 mb/d, up by 1.13 mb/d compared with November 2020.

Crude oil and condensate production increased in November 2021 by 244 tb/d m-o-m to average 11.75 mb/d, up by 0.63 mb/d y-o-y.

Regarding the crude and condensate production breakdown by region (PADDs), production rose the most on the US Gulf Coast (USGC) by 187 tb/d to average 8.35 mb/d, and also increased slightly in the Midwest, Rocky Mountains and West Coast. Production on the East Coast declined by 2 tb/d m-o-m in November to 67 tb/d.

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



Source: OPEC.

NGL production was up by 55 tb/d m-o-m to average 5.77 mb/d in November, higher by 0.45 mb/d y-o-y. Meanwhile, production of **non-conventional liquids** (mainly ethanol) in November increased by 36 tb/d m-o-m to average 1.26 mb/d, according to the US Department of Energy (DOE). According to a preliminary estimate, non-conventional liquids are estimated to average 1.26 mb/d in December, unchanged from the previous month.

Production in the Gulf of Mexico (GoM) rose by 107 tb/d m-o-m in November to average 1.8 mb/d, showing the rebound from the impact of Hurricane Ida.

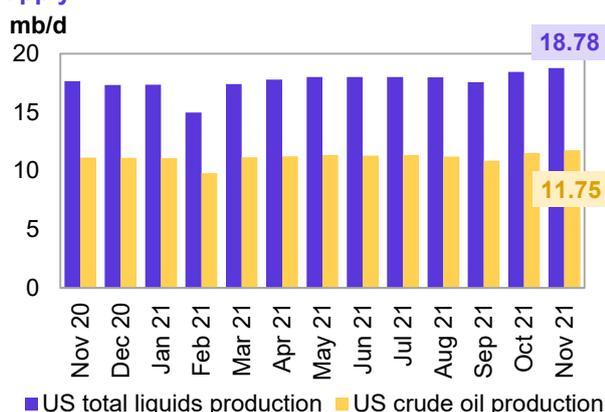
Looking at states, oil production in New Mexico rose by 45 tb/d m-o-m to average 1.4 mb/d, 357 tb/d higher than a year ago, and production in Texas increased by 34 tb/d to average 5.0 mb/d, 317 tb/d higher than a year ago. Production in North Dakota also increased by 54 tb/d m-o-m to average 1.2 mb/d, but was lower by 73 tb/d y-o-y. Production in Alaska was up marginally by 9 tb/d to average 0.4 mb/d. Oil output in Oklahoma and Colorado showed a minor decrease m-o-m by 9 tb/d and 8 tb/d, respectively. In the onshore lower 48, November production increased by 128 tb/d m-o-m to average 9.5 mb/d.

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

| State | Oct 21 | Nov 21 | Change Nov 21/Oct 21 |
|----------------------|---------------|---------------|-------------------------|
| Oklahoma | 404 | 395 | -9 |
| Colorado | 412 | 404 | -8 |
| Alaska | 437 | 446 | 9 |
| North Dakota | 1,100 | 1,154 | 54 |
| New Mexico | 1,380 | 1,425 | 45 |
| Gulf of Mexico (GoM) | 1,688 | 1,795 | 107 |
| Texas | 4,954 | 4,988 | 34 |
| Total | 11,509 | 11,753 | 244 |

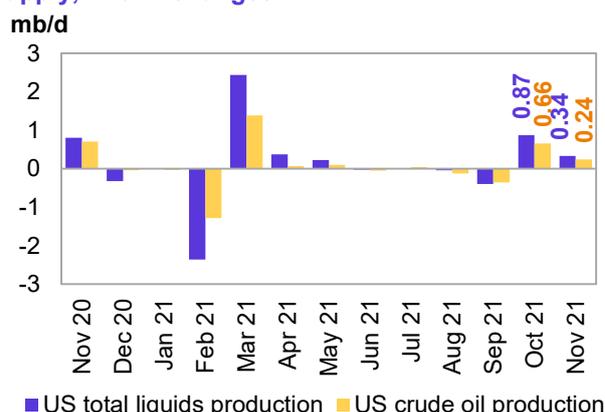
Sources: EIA and OPEC.

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



Sources: EIA and OPEC.

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



Sources: EIA and OPEC.

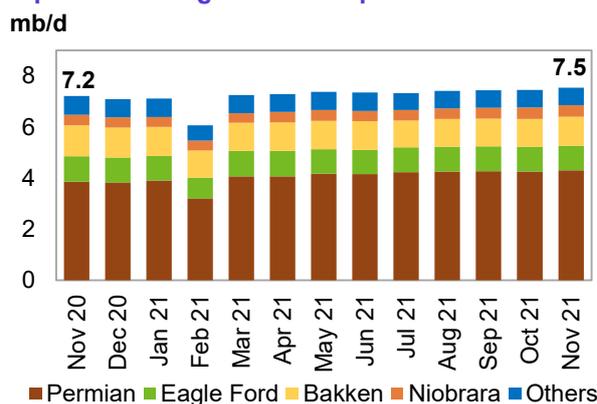
US tight crude output in November increased by 87 tb/d m-o-m to average 7.54 mb/d, which was 328 tb/d higher than the same month a year earlier, according to US Energy Information Administration (EIA) estimates.

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 4.3 mb/d, and was up by 0.45 mb/d y-o-y.

In the Williston Basin, production in the Bakken shale rose by 49 tb/d to average 1.14 mb/d, down by 68 tb/d y-o-y. Tight crude output at Eagle Ford in Texas declined by a minor 1 tb/d to average 0.96 mb/d, while production in Niobrara-Codell in Colorado and Wyoming was down by 9 tb/d to average 0.45 mb/d.

Average tight crude output in the first eleven months of the year was estimated at 7.28 mb/d.

Graph 5 - 9: US tight crude output breakdown



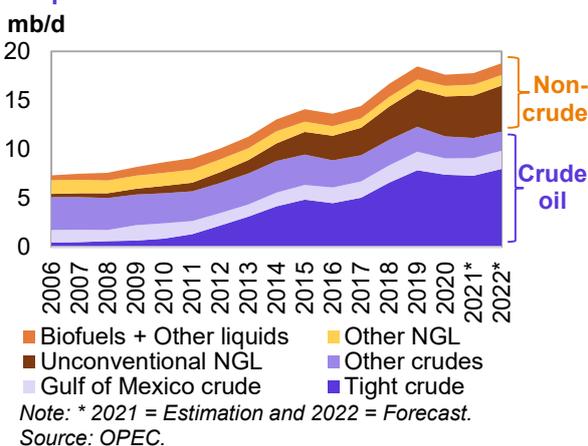
Sources: EIA, Rystad Energy and OPEC.

The **US liquids production growth forecast for 2021** was revised up by 21 tb/d and now stands to grow by 0.15 mb/d y-o-y, compared to previously projected growth of 0.13 mb/d, to average 17.76 mb/d. The upward revision was effected to 4Q21 by 78 tb/d, and 3Q21 was also revised upward by a minor 6 tb/d.

Regarding the liquids breakdown, **US crude and condensate production** for 2021 is expected to decline by 0.14 mb/d to average 11.14 mb/d. US crude oil production is expected to exit December 2021 at 11.71 mb/d.

US tight and conventional crude oil production are forecast to see contractions of 0.11 mb/d and 0.19 mb/d in 2021, to average 7.28 mb/d and 2.06 mb/d, respectively.

Graph 5 - 10: US liquids supply developments by component



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

Growth of NGLs and non-conventional liquids is forecast at 0.28 mb/d and 0.02 mb/d to average 5.45 mb/d and 1.17 mb/d, respectively.

US liquids production in 2022, excluding processing gains, is forecast to grow by 1.03 mb/d y-o-y to average 18.79 mb/d, revised down by 0.01 mb/d. The 2022 gains are due primarily to forecast tight crude production growth of 0.67 mb/d, unconventional NGL growth of 0.36 mb/d and projected growth of 0.08 mb/d in the GoM. However, the expected growth will be partially offset by natural declines in onshore conventional fields by 0.1 mb/d y-o-y.

Given the current pace of drilling and well completion in oil fields, **production of crude oil** is forecast to grow by 0.67 mb/d y-o-y to average 11.79 mb/d in 2022. This forecast assumes ongoing capital discipline, inflation rates, completion crews and labour shortages.

Production of NGLs, mainly from unconventional shale sources, is forecast to increase by 0.34 mb/d to average 5.8 mb/d, and non-conventional liquids are projected to grow by 0.04 mb/d.

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

| US liquids | Change | | Change | | Change | |
|--------------------------|--------------|--------------|--------------|--------------|--------------|-------------|
| | 2020 | 2020/19 | 2021* | 2021/20 | 2022* | 2022/21 |
| Tight crude | 7.39 | -0.45 | 7.28 | -0.11 | 7.95 | 0.67 |
| Gulf of Mexico crude | 1.64 | -0.25 | 1.80 | 0.16 | 1.88 | 0.08 |
| Conventional crude oil | 2.25 | -0.30 | 2.06 | -0.19 | 1.96 | -0.10 |
| Total crude | 11.28 | -1.01 | 11.14 | -0.14 | 11.79 | 0.65 |
| Unconventional NGLs | 4.09 | 0.25 | 4.35 | 0.26 | 4.71 | 0.36 |
| Conventional NGLs | 1.09 | 0.10 | 1.10 | 0.01 | 1.08 | -0.02 |
| Total NGLs | 5.17 | 0.35 | 5.45 | 0.28 | 5.79 | 0.34 |
| Biofuels + Other liquids | 1.15 | -0.20 | 1.17 | 0.02 | 1.21 | 0.04 |
| US total supply | 17.61 | -0.86 | 17.76 | 0.15 | 18.79 | 1.03 |

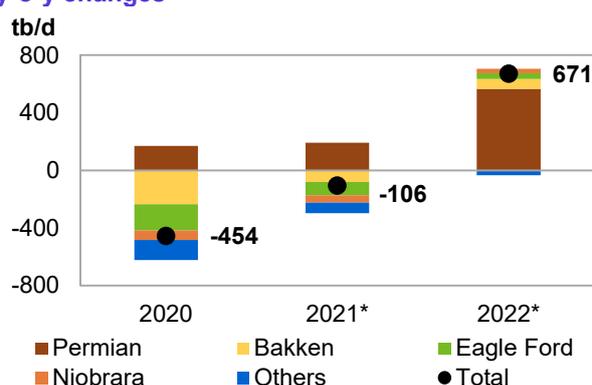
Note: * 2021 = Estimation and 2022 = Forecast. Sources: EIA, OPEC and Rystad Energy.

US tight crude production in 2021 and 2022 is expected to show continuous y-o-y growth in the Permian Basin by 192 tb/d and 566 tb/d to average 4.12 mb/d and 4.7 mb/d, respectively.

The decline rate in Bakken shale production slowed in 2021 compared to 2020, from a contraction of 235 tb/d to a decline of 80 tb/d, and is now expected to stand at an average of 1.1 mb/d in 2021. For 2022, tight crude production from the Bakken shale is forecast to grow by 67 tb/d on the back of increased drilling activity in North Dakota.

The Eagle Ford in Texas is expected to decline in 2021 by 95 tb/d to average 0.96 mb/d, but is forecast to grow in 2022 by 42 tb/d to average 1.0 mb/d. The rig-weighted average productivity (new-well oil production per rig) is still showing a y-o-y decline by 69 b/d, or 3%, in the Eagle Ford, according to the EIA-DPR (Drilling Productivity Report) forecast for February 2022. However, production is forecast to increase by 12 tb/d in February 2022 m-o-m.

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



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

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

| US tight oil | Change | | Change | | Change | |
|-------------------|-------------|--------------|-------------|--------------|-------------|-------------|
| | 2020 | 2020/19 | 2021* | 2021/20 | 2022* | 2022/21 |
| Permian tight | 3.92 | 0.17 | 4.12 | 0.19 | 4.68 | 0.57 |
| Bakken shale | 1.18 | -0.23 | 1.10 | -0.08 | 1.17 | 0.07 |
| Eagle Ford shale | 1.05 | -0.18 | 0.96 | -0.09 | 1.00 | 0.04 |
| Niobrara shale | 0.47 | -0.07 | 0.42 | -0.05 | 0.45 | 0.03 |
| Other tight plays | 0.76 | -0.14 | 0.69 | -0.07 | 0.65 | -0.03 |
| Total | 7.39 | -0.45 | 7.28 | -0.11 | 7.95 | 0.67 |

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

Production in the Niobrara, following an expected decline of 49 tb/d this year, is likely to grow by 29 tb/d y-o-y in 2022, to average 0.45 mb/d. Other shale plays are not expected to show growth in 2021 or 2022, given current drilling and completion activities.

US tight crude saw a contraction of 454 tb/d in 2020 and is expected to decline by 106 tb/d y-o-y in 2021. As of 2022, production is forecast to grow by 671 tb/d to average 7.95 mb/d.

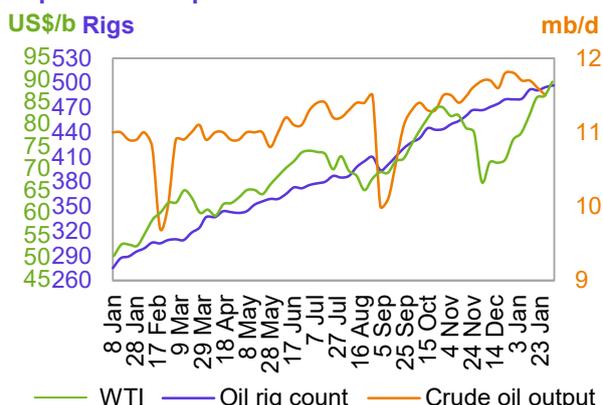
US rig count, spudded, completed, DUC wells and fracking activity

Total **US active drilling rigs** increased by 6 to 610 rigs in the week ended 28 January, which is 225 rigs more than a year ago. The number of active offshore rigs was steady w-o-w at 18, two rigs higher than in 2021. Moreover, 590 rigs (oil and gas) were active onshore, climbing by 6 w-o-w, and two in inland waters.

The US horizontal rig count rose by 9 rigs w-o-w to 553 rigs, compared to 344 horizontal rigs a year ago. The number of drilling rigs for oil increased by 4 to 495, while gas rigs climbed by 2 to 115 w-o-w.

Overall, in all the main basins, except for the Ardmore Wood Ford, which dropped by one rig on the weekly rig count, the number of rigs did not drop.

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



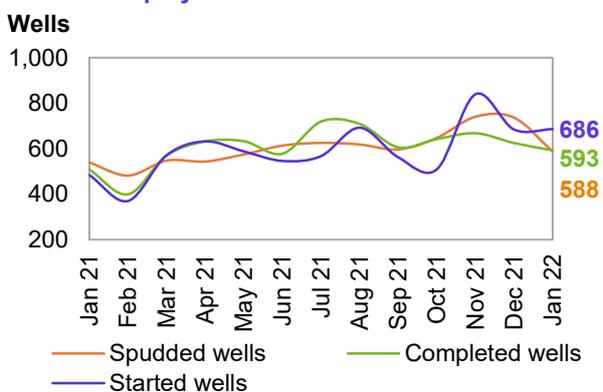
Sources: Baker Hughes, EIA and OPEC.

While the rig count in the Permian increased by one w-o-w to 293 rigs, the number of active rigs remains unchanged at 27 in the Williston, 43 in the Eagle Ford, 26 in Cana Woodford and 12 rigs in the DJ-Niobrara basins. Two rigs also mounted in the Barnett basin after seven weeks of no activity.

Drilling and completion (D&C) activities for spudded, completed and started wells in all US shale plays based on EIA DPR regions saw 588 horizontal wells spudded in January (as per preliminary data), down by 149 m-o-m, but 9% higher than in January 2021.

In January 2022, preliminary data indicates a lower number of completed wells at 593, but a marginally higher number of started wells at 686. However, the number of completed and started wells increased by 17% and 42% y-o-y, respectively.

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

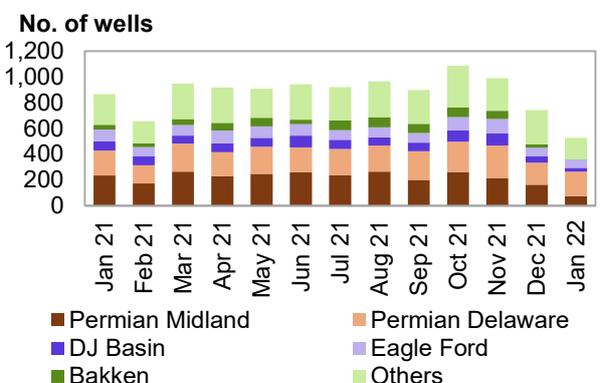


Note: Jan 22 = Preliminary data. Sources: Rystad Energy and OPEC.

Regarding identified **US oil and gas fracking operations** by region, Rystad Energy reported that after the highest value of 1,087 fracked wells seen in October 2021 since March 2020, 526 wells started to frack in January. This preliminary number is based almost exclusively on analysis of high-frequency satellite data.

Preliminary data on fracking in January shows that 74 and 190 wells were fracked in the Permian Midland Tight and Permian Delaware Tight, respectively. In comparison with December 2021, there was a decrease of 88 wells fracked in the Midland and an increase of 17 wells fracked in the Delaware tight. Data also indicated that 30 wells were fracked in the DJ Basin compared with 64 in the Eagle Ford and only 1 in the Bakken in North Dakota.

Graph 5 - 14: Fracked wells count per month



Note: Jan 22 = Preliminary data. Sources: Rystad Energy Shale Well Cube and OPEC.

Canada

Canada's liquids production in December is estimated to have decreased by 175 tb/d m-o-m to average 5.58 mb/d.

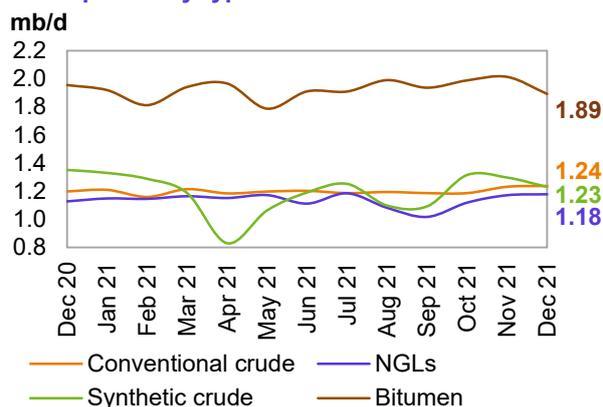
Crude bitumen and synthetic crude output decreased by 188 tb/d to 3.12 mb/d, while production of conventional crude was up slightly by 6 tb/d for an average of 1.24 mb/d. At the same time, production of NGLs was marginally up by 7 tb/d m-o-m to average 1.18 mb/d.

The decrease in crude bitumen and synthetic crude output was mainly because of the two operational incidents at the Syncrude mine and Firebag in situ operations, which impacted production in late December. Both issues have been resolved with production back to normal levels, Suncor reported.

Lower-than-forecast monthly liquids output throughout 4Q21 has necessitated a slight downward revision to Canadian liquids supply for **2021** by 17 tb/d, to show growth of 0.31 mb/d and an average of 5.48 mb/d.

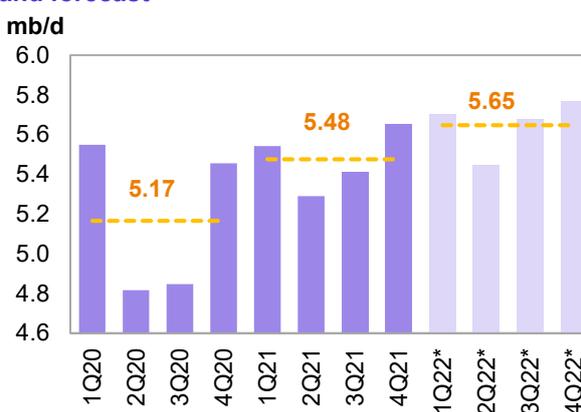
For **2022**, Canada's liquids production is forecast to increase at a slower pace compared with the current year, rising by 0.17 mb/d to average 5.65 mb/d, remaining unchanged from the previous month's assessment.

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



Sources: National Energy Board and OPEC.

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



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

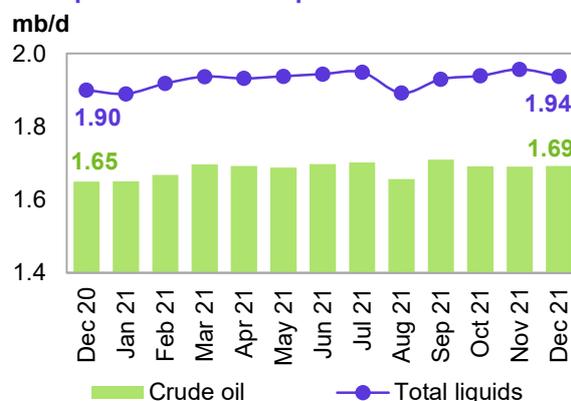
Mexico

Mexico's crude output was broadly flat in **December** to average 1.69 mb/d. However, NGL output decreased by 22 tb/d. Therefore, Mexico's total liquids output in December decreased by 20 tb/d m-o-m to average 1.94 mb/d.

For **2021**, liquids production in Mexico is forecast to grow by 0.01 mb/d to average 1.93 mb/d, unchanged from the previous assessment.

For **2022**, growth is forecast at 0.03 mb/d to average 1.96 mb/d.

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



Sources: PEMEX and OPEC.

OECD Europe

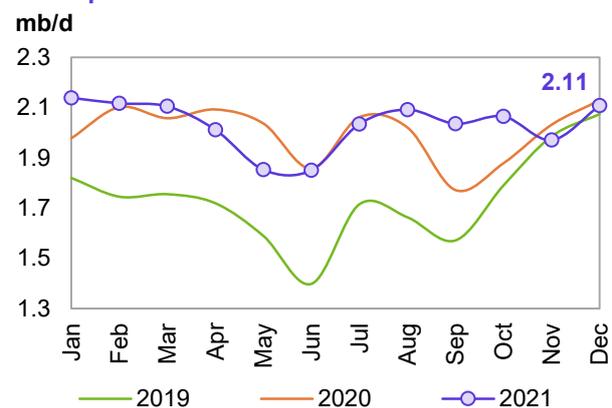
Norway

Norwegian Liquids production in December rose by 0.14 mb/d m-o-m to average 2.11 mb/d.

Crude production increased by 110 tb/d m-o-m to average 1.84 mb/d and was up by 30 tb/d y-o-y, which is still 0.2% lower than the NPD's forecast. Production of NGLs and condensates rose by 28 tb/d m-o-m to average 0.27 mb/d.

For **2021**, Norway's liquids supply growth forecast has been revised down slightly by 2 tb/d m-o-m due to lower-than-expected output in 4Q21 as a result of a number of unannounced repair activities, which saw a downward revision of 14 tb/d. Production is now expected to average 2.03 mb/d, with growth of 0.03 mb/d y-o-y.

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



Sources: NPD and OPEC.

For **2022**, Norwegian liquids production is expected to grow by 0.13 mb/d to average 2.16 mb/d, with no considerable revision from last month's assessment. It is worth noting that the second development phase of the Johan Sverdrup field, which already provides 30% of Norway's crude oil production, is due to come onstream in 4Q22 and is expected to reach 755,000 b/d, according to state-controlled energy group Equinor.

UK

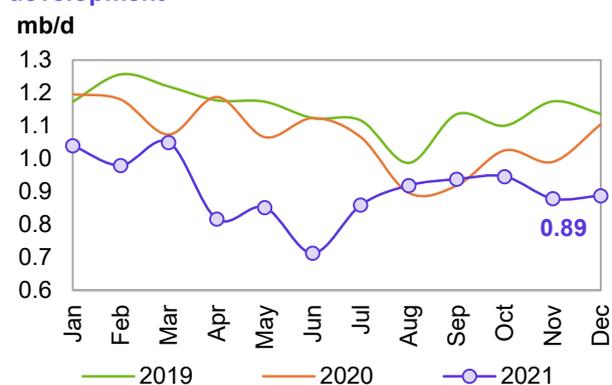
UK liquids production increased in December by 10 tb/d m-o-m to average 0.89 mb/d.

Crude oil output increased slightly by 10 tb/d m-o-m to average 0.76 mb/d, according to official data, and was down by 210 tb/d y-o-y. NGL output held steady m-o-m in December to average 92 tb/d.

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

For **2022**, UK liquids production is forecast to grow by a minor 0.02 mb/d to average 0.93 mb/d, following two consecutive years of heavy declines.

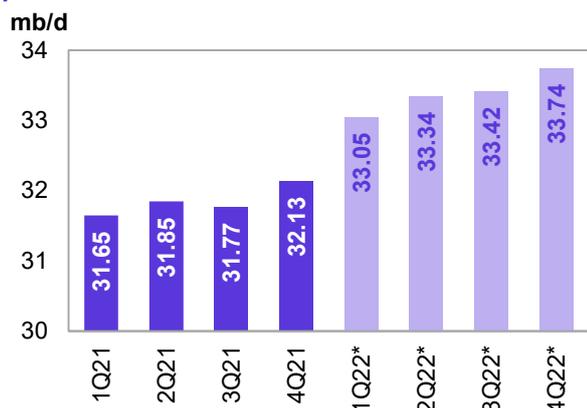
Graph 5 - 19: UK monthly liquids production development



Sources: Department of Energy & Climate Change and OPEC.

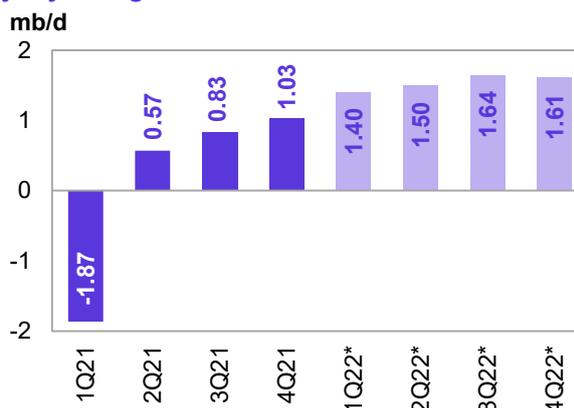
Non-OECD

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



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

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

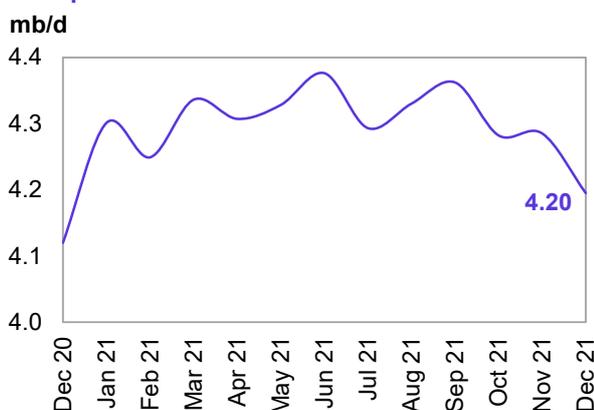


Note: * 1Q22-4Q22 = Forecast. Source: OPEC.

China

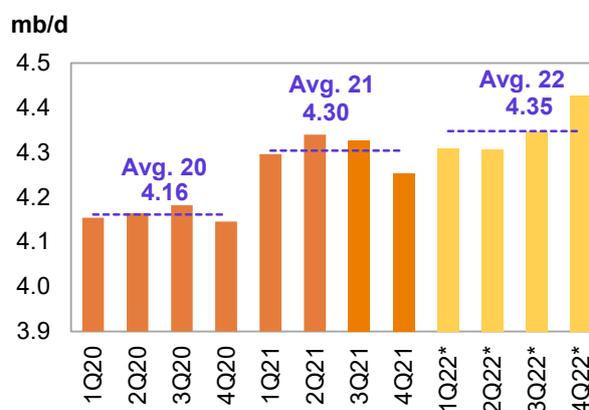
China's liquids production declined by 0.09 mb/d m-o-m in December to average 4.20 mb/d. The average liquid production in 2021 is estimated to be 4.3 mb/d, increased by 0.14 mb/d y-o-y, according to official data. Crude oil output in December dropped up by 91 tb/d to average 3.88 mb/d and was higher by 47 tb/d y-o-y. Crude oil output in January-December averaged 3.99 mb/d, up by 99 tb/d from the same period in 2020.

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



Sources: CNPC and OPEC.

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



Note: * 1Q22-4Q22 = Forecast. Sources: CNPC and OPEC.

For **2021**, China's liquids supply is projected to see growth of 0.14 mb/d to average 4.30 mb/d, with a minor downward revision of 18 tb/d from the previous assessment.

For **2022**, growth of 0.04 mb/d is forecast for an average of 4.35 mb/d.

Latin America

Brazil

Brazil's crude output in December decreased by 15 tb/d m-o-m to average 2.84 mb/d. NGLs declined by 8 tb/d to average 94 tb/d, and biofuel output remained steady at 594 tb/d. Therefore, in December, total liquids production decreased by 23 tb/d to average 3.53 mb/d, which was higher by 75 tb/d y-o-y. Non-conventional liquids (mainly ethanol) were revised down for all the quarters of 2021 at the end of January 2022.

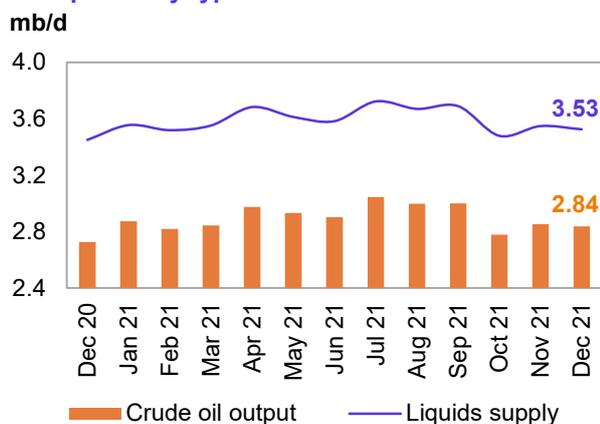
Average crude production in Brazil during January-December 2021 shows a decline of 35 tb/d compared with the same period in 2020, despite the production ramp-ups in the Sepia and Buzios fields. This is far from the initially expected growth for 2021. Maintenance impacted crude production, especially in 3Q21 and 4Q21. Moreover, COVID-19-related health and safety measures at production platforms, delays in project start-ups

and heavy natural declines at offshore mature fields, particularly in the Campos Basin, have also contributed to under-performance in production. The downward revision of ethanol for the whole year also affected estimated 2021 liquids production.

Hence, the initial liquids supply forecast for **2021** has been revised down by 28 tb/d m-o-m to average 3.60 m/d, a decline of 0.08 mb/d y-o-y.

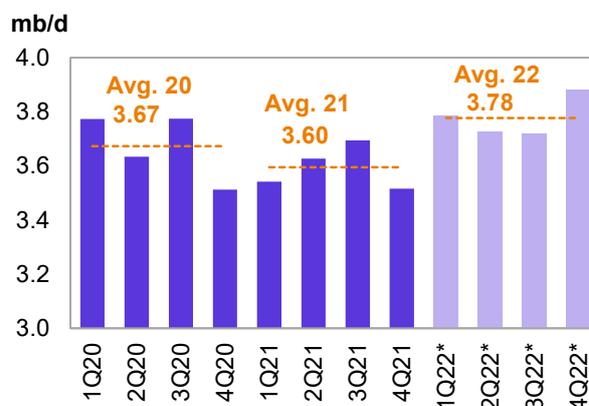
For **2022**, Brazil's liquids supply, including biofuels, is forecast to increase by 0.18 mb/d y-o-y to average 3.78 mb/d, revised down by 0.04 mb/d, in line with the downward revision by the Brazilian ANP for 2022. Crude oil production is expected to rise through two new project start-ups: Mero-1 (Guanabara), which was initially planned to start in 2021, and Peregrino-Phase 2. Moreover, in Buzios, a fifth unit, the Almirante Barroso FPSO — to be supplied by Japan's Modec — is due to begin operations in 2022.

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



Sources: ANP, Petrobras and OPEC.

Graph 5 - 25: Brazil's quarterly liquids production

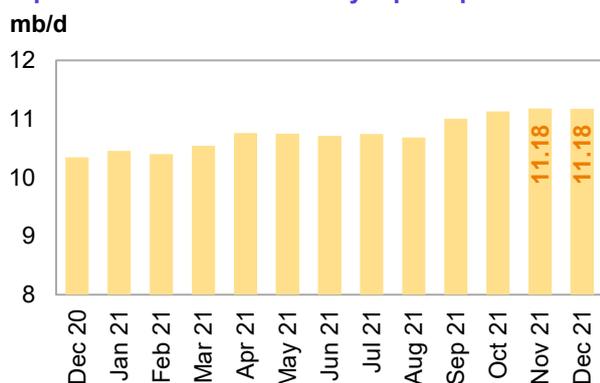


Note: * 1Q22-4Q22 = Forecast. Sources: ANP and OPEC.

Russia

Russia's liquids production in December remained unchanged at 11.18 mb/d m-o-m. This includes 9.95 mb/d of crude oil and 1.23 mb/d of condensate and NGLs. A preliminary estimate for Russia's crude and condensate production in January 2022 based on the Ministry of Energy's production data shows an increase of 0.1 mb/d m-o-m to average 11.28 mb/d, which is higher by 0.82 mb/d y-o-y.

Graph 5 - 26: Russia's monthly liquids production



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

Graph 5 - 27: Russia's quarterly liquids production



Note: * 1Q22-4Q22 = Forecast. Sources: Nefte Compass and OPEC.

Annual liquids production in **2021** increased by 0.2 mb/d y-o-y to average 10.80 mb/d, which is unchanged on a monthly basis.

For **2022**, Russian liquids output is expected to increase by 0.98 mb/d to average 11.77 mb/d, with 3Q22 and 4Q22 both expected to reach 11.88 mb/d, unchanged from the previous assessment.

Caspian

Kazakhstan & Azerbaijan

Liquids output in Kazakhstan remained broadly unchanged at an average of 2.01 mb/d in **December** on the back of the production from main oil fields such as Tengiz. Kazakh crude production inched up marginally by 10 tb/d m-o-m in December to average 1.63 mb/d, the highest output since April 2020, and was up by 0.2 mb/d y-o-y. At the same time, production of condensate and NGLs was unchanged m-o-m to average 376 tb/d in December.

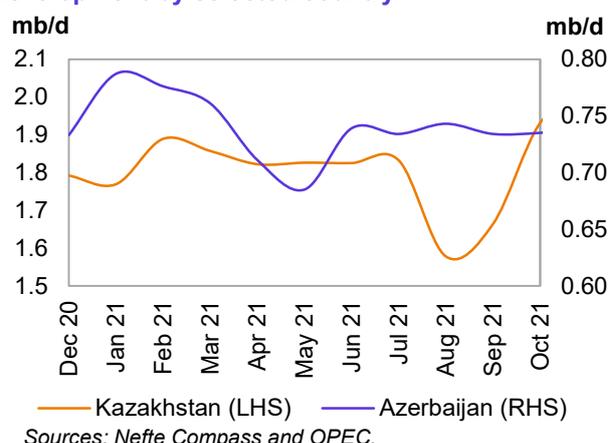
Kazakhstan's liquids supply forecast for **2021** was revised up marginally from the previous assessment and is estimated to have averaged 1.84 mb/d, higher by 0.01 mb/d y-o-y, while for **2022**, liquids supply is forecast to grow by 0.15 mb/d to average 1.99 mb/d.

Azerbaijan's liquids production in December increased by 0.01 mb/d m-o-m to average 0.75 mb/d, up by 0.02 mb/d y-o-y. Crude production inched up by 6 tb/d m-o-m to average 595 tb/d as maintenance was completed on the Chirag platform. Condensate output held steady at 150 tb/d, according to official sources.

Azeri liquids production is expected to increase in January 2022 to average 0.81 mb/d, following the completion of maintenance.

Azerbaijan's liquids supply is estimated to have grown by 0.01 mb/d y-o-y to average 0.74 mb/d in **2021**, while for **2022**, growth of 0.08 mb/d y-o-y is forecast for an average of 0.82 mb/d.

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



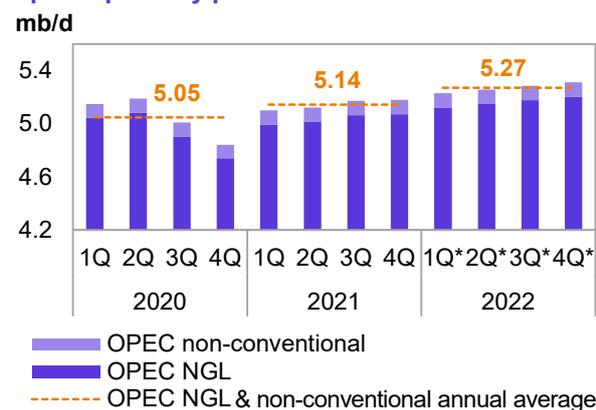
Sources: Nefte Compass and OPEC.

OPEC NGLs and non-conventional oils

Following a decline of 0.17 mb/d in 2020, **OPEC NGLs and non-conventional liquids in 2021** are estimated to have grown by 0.10 mb/d, to average 5.14 mb/d, unchanged from last month's assessment.

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

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



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

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

| OPEC NGL and non-conventional oils | Change | | Change | | Change | | | | | |
|------------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 2020 | 20/19 | 2021 | 21/20 | 1Q22 | 2Q22 | 3Q22 | 4Q22 | 2022 | 22/21 |
| OPEC NGL | 4.94 | -0.18 | 5.04 | 0.09 | 5.12 | 5.15 | 5.18 | 5.20 | 5.16 | 0.13 |
| OPEC non-conventional | 0.10 | 0.01 | 0.11 | 0.00 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.00 |
| Total | 5.05 | -0.17 | 5.14 | 0.10 | 5.23 | 5.26 | 5.29 | 5.31 | 5.27 | 0.13 |

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

OPEC crude oil production

According to secondary sources, total **OPEC-13 crude oil production** averaged 27.98 mb/d in January 2022, higher by 0.06 mb/d m-o-m. Crude oil output increased mainly in Nigeria, Saudi Arabia, the UAE and Kuwait, while production in Venezuela, Libya and Iraq declined.

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

| Secondary sources | 2020 | 2021 | 2Q21 | 3Q21 | 4Q21 | Nov 21 | Dec 21 | Jan 22 | Change Jan/Dec |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Algeria | 897 | 908 | 886 | 922 | 954 | 954 | 965 | 970 | 5 |
| Angola | 1,255 | 1,120 | 1,109 | 1,106 | 1,124 | 1,087 | 1,164 | 1,155 | -9 |
| Congo | 288 | 265 | 261 | 258 | 268 | 261 | 272 | 255 | -17 |
| Equatorial Guinea | 115 | 100 | 106 | 99 | 91 | 85 | 103 | 96 | -6 |
| Gabon | 195 | 186 | 186 | 186 | 187 | 185 | 199 | 185 | -14 |
| IR Iran | 1,988 | 2,405 | 2,440 | 2,480 | 2,480 | 2,473 | 2,482 | 2,503 | 21 |
| Iraq | 4,049 | 4,024 | 3,940 | 4,053 | 4,219 | 4,242 | 4,271 | 4,245 | -27 |
| Kuwait | 2,430 | 2,415 | 2,356 | 2,445 | 2,528 | 2,531 | 2,551 | 2,579 | 27 |
| Libya | 367 | 1,148 | 1,151 | 1,154 | 1,114 | 1,137 | 1,053 | 1,008 | -45 |
| Nigeria | 1,579 | 1,380 | 1,424 | 1,349 | 1,335 | 1,381 | 1,317 | 1,398 | 81 |
| Saudi Arabia | 9,182 | 9,091 | 8,502 | 9,536 | 9,860 | 9,871 | 9,945 | 9,999 | 54 |
| UAE | 2,802 | 2,718 | 2,644 | 2,762 | 2,854 | 2,852 | 2,880 | 2,924 | 44 |
| Venezuela | 500 | 558 | 513 | 538 | 667 | 669 | 718 | 668 | -51 |
| Total OPEC | 25,648 | 26,319 | 25,520 | 26,886 | 27,682 | 27,727 | 27,918 | 27,981 | 64 |

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 | 2Q21 | 3Q21 | 4Q21 | Nov 21 | Dec 21 | Jan 22 | Change Jan/Dec |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|
| Algeria | 899 | 911 | 886 | 924 | 958 | 959 | 966 | 977 | 11 |
| Angola | 1,271 | 1,124 | 1,125 | 1,114 | 1,122 | 1,110 | 1,150 | 1,193 | 43 |
| Congo | 300 | 267 | 265 | 266 | 260 | 253 | 257 | .. | .. |
| Equatorial Guinea | 114 | 94 | 99 | 94 | 79 | 71 | 85 | 88 | 3 |
| Gabon | 207 | 181 | 179 | 180 | 183 | 188 | 189 | .. | .. |
| IR Iran | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Iraq | 3,997 | 3,971 | 3,890 | 3,979 | 4,167 | 4,208 | 4,225 | 4,162 | -63 |
| Kuwait | 2,438 | 2,415 | 2,355 | 2,447 | 2,528 | 2,532 | 2,549 | 2,584 | 35 |
| Libya | 389 | 1,207 | 1,213 | 1,220 | 1,182 | 1,211 | 1,092 | .. | .. |
| Nigeria | 1,493 | 1,312 | 1,343 | 1,270 | 1,233 | 1,275 | 1,197 | 1,399 | 202 |
| Saudi Arabia | 9,213 | 9,125 | 8,535 | 9,565 | 9,905 | 9,912 | 10,022 | 10,145 | 123 |
| UAE | 2,779 | 2,718 | 2,645 | 2,758 | 2,854 | 2,852 | 2,878 | 2,924 | 46 |
| Venezuela | 569 | 636 | 556 | 635 | 817 | 824 | 871 | 755 | -116 |
| Total OPEC | .. |

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

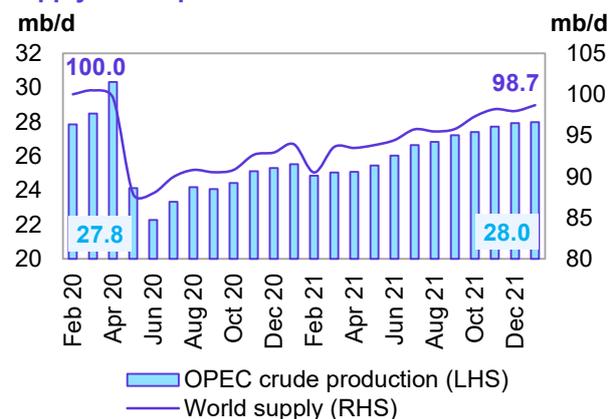
World oil supply

Preliminary data indicates that **global liquids production in January** increased by 0.71 mb/d to average 98.69 mb/d compared with the previous month.

Non-OPEC liquids production (including OPEC NGLs) is estimated to have increased in January by 0.65 mb/d compared with the previous month to average 70.71 mb/d, higher by 2.3 mb/d y-o-y. Preliminary increases in production of 0.53 mb/d during January were driven by the non-OECD, mainly by Russia, Ecuador and Brazil, while output in the OECD was up by 0.08 mb/d, primarily driven by Norway and the UK.

The **share of OPEC crude oil in total global production** decreased by 0.1 pp to 28.4% in January compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

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



Source: OPEC.

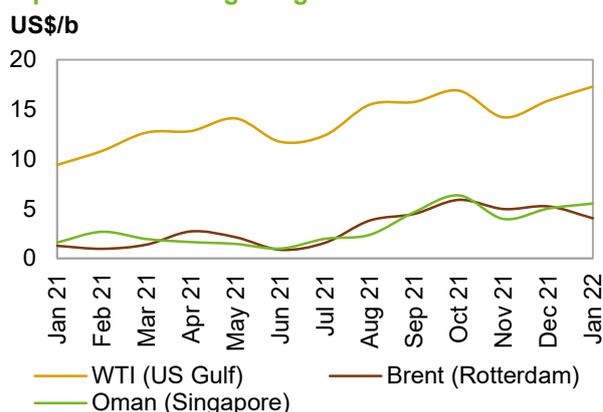
Product Markets and Refinery Operations

Refinery margins in the US Gulf Coast and in Singapore exhibited positive performance in January, gaining \$1.42/b and 50¢/b, respectively, m-o-m. Compared with 2019 margins, they were up by \$4.00/b and \$2.37/b, respectively, as global product inventory levels reached multi-year lows. However, in Northwest Europe refinery margins lost \$1.20/b, affected not only by higher crude prices, but also the impact of the recent record-high natural gas prices as a vast majority of European refineries depend on gas to power their plants. Over the month, soaring diesel prices and consequently stronger crack spreads have projected diesel as the strongest margin contributor, backed by firm manufacturing, industrial activity in Asia as well as positive heating oil demand in the US amid winter storms that hit the country mid-January. The frigid temperatures in the US contributed to refinery shutdowns and a decline in refinery intakes, while in Europe and in Asia intakes increased moderately.

Refinery margins

US Gulf Coast (USGC) refining margins against WTI continued to trend upwards for the second consecutive month to fully recover all losses registered last November, and reached the highest level recorded since October 2019. Product output restrictions, as some parts of the US were affected by a winter storm in mid-January, signalled a worsening of the already tight product balance, despite recent indications of recovery in gasoline inventories. According to preliminary estimates, US refinery intakes declined by around 370 tb/d in January. US refinery intake is expected to decline further in the coming months on forecasts of another winter storm amid the onset on peak spring turnaround season, pointing to continued upside potential in refining economics for the coming months.

Graph 6 - 1: Refining margins



Sources: Argus and OPEC.

Diesel prices in the US jumped by the highest magnitude relative to all other products across the barrel amid low stockpiles and output cuts, and reached its highest level in more than five years in the USGC. Diesel was the strongest margin contributor across the barrel in January. USGC margins against WTI averaged \$17.31/b in January, up by \$1.42 m-o-m and by \$7.89/b y-o-y.

Refinery margins in Northwest **Europe** against Brent lost some ground, pressured by higher feedstock prices and power costs as natural gas prices remained high in January. Nearly 80% of all European refineries depend on natural gas to power their plants, with refineries located in the big oil refining hubs such as Northwest Europe's Amsterdam-Rotterdam-Antwerp essentially relying on natural gas for all its power needs. European refinery run rates in January increased by a slight 30 tb/d m-o-m, according to preliminary data, while strong diesel crack spreads continued to encourage a push for higher diesel yields to increase profits. Refinery margins against Brent in Europe averaged \$4.04/b in January, down by \$1.20 compared with a month earlier but up by \$2.78 y-o-y.

In Singapore - **Asia**, margins against Oman strengthened, supported by strong regional product demand amid still suppressed product deliveries from China. The overall rise in Asian product output was estimated to be 170 tb/d higher relative to the previous month. The average utilization rate at China's four state-owned refiners rebounded in January to 80.7%, with nearly 1.53 mb/d capacity coming online following scheduled maintenance. Diesel provided the highest contribution to refining economics across the barrel in Asia, backed by strong regional demand, despite pressures brought by high COVID-19 infection rates. Indian diesel as well as gasoline sales were reported to have declined m-o-m according to secondary sources. Diesel sales by India's three biggest fuel retailers were at 5.63 million tonnes, 12.8% lower than December 2021. In Japan, the recent decision on 19 January to impose COVID-19 priority measures on Tokyo and other populous prefectures is set to slow the recovery in the country's gasoline demand, and could consequently weigh on regional gasoline markets in the immediate short term. Japan's efforts to offer oil refiners subsidies to maintain margins and limit passing on rising gasoline costs to consumers should provide support in the longer term.

Refinery margins against Oman in Asia gained 50¢ m-o-m to average \$5.52/b in January, higher by \$3.92 y-o-y.

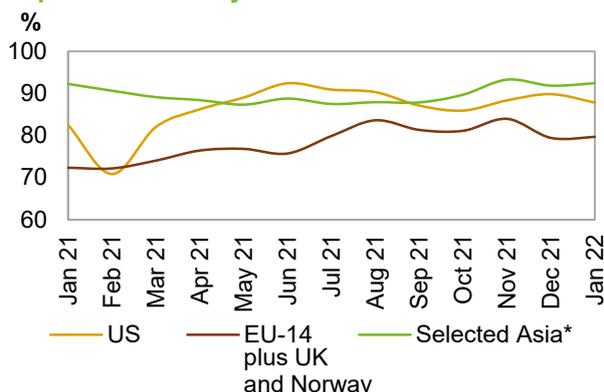
Refinery operations

US refinery utilization rates decreased in January to average 87.8%, which corresponds to a throughput of 15.91 mb/d. This represented a drop of 2.0 pp and 370 tb/d, respectively, compared with the previous month. Y-o-y, the January refinery utilization rate was up by 5.3 pp, with throughput showing a rise of 940 tb/d.

European refinery utilization averaged 79.7%, corresponding to a throughput of 9.38 mb/d. This is a m-o-m a slight rise of 0.3 pp or 30 tb/d. On a y-o-y basis, utilization rates increased by 7.3 pp, while throughput was up by 520 tb/d.

In **selected Asia** – comprising Japan, China, India, Singapore and South Korea – refinery utilization rates rose to average 92.4% in January, corresponding to a throughput of 26.36 mb/d. Compared with the previous month, throughput was up by 0.6 pp and 170 tb/d. Meanwhile, it rose y-o-y by 0.2 pp and 140 tb/d.

Graph 6 - 2: Refinery utilization rates



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

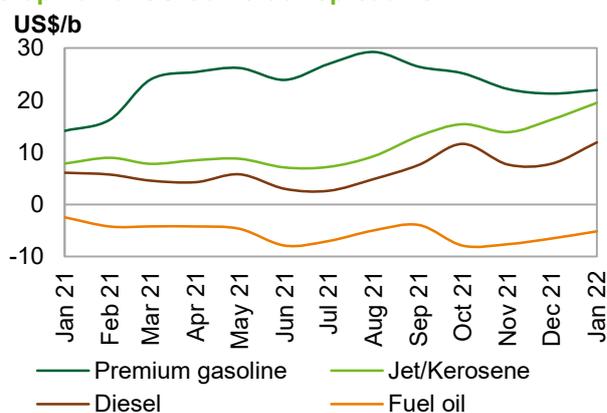
Product markets

US market

USGC gasoline crack spreads gained some ground following five consecutive month of losses, supported mainly by supply-side factors. Although US gasoline inventory levels rose, the impact of unplanned refinery outages due to severe winter amid the soon-approaching peak refinery maintenance season triggered positive market sentiment and supported US gasoline markets.

Moreover, during the month, wholesale gasoline in the New York market surged to the highest seasonal level in three decades as deliveries of domestic and foreign supplies failed to keep pace with demand. The USGC gasoline crack spread gained 67¢ m-o-m to average \$21.94/b in January, and was up by \$7.80 y-o-y.

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



Sources: Argus and OPEC.

USGC **jet/kerosene crack spreads** extended the upward trend seen in the previous month in response to a reduction in refinery outputs. Although the decline in jet fuel/kerosene production was supportive, on the demand-side, jet fuel requirements were rather subdued due to weak air travel activity. US jet fuel inventory levels rose during the first week of January but declined continually thereafter to lose around 2.3 mb/d in the week ended 28 January, according to the latest data available. The US jet/kerosene crack spread against WTI averaged \$19.49/b, up by \$3.21 m-o-m and higher by \$11.66 y-o-y.

The USGC **gasoil crack spread** against WTI showed notable gains, as diesel prices in the US jumped by the highest magnitude relative to all other products across the barrel amid low stockpiles and output cuts, and reached its highest level in more than five years in the USGC. Diesel was the strongest margin contributor across the barrel in January. In addition, requirements for heating oil in the US improved as the country was hit by a winter storm in mid-January, which likely added to the gains in diesel margins. Positive global manufacturing and industrial indicators amid the worsening global diesel balance tightness likely provided further support to the US gasoil market. The US gasoil crack spread against WTI averaged \$11.89/b, up by \$4.09 m-o-m and \$5.82 y-o-y.

USGC fuel oil crack spreads against WTI rose in January, supported by a combination of supply- and demand-side factors. Strong inventory drawdowns, as well as fuel oil demand for feedstock blending amid high crude prices contributed to the positive performance. Going forward, fuel oil markets are expected to benefit from the prevailing need for fuel oil conversion to gasoil to replenish gasoil stock levels. In January, the US fuel oil crack spread against WTI averaged -\$5.17/b, higher by \$1.37 m-o-m, but lower by \$2.69 y-o-y.

European market

Gasoline crack spreads weakened under pressure from lower trans-Atlantic exports as well as lower regional demand. The ongoing recovery in US gasoline inventories led to lower gasoline requirements from Europe. The gasoline crack spread against Brent averaged \$15.86/b in January, down by 54¢ m-o-m, but was up by \$7.53 y-o-y.

In January, **jet/kerosene** crack spreads saw solid gains as their crack spreads against Brent rose for the second consecutive month and reached their highest level since November 2019. Waning concerns over the Omicron-related travel restrictions prompted a more optimistic outlook with the possibility of the jet fuel demand recovery gaining momentum sooner than previously expected. The Rotterdam jet/kerosene crack spread against Brent averaged \$14.90/b, up by \$2.79 m-o-m and by \$10.23 y-o-y.

Gasoil crack spreads trended upwards as the European diesel market structure yielded to a strong backwardation in January, and widened further from December, as changing middle distillate yields and trade flows limit diesel supply. The regional and global diesel tightness, at a time when some European refiners were encouraged to increase jet fuel yields due to lower imports, pushed gasoil prices to \$101.18/b, up by \$14.80 m-o-m. This marked a new multi-year, pre-COVID-19 high as gasoil prices have not surpassed the \$100/b mark since at least 2017. The gasoil crack spread against Brent averaged \$14.57/b, which was higher by \$2.28 m-o-m and up by \$9.24 y-o-y.

At the bottom of the barrel, **fuel oil 1.0% crack spreads** weakened, pressured by steady volume arrivals from the Baltic Sea. In Europe, fuel oil cracks averaged -\$3.64/b in January, having lost \$3.19 m-o-m and \$4.43 y-o-y.

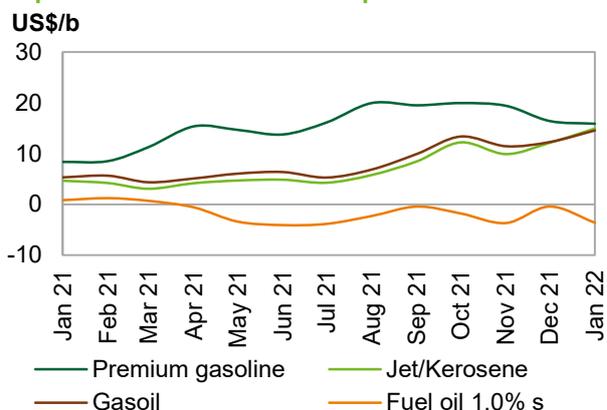
Asian market

The Asian **gasoline 92 crack spread** gained some ground with support from a rise in consumption levels within the region, particularly in India, and despite prevailing concerns about COVID-19 variants.

The start of the Lunar New Year, which is celebrated in some countries of the region, likely provided further support. Moreover, the hefty reduction in Chinese gasoline exports has largely contributed to lower volume availability in the region, which provided support to the Asian gasoline complex. The Singapore gasoline crack spread against Oman in January averaged \$12.84/b, up by 36 ¢ m-o-m and up by \$8.58 y-o-y.

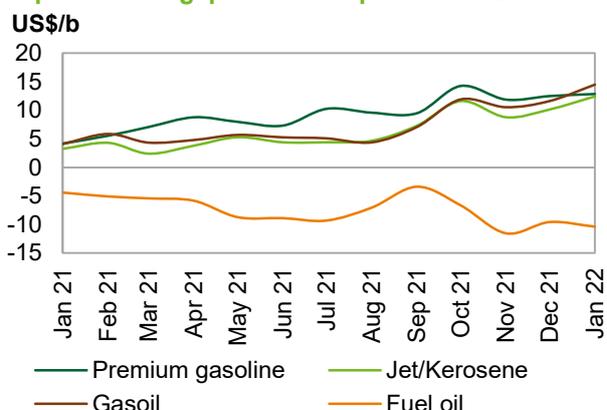
Asia **naphtha crack spreads** underwent a steep downturn, affected by a slowdowns at Asian chemical plants and a downtick in demand for the feedstock. The narrow ethylene-naphtha spread represented a potential challenge for naphtha margins and pushed some Asian refiners to reduce runs, which consequently weighed on Asian naphtha demand for steam crackers. The Singapore naphtha crack spread against Oman averaged \$1.22/b, having decreased by \$3.29 m-o-m and 15¢ y-o-y.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



Sources: Argus and OPEC.

Graph 6 - 5: Singapore crack spreads vs. Dubai



Sources: Argus and OPEC.

In the middle of the barrel, **jet/kerosene crack spreads** trended upwards, supported by a slow pick-up in jet fuel requirements for air passenger travel, although the recovery in Asian flights lagged far behind other main regions. International flights in the region are still the lowest globally, at just 21% of pre-pandemic levels, according to aviation intelligence firm OAG. A pick-up in air cargo demand in Thailand helped support jet fuel markets in the region. Jet/kerosene prices have reached a multi-year high, while retail kerosene prices in Japan were reported by secondary sources to have reached their highest in more than 13 years on 17 January. Cooler temperatures in January in parts of Asia may have spurred stronger kerosene demand for heating relative to December, even though sales were partially suppressed due to high prices. The Singapore jet/kerosene crack spread against Oman averaged \$12.44/b, up by \$2.28 m-o-m and by \$9.18 y-o-y.

The Singapore **gasoil crack spread** trended upwards, a reflection of strong regional demand, firm industrial and manufacturing activity as well as a contraction in gasoil availability in the region. The Singapore gasoil crack spread against Oman averaged \$14.50/b, up by \$2.87 m-o-m and up by \$10.39 y-o-y.

The Singapore **fuel oil 3.5% crack spread** took a downturn following the gains seen in the previous month as ample arrivals of fuel oil cargoes in the region exerted pressure on high-sulphur fuel oil (HSFO) markets. The rise in refinery runs in January aimed to ensure regional demand was met amid a decline in Singapore bunker sales, which fell by 4% m-o-m to 885 tb/d, 27.5% of which was high sulphur bunker fuel. This was the third highest reading since new International Maritime Organization (IMO) rules took effect in 2020, according to JBC, and contributed to the poor m-o-m HSFO performance. Singapore fuel oil cracks against Oman averaged -\$10.37/b, down by 81¢ m-o-m and lower by \$5.96 y-o-y.

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

| Event | Time frame | Asia | Europe | US | Observations |
|---|---------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| Spring peak maintenance season | Feb 22-Mar 22 | ↑ Positive impact on product markets | ↑ Positive impact on product markets | ↑ Positive impact on product markets | Further product output declines are expected in the coming months, which could further suppress inventory levels and consequently lift product prices. |
| Potential reinforcement of mobility restrictions | Feb 22-Mar 22 | ↓ Negative impact on product markets | ↓ Negative impact on product markets | ↓ Negative impact on product markets | Refining economics could come under pressure if mobility restrictions are re-implemented. This could exert pressure on fuel consumption levels and lead to product surplus in the near term. |
| Omicron/ jet fuel | Feb 22-Mar 22 | ↓ Negative impact on jet fuel | ↓ Negative impact on jet fuel | ↓ Negative impact on jet fuel | Concerns over the spread of new COVID-19 variants could lead to heightened air travel restrictions, which may slow or reverse the robust jet fuel recovery trend of recent months. |
| Current product tightness | Feb 22-Mar 22 | ↑ Positive impact on product markets | ↑ Positive impact on product markets | ↑ Positive impact on product markets | This is set to support processing rates in the immediate short term as refiners, and traders are expected to replenish product stock levels. |

Source: OPEC.

Product Markets and Refinery Operations

Table 6 - 2: Refinery operations in selected OECD countries

| | Refinery throughput, mb/d | | | | Refinery utilization, % | | | |
|------------------------------------|---------------------------|--------------|--------------|-------------------|-------------------------|--------------|--------------|-------------------|
| | Nov 21 | Dec 21 | Jan 22 | Change Jan/Dec | Nov 21 | Dec 21 | Jan 22 | Change Jan/Dec |
| | US | 16.01 | 16.28 | 15.91 | -0.37 | 88.33 | 89.82 | 87.79 |
| Euro-14, plus UK and Norway | 9.89 | 9.35 | 9.38 | 0.03 | 83.95 | 79.43 | 79.69 | 0.3 pp |
| France | 0.79 | 0.77 | 0.74 | -0.02 | 68.64 | 66.47 | 64.52 | -1.9 pp |
| Germany | 1.80 | 1.74 | 1.73 | -0.01 | 87.74 | 84.96 | 84.32 | -0.6 pp |
| Italy | 1.39 | 1.23 | 1.24 | 0.01 | 72.95 | 64.47 | 65.01 | 0.5 pp |
| UK | 1.04 | 0.99 | 1.01 | 0.02 | 88.57 | 84.31 | 86.38 | 2.1 pp |
| Selected Asia* | 26.64 | 26.19 | 26.36 | 0.17 | 93.24 | 91.82 | 92.40 | 0.6 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 | 1Q21 | 2Q21 | 3Q21 | 4Q21 | 1Q22 |
|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| OECD Americas | 18.96 | 16.54 | 17.72 | 16.29 | 18.18 | 18.37 | 18.04 | 18.02 |
| of which US | 16.99 | 14.72 | 15.64 | 14.20 | 16.17 | 16.22 | 15.96 | 15.66 |
| OECD Europe | 12.13 | 10.64 | 10.89 | 10.17 | 10.65 | 11.35 | 11.38 | 11.32 |
| of which: | | | | | | | | |
| France | 1.00 | 0.67 | 0.69 | 0.58 | 0.65 | 0.79 | 0.76 | 0.77 |
| Germany | 1.78 | 1.72 | 1.70 | 1.58 | 1.66 | 1.75 | 1.81 | 1.80 |
| Italy | 1.35 | 1.11 | 1.23 | 1.06 | 1.24 | 1.27 | 1.33 | 1.29 |
| UK | 1.08 | 0.92 | 0.91 | 0.75 | 0.94 | 0.99 | 0.98 | 1.01 |
| OECD Asia Pacific | 6.79 | 5.89 | 5.77 | 5.82 | 5.49 | 5.78 | 5.99 | 5.93 |
| of which Japan | 3.02 | 2.48 | 2.51 | 2.56 | 2.22 | 2.51 | 2.75 | 2.77 |
| Total OECD | 37.88 | 33.08 | 34.38 | 32.28 | 34.32 | 35.50 | 35.41 | 35.28 |
| Latin America | 4.09 | 3.28 | 3.45 | 3.47 | 3.30 | 3.46 | 3.57 | 3.62 |
| Middle East | 6.84 | 6.02 | 6.67 | 6.42 | 6.40 | 6.68 | 7.19 | 7.16 |
| Africa | 2.12 | 1.96 | 2.05 | 2.08 | 2.02 | 2.01 | 2.07 | 2.11 |
| India | 5.04 | 4.42 | 4.73 | 4.93 | 4.55 | 4.40 | 5.02 | 5.06 |
| China | 13.02 | 13.48 | 14.07 | 14.12 | 14.38 | 13.76 | 14.03 | 14.11 |
| Other Asia | 4.95 | 4.62 | 4.64 | 4.47 | 4.70 | 4.69 | 4.68 | 4.87 |
| Russia | 5.70 | 5.39 | 5.61 | 5.55 | 5.52 | 5.63 | 5.75 | 5.70 |
| Other Eurasia | 1.30 | 1.11 | 1.27 | 1.16 | 1.24 | 1.37 | 1.31 | 1.35 |
| Other Europe | 0.62 | 0.49 | 0.48 | 0.46 | 0.53 | 0.52 | 0.40 | 0.53 |
| Total Non-OECD | 43.68 | 40.76 | 42.96 | 42.66 | 42.63 | 42.53 | 44.02 | 44.52 |
| Total world | 81.56 | 73.84 | 77.34 | 74.94 | 76.95 | 78.03 | 79.43 | 79.79 |

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

| | Dec 21 | Jan 22 | Change Jan/Dec | Annual avg. 2021 | Year-to-date 2022 |
|---------------------------------------|--------|--------|-------------------|---------------------|----------------------|
| US Gulf (Cargoes FOB) | | | | | |
| Naphtha* | 75.90 | 86.42 | 10.52 | 70.70 | 86.42 |
| Premium gasoline (unleaded 93) | 93.14 | 105.10 | 11.96 | 91.41 | 105.10 |
| Regular gasoline (unleaded 87) | 89.36 | 101.14 | 11.78 | 86.72 | 101.14 |
| Jet/Kerosene | 88.15 | 102.65 | 14.50 | 78.32 | 102.65 |
| Gasoil (0.2% S) | 79.67 | 95.05 | 15.38 | 73.94 | 95.05 |
| Fuel oil (3.0% S) | 63.45 | 74.91 | 11.46 | 59.84 | 74.91 |
| Rotterdam (Barges FoB) | | | | | |
| Naphtha | 77.40 | 85.91 | 8.51 | 70.15 | 85.91 |
| Premium gasoline (unleaded 98) | 90.49 | 102.47 | 11.98 | 85.89 | 102.47 |
| Jet/Kerosene | 86.20 | 101.51 | 15.31 | 77.17 | 101.51 |
| Gasoil/Diesel (10 ppm) | 86.38 | 101.18 | 14.80 | 78.31 | 101.18 |
| Fuel oil (1.0% S) | 73.64 | 82.97 | 9.33 | 69.12 | 82.97 |
| Fuel oil (3.5% S) | 64.48 | 74.28 | 9.80 | 61.38 | 74.28 |
| Mediterranean (Cargoes FOB) | | | | | |
| Naphtha | 75.50 | 84.89 | 9.39 | 69.40 | 84.89 |
| Premium gasoline** | 84.94 | 96.69 | 11.75 | 80.46 | 96.69 |
| Jet/Kerosene | 83.07 | 99.21 | 16.14 | 75.06 | 99.21 |
| Diesel | 84.96 | 99.73 | 14.77 | 77.73 | 99.73 |
| Fuel oil (1.0% S) | 75.70 | 85.58 | 9.88 | 70.51 | 85.58 |
| Fuel oil (3.5% S) | 61.24 | 72.09 | 10.85 | 58.98 | 72.09 |
| Singapore (Cargoes FOB) | | | | | |
| Naphtha | 77.82 | 84.56 | 6.74 | 70.83 | 84.56 |
| Premium gasoline (unleaded 95) | 87.92 | 98.04 | 10.12 | 80.28 | 98.04 |
| Regular gasoline (unleaded 92) | 85.79 | 96.18 | 10.39 | 78.28 | 96.18 |
| Jet/Kerosene | 83.47 | 95.78 | 12.31 | 75.10 | 95.78 |
| Gasoil/Diesel (50 ppm) | 85.66 | 98.99 | 13.33 | 77.36 | 98.99 |
| Fuel oil (180 cst) | 84.50 | 97.43 | 12.93 | 75.71 | 97.43 |
| Fuel oil (380 cst 3.5% S) | 63.75 | 72.97 | 9.22 | 62.07 | 72.97 |

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

Sources: Argus and OPEC.

Tanker Market

Coming off a year that saw multi-decade lows, dirty tanker spot freight rates started 2022 close to the bottom end of the five-year range, despite rising bunker fuel prices weighing on earnings. VLCC rates continued to languish in the doldrums, while Suezmax and Aframax continued to perform relatively better, although earnings were impacted by higher bunker prices and softening demand amid efforts to mitigate the spread of Omicron.

Clean rates experienced similar trends, with rates showing a seasonal decline following a slight lift at the end of last year supported by heating fuel demand and gasoil flows.

Looking ahead, the tanker market began 2022 facing the still formidable task of navigating the resulting impacts of the collapse in demand in 2020 associated with the COVID-19 pandemic. While demand for tankers is returning following the unwinding of record-high inventories, fleet growth has continued, lengthening the time needed to return the market to balance. While 2021 missed the general lift expected at the end of the year, expectations foresee an improvement in rates toward the second half of this year, with a more sustained market balance emerging in 2023.

Spot fixtures

The latest estimates show **global spot fixtures** increased in January, starting the year with an average of 13.82 mb/d. This represents an increase of 0.2 mb/d, or around 1.5%. Compared with the previous year, spot fixtures were 1.2 mb/d lower, representing a decline of almost 8%.

Table 7 - 1: Spot fixtures, mb/d

| Spot fixtures | Nov 21 | Dec 21 | Jan 22 | Change Jan 22/Dec 21 |
|----------------------------|--------|--------|--------|-------------------------|
| All areas | 14.90 | 13.62 | 13.82 | 0.20 |
| OPEC | 8.98 | 9.43 | 9.43 | 0.00 |
| Middle East/East | 5.57 | 5.69 | 6.34 | 0.65 |
| Middle East/West | 0.79 | 0.59 | 0.91 | 0.32 |
| Outside Middle East | 2.62 | 3.15 | 2.18 | -0.97 |

Sources: Oil Movements and OPEC.

OPEC spot fixtures were broadly unchanged m-o-m in January, averaging 9.4 mb/d. Compared with the same month in 2021, they were about 0.6 mb/d, or 6%, lower.

Spot fixtures from the **Middle East-to-West** showed a strong recovery, increasing by 0.3 mb/d m-o-m in January, to average 0.9 mb/d. Y-o-y, rates were broadly flat, up just 1%.

Middle East-to-East fixtures increased m-o-m by 0.7 mb/d, or around 11%, to average 6.3 mb/d. Compared with the same month last year, eastward flows were 0.4 mb/d, or 6%, higher.

Outside the Middle East, fixtures fell sharply to average 2.2 mb/d in January. This represents an almost 1 mb/d, or 31%, decline m-o-m and a roughly similar decline y-o-y.

Sailings and arrivals

OPEC sailings declined m-o-m in January to average 22.5 mb/d, representing a drop of 0.8 mb/d or 3%. OPEC sailings were 1.2 mb/d, or around 6%, higher compared with the same month of the previous year.

Middle East sailings increased m-o-m in January, up by about 0.3 mb/d, or about 1%, to average 17.6 mb/d. Y-o-y, sailings from the region rose 1.7 mb/d, or around 11%, compared with January 2021.

Crude arrivals were generally lower in January, with the exception of arrivals in the Far East. Arrivals in North America declined by just over 1%, or 0.1 mb/d, to average 8.8 mb/d. However, y-o-y, North American arrivals were 0.5 mb/d, or over 5%, higher. Arrivals in Europe declined by 0.7 mb/d, or 5%, m-o-m in January to average 12.1 mb/d. This was 0.6 mb/d, or 6%, higher than in the same month last year.

In West Asia, arrivals declined m-o-m in January, dropping by 0.5 mb/d, or close to 6%, to average 8.4 mb/d. This represented a y-o-y gain of 1.6 mb/d, or almost 23%. Arrivals in the Far East bucked the generally lower

trend, increasing by 0.3 mb/d, or around 2%, m-o-m to average around 15.1 mb/d. Y-o-y, arrivals were 1.6 mb/d, or about 12%, higher.

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

| Sailings | | | | Change |
|---------------|--------|--------|--------|---------------|
| | Nov 21 | Dec 21 | Jan 22 | Jan 22/Dec 21 |
| OPEC | 21.59 | 23.29 | 22.50 | -0.79 |
| Middle East | 16.55 | 17.38 | 17.63 | 0.25 |
| Arrivals | | | | |
| North America | 9.07 | 8.93 | 8.82 | -0.11 |
| Europe | 12.78 | 12.77 | 12.10 | -0.67 |
| Far East | 14.98 | 14.76 | 15.06 | 0.30 |
| West Asia | 8.11 | 8.94 | 8.44 | -0.50 |

Sources: Oil Movements and OPEC.

Dirty tanker freight rates

Very large crude carriers (VLCCs)

VLCC spot rates continued to languish in January, starting the year 3% lower than in the same month of 2021. M-o-m, VLCC spot freight rates were 14% lower on average, with rates across all selected routes moving lower.

Rates on the **Middle East-to-East** route were marginally higher y-o-y, averaging WS36 points. M-o-m, rates were 10% lower, pressured by ample availability. After remaining flat over the previous months, rates on the **Middle East-to-West** route fell by 25% m-o-m to average WS18 points, impacted by softness on the Middle East-to-East rates. This represented a y-o-y decline of 22%.

West Africa-to-East spot rates were 3% higher y-o-y, averaging WS37 in January. Compared with the previous month, rates on the route were 10% lower, with flows to China expected to be somewhat muted in 1Q22.

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

| VLCC | Size | | | | Change |
|------------------|-----------|--------|--------|--------|---------------|
| | 1,000 DWT | Nov 21 | Dec 21 | Jan 22 | Jan 22/Dec 21 |
| Middle East/East | 230-280 | 43 | 40 | 36 | -4 |
| Middle East/West | 270-285 | 24 | 24 | 18 | -6 |
| West Africa/East | 260 | 45 | 41 | 37 | -4 |

Sources: Argus and OPEC.

Suezmax

Suezmax rates came off better performance seen the month before, declining 16% m-o-m in January, although with some improvements seen towards the end of the month amid increased bunker prices. Y-o-y, however, rates were 24% higher.

Rates on the **West Africa-to-US Gulf Coast (USGC)** route increased by 23% in January, compared with the same month last year, averaging WS53. Compared with the previous month, rates were 15% lower.

Spot freight rates on the **USGC-to-Europe** route started the year 24% higher than in the same month last year, averaging WS51 points. M-o-m, rates were 18% lower.

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

| Suezmax | Size | | | | Change |
|---------------------------|-----------|--------|--------|--------|---------------|
| | 1,000 DWT | Nov 21 | Dec 21 | Jan 22 | Jan 22/Dec 21 |
| West Africa/US Gulf Coast | 130-135 | 61 | 62 | 53 | -9 |
| US Gulf Coast/ Europe | 150 | 56 | 62 | 51 | -11 |

Sources: Argus and OPEC.

Aframax

Aframax rates also managed to start the year higher than in the same month last year. Spot Aframax rates were 33% higher y-o-y. Compared with December 2021, rates declined 16%.

Rates on the **Indonesia-to-East** route were 64% higher in January compared to the same month last year, averaging WS95. M-o-m, rates on the route declined by 8% amid growing availability and reduced fixtures.

Med routes fell further in January, dropping by around 11% m-o-m, with the **Cross-Med** route averaging WS94 and the **Mediterranean-to-NWE** route averaging WS83. Compared with the same month of the previous year, rates on both routes were around 31% higher.

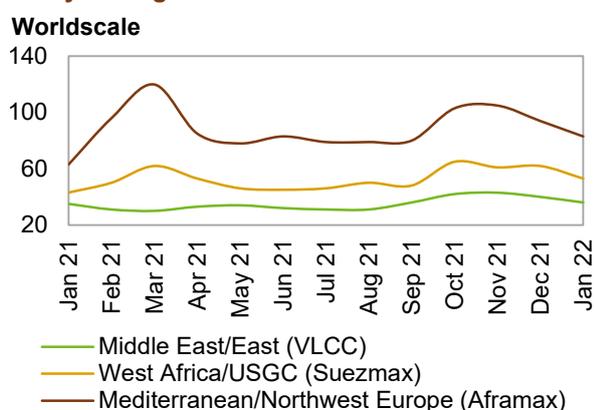
Table 7 - 5: Dirty Aframax spot tanker freight rates, WS

| Aframax | Size 1,000 DWT | Nov 21 | Dec 21 | Jan 22 | Change Jan 22/Dec 21 |
|--------------------------------|-------------------|--------|--------|--------|-------------------------|
| Indonesia/East | 80-85 | 105 | 103 | 95 | -8 |
| Caribbean/US East Coast | 80-85 | 124 | 134 | 97 | -37 |
| Mediterranean/Mediterranean | 80-85 | 117 | 105 | 94 | -11 |
| Mediterranean/Northwest Europe | 80-85 | 105 | 94 | 83 | -11 |

Sources: Argus and OPEC.

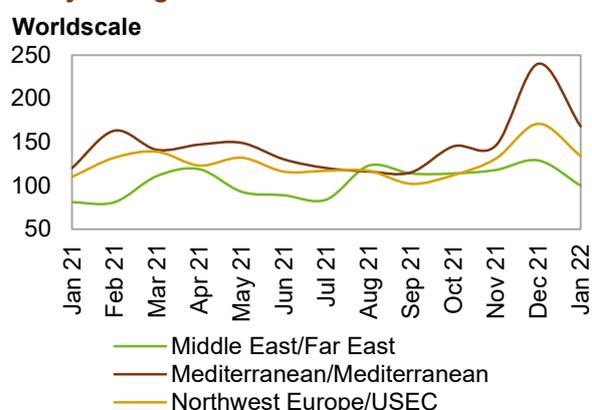
Spot rates on the **Caribbean-to-US East Coast (USEC)** route erased the previous month's gain, declining by 28% m-o-m to average WS97. Y-o-y, rates were 13% higher.

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

Average **clean spot freight rates** started the year with a y-o-y improvement, up 21% from the levels seen in the same month last year. Gains were driven primarily by the strong performance West of Suez, where rates were 30% higher, while East of Suez rates were up by 4% y-o-y. M-o-m, rates fell from a strong showing in December.

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

| East of Suez | Size 1,000 DWT | Nov 21 | Dec 21 | Jan 22 | Change Jan 22/Dec 21 |
|--------------------------------|-------------------|--------|--------|--------|-------------------------|
| Middle East/East | 30-35 | 118 | 129 | 100 | -29 |
| Singapore/East | 30-35 | 138 | 139 | 129 | -10 |
| West of Suez | | | | | |
| Northwest Europe/US East Coast | 33-37 | 131 | 171 | 134 | -37 |
| Mediterranean/Mediterranean | 30-35 | 146 | 240 | 168 | -72 |
| Mediterranean/Northwest Europe | 30-35 | 156 | 250 | 177 | -73 |

Sources: Argus and OPEC.

In the East of Suez, rates on the **Middle East-to-East** route averaged WS100, representing a y-o-y increase of 23%, while falling 22% m-o-m. Freight rates on the **Singapore-to-East** route experience the sole y-o-y decline on selected routes, down 8% to average WS129. This was a fall of 7% compared with December 2021.

In the West of Suez market, rates on the **Northwest Europe (NWE)-to-USEC** route rose 22% y-o-y to average WS134 points. They were 22% lower than the relatively good performance seen the month before.

Rates in the **Cross-Med** and **Med-to-NWE** outperformed the same month last year by 40% and 28%, respectively, to average WS168 and WS177 points. Compared with the previous month, rates were around 30% lower on both routes.

Crude and Refined Products Trade

Preliminary data shows US crude imports rose 3% m-o-m in January to average 6.5 mb/d, the highest level seen since June 2021. US crude exports fell to their lowest since December 2018, averaging 2.4 mb/d in January. This figure could be revised higher once official monthly data is released. Both product imports and exports fell to their lowest since May 2020, the month hit hardest by the pandemic.

The latest data for China shows the country's crude imports continued to recover from lows seen in October to reach a nine-month high of 10.9 mb/d in December. Product exports contracted 24% m-o-m in December to their lowest point since Jan 2017, amid government directives to limit the outflow of clean products. For the year 2021, product imports rose 8% to average 1.43 mb/d, exceeding pre-COVID levels of 1.39 mb/d in 2019. Product exports were sharply higher in 2021, averaging 1.3 mb/d, but still below pre-COVID levels of 1.5 mb/d in 2019.

Meanwhile, India's crude imports averaged 4.6 mb/d in December, the highest for the year, as refiners looked toward higher runs in 1Q22. Product exports were the highest since April 2020, with increases across all major products, except jet fuel, which still remained at the high levels seen the previous month. For the year 2021, India's crude imports increased 5% or 0.2 mb/d over the previous year to average 4.2 mb/d, remaining below pre-COVID levels in 2019 of 4.5 mb/d.

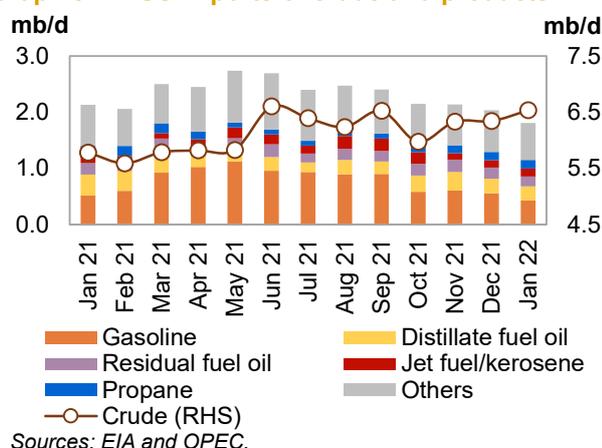
Japan's crude imports have seen a 26% increase over the last two months to average 3.0 mb/d, the highest point since December 2019, amid higher refinery runs to meet winter heating demand as well as increased use of crude for direct burning. For the year 2021, crude imports averaged 2.5 mb/d, higher than the previous year and still well below pre-COVID levels of 3.0 mb/d in 2019. For the year 2021, product imports averaged 1.0 mb/d, representing a 10% increase over the previous year and exceeding pre-COVID levels.

US

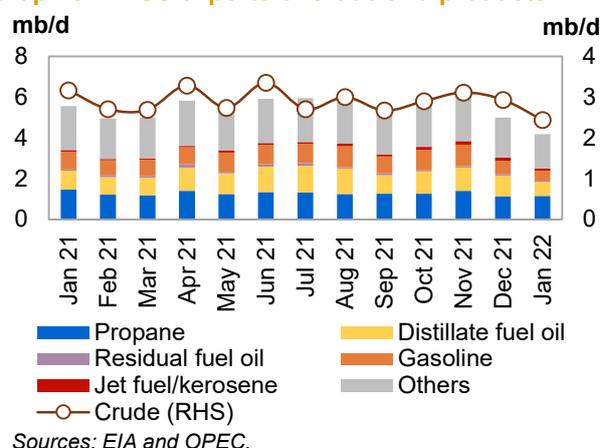
Preliminary data shows **US crude imports** rose 3% m-o-m in **January** to average 6.5 mb/d, the highest point since June 2021. Compared with the same month of the previous year, crude imports were around 0.8 mb/d, or 13%, higher.

US crude exports fell in January to their lowest point since December 2018, down 17%, or 0.5 mb/d, to average 2.4 mb/d. Exports declined by 0.7 mb/d, or almost 23%, compared with the same month of the previous year.

Graph 8 - 1: US imports of crude and products



Graph 8 - 2: US exports of crude and products



The latest available monthly data for **US crude imports by source** shows flows from Canada increased by 311 tb/d in November to remain in the top spot, with a share of 62%. Saudi Arabia moved up to second place, following an increase of 156 tb/d to hold a share of 8%, just edging out Mexico, which held an 8% share as well, with marginally lower volumes. **US crude exports by destination** showed a pickup in flows to Asia, with volumes heading to South Korea doubling to average 420 tb/d for a 13% share as top destination. Exports to China increased to 370 tb/d for a 12% share, while flows to India edged up to average 350 tb/d for an 11% share.

Based on weekly data, **US net crude imports** averaged 4.1 mb/d in **January**, compared with 3.4 mb/d the month before and 2.6 mb/d in the same month of the previous year.

On the **products** side, **imports** fell for the fifth month in a row to average 1.8 mb/d, the lowest point since May 2020, the month hardest hit by the pandemic. This represents a m-o-m decline of 11%, or 0.2 mb/d. Compared with the start of last year, product imports were 15%, or 0.3 mb/d, higher.

Product exports plunged 16% m-o-m to average 4.2 mb/d, the lowest point since May 2020. Compared with January 2021, product exports declined by 1.4 mb/d, or 25%.

As a result, preliminary data shows **US net product exports** averaged just under 2.3 mb/d in January, compared with just under 3.0 mb/d in the previous month and 3.4 mb/d in the same month of the previous year.

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

| US | Nov 21 | Dec 21 | Jan 22 | Change Jan 22/Dec 21 |
|---------------------------------|--------------|-------------|-------------|-------------------------|
| Crude oil | 3.22 | 3.41 | 4.10 | 0.69 |
| Total products | -3.93 | -2.96 | -2.37 | 0.58 |
| Total crude and products | -0.71 | 0.46 | 1.73 | 1.27 |

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

Sources: EIA and OPEC.

Preliminary data indicates that **US net crude and product imports** averaged 1.7 mb/d in January. This compares with net imports of 0.5 mb/d the month before and net exports of almost 0.8 mb/d in January 2021.

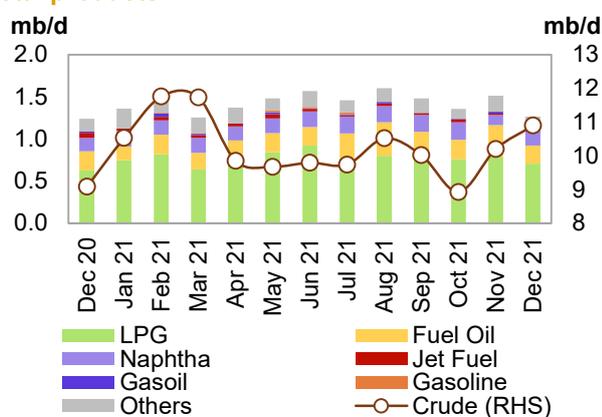
Looking ahead, US crude exports are expected to recover from surprisingly low levels in recent weekly data. Product exports should also pick up as lockdown concerns soften in key destinations.

China

China's **crude imports** continued to recover from a low seen in October to reach a nine-month high of 10.9 mb/d in **December**, as independent refiners received a late batch of import quotas and state-owned refiners sought to replenish inventories and ensure a well-supplied domestic product market. M-o-m, crude imports were around 0.7 mb/d, or about 7%, higher. Y-o-y, crude imports were 1.8 mb/d, or 20%, higher than the relatively low levels seen in the same month of 2020.

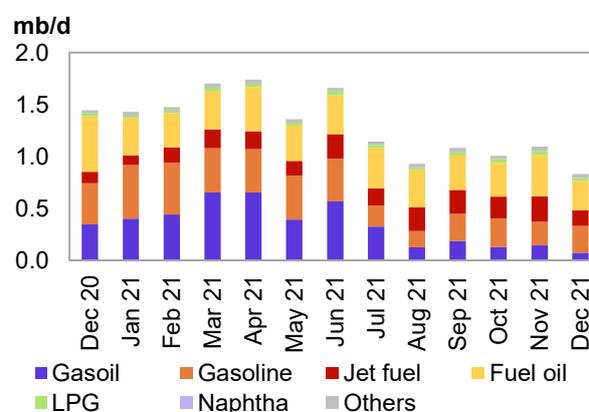
In terms of **crude imports by source**, Russia claimed the top position in December, with a share of close to 16%. Saudi Arabia was second with a share of 14% and Iraq third with almost 11%. China increased buying from Angola, Malaysia, Colombia, Norway and the US in December.

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.

Product imports declined by more than 16%, or 0.2 mb/d, to hit a 9-month low of 1.3 mb/d, as sharp declines in LPG and fuel oil offset gains in naphtha and jet fuel. The drop in fuel oil followed heavy buying by smaller independents, which use the product as a feedstock. Compared with the same month of the previous year, product imports were 2% higher.

Crude and Refined Products Trade

Product exports contracted 24%, or 0.3 mb/d, m-o-m in December to average 0.8 mb/d, the lowest point since January 2017. Declines were seen in most major products, with gasoil sharply lower amid government directives to limit outflows. Product outflows were 0.6 mb/d, or 42%, lower y-o-y.

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

| China | Oct 21 | Nov 21 | Dec 21 | Change Dec 21/Nov 21 |
|---------------------------------|-------------|--------------|--------------|-------------------------|
| Crude oil | 8.90 | 10.02 | 10.77 | 0.75 |
| Total products | 0.35 | 0.42 | 0.43 | 0.01 |
| Total crude and products | 9.25 | 10.43 | 11.20 | 0.77 |

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

Sources: China, Oil and Gas Petrochemicals and OPEC.

As a result, China's **net product importers** averaged 431 tb/d in December, compared with net imports of 416 tb/d the month before and net product exports of 208 tb/d in the same month of the previous year.

For **the year 2021**, product imports rose 8% or 0.1 mb/d compared the year before, averaging 1.43 mb/d. This even exceeded pre-COVID levels of 1.39 mb/d in 2019. The gains over the previous year were driven by primarily by LPG and to a lesser degree fuel oil, which offset declines in jet fuel and other major categories. Product exports also increased in 2021, averaging 1.3 mb/d, representing a gain of 0.5 mb/d or 63%. However, outflows remained below pre-COVID levels of 1.5 mb/d, although this is more attributable to government efforts to limit excess product exports. As a result, China returned to being a net product importer with 0.1 mb/d, after two years as a net exporter with net outflows of 0.2 mb/d in 2020 and 0.4 mb/d in 2019.

Looking ahead, crude imports are expected remain around current levels as independents cautiously utilize 2022 import quotas and inventories are replenished, but a high level of uncertainty around crude needs in February and refinery constraints will potentially weigh on inflows. Product exports of clean fuels are expected to remain muted due to limited export quotas.

India

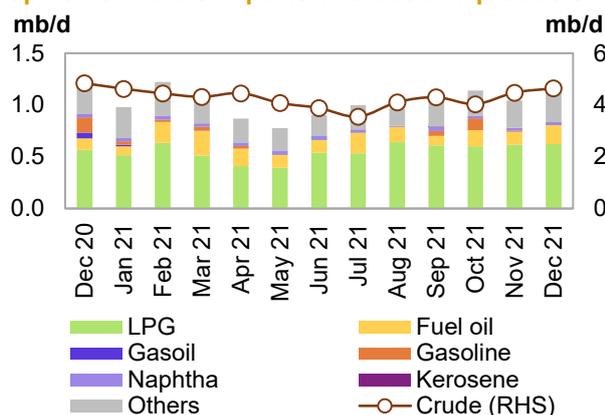
India's **crude imports** averaged 4.6 mb/d in **December**, the highest for the year, as refiners looked toward higher runs in 1Q22. Compared with the previous month, crude imports increased by about 0.2 mb/d, or about 4% and were up about the same amount y-o-y. For **the year 2021**, India's crude imports increased 5% or 0.2 mb/d over the previous year to average 4.2 mb/d. This was still below pre-COVID levels in 2019 of 4.5 mb/d.

In terms of **crude imports by source**, the latest data for November show Iraq continuing to hold the top position, with a share of 30%. Saudi Arabia was second with around 22%, followed by the UAE with around 9%. Nigeria was fourth with about 7%. Inflows from Mexico were sharply higher, while US imports dropped off.

Regarding **products, imports** rose m-o-m, averaging 1.1 mb/d, amid stronger fuel oil inflows. This represents an increase of about 6%, m-o-m. Compared with the same month in 2020, inflows were about 8% lower.

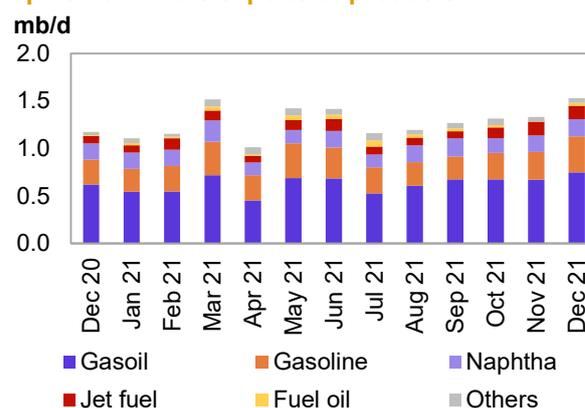
Product exports averaged 1.5 mb/d in December, the highest amount since April 2020, with increases across all major products, except jet fuel, which remained at the high levels seen the previous month. M-o-m, product exports were 0.2 mb/d, or 15%, higher. Compared with December 2021, product outflows were 0.4 mb/d, or 30%, higher.

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.

As a result, **net product exports** averaged 418 tb/d in December, compared with 284 tb/d the month before and net imports of 35 tb/d in the same month of the previous year.

For **the year 2021**, product imports declined by 3% compared to the previous year to average 1.0 mb/d. This was still 5% above 2019 imports which averaged just under 1.0 mb/d. The decline in 2021 was driven by gasoil and to a lesser extent gasoline and naphtha, which offset higher LPG inflows. Meanwhile, product exports averaged 1.3 mb/d in 2021, representing a gain of 6% over the previous year. However, product exports were still below the 1.4 mb/d recorded in 2019. All major products contributed to the increase flows.

Looking ahead, crude imports are expected to remain buoyant in January, as the economy gains momentum and refiners boost runs. Product exports are likely to be supported by reduced product flows out of China, providing an opportunity for Indian refiners to fill the gap.

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

| India | Oct 21 | Nov 21 | Dec 21 | Change Dec 21/Nov 21 |
|---------------------------------|-------------|-------------|-------------|-------------------------|
| Crude oil | 4.03 | 4.48 | 4.64 | 0.16 |
| Total products | -0.17 | -0.28 | -0.42 | -0.13 |
| Total crude and products | 3.86 | 4.19 | 4.22 | 0.03 |

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

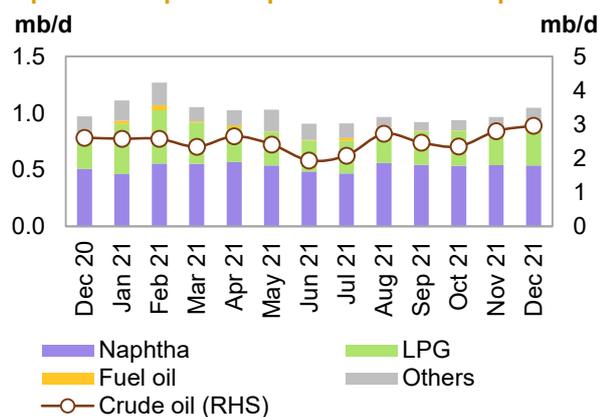
India data table does not include information for crude import and product export by Reliance Industries.

Sources: PPAC and OPEC.

Japan

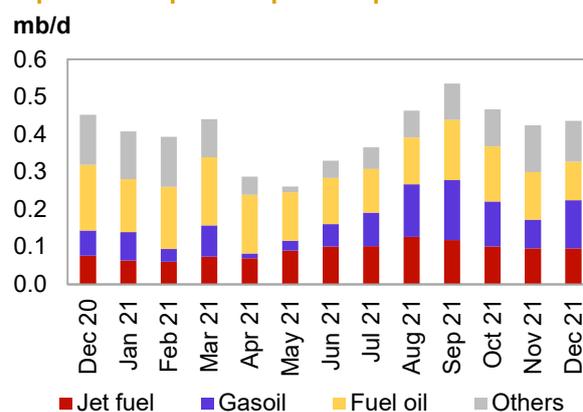
Japan's crude imports have seen a 26% increase over the last two months to average 3.0 mb/d in **December**, the highest amount since December 2019, amid higher refinery runs to meet winter heating demand. Crude imports were 163 tb/d, or around 6%, higher than in the previous month and 356 tb/d, or about 14%, higher y-o-y. For the **year 2021**, crude imports averaged 2.5 mb/d, a slight 1% increase over the previous year and still well below pre-COVID levels of 3.0 mb/d in 2019.

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.

In terms of share of **crude imports by source**, Saudi Arabia remained in the top spot with a share of over 43%. The UAE was second, with a share of just under 37%, followed by Kuwait with around 7%.

Total product imports increased m-o-m, averaging 1.1 mb/d, as kerosene, fuel oil and LPG led gains. Compared with the previous month, product imports were 81 tb/d, or around 8%, higher. Y-o-y, product inflows rose 75 tb/d, or 8%.

Total product exports edged slightly higher, averaging 436 tb/d in December, amid a sharp jump in gasoil outflows as fuel oil declined and jet fuel was flat. Product outflows were 12 tb/d, or around 3%, higher compared with the previous month, but dropped 16 tb/d, or 4%, compared with the same month of the previous year.

Crude and Refined Products Trade

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

| Japan | Oct 21 | Nov 21 | Dec 21 | Change Dec 21/Nov 21 |
|---------------------------------|-------------|-------------|-------------|-------------------------|
| Crude oil | 2.35 | 2.81 | 2.97 | 0.16 |
| Total products | 0.47 | 0.54 | 0.61 | 0.07 |
| Total crude and products | 2.82 | 3.35 | 3.58 | 0.23 |

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

Sources: METI and OPEC.

As a consequence, Japan's **net product imports** averaged 601 tb/d in December, down from 541 tb/d the month before and 519 tb/d in December 2020.

For the **year 2021**, product imports averaged 1.0 mb/d, representing an increase 93 tb/d or 10% over the previous year and exceeding pre-COVID levels. Gains were seen across all major products. On the export side, product inflows rose 4% in 2021, although remained below 2019 levels. Gains were seen in all major products except fuel oil, which declined 9%.

Looking ahead, although winter has been mild so far, high LNG costs have supported crude imports to produce heating fuels and for direct burning. Product imports could remain strong, as heating demand is expected to outpace the domestic production of heating fuels.

OECD Europe

The latest data for **OECD Europe** show **crude imports** from outside the region surged to a 21-month high in **October**, averaging 9.3 mb/d in preparation for the winter season. Imports increased by 0.6 mb/d, or 7%, m-o-m and surged by 1.5 mb/d, or 20%, compared with the same month in 2020.

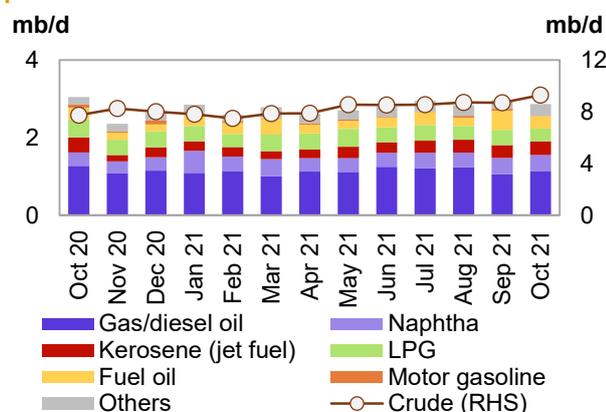
In terms of **import sources** from outside the region, Russia retained the top spot in October with 2.9 mb/d, followed by Iraq, which supplied 1.1 mb/d, and then the US with 1.0 mb/d. Stronger flows were also seen from Nigeria and Algeria.

Crude exports to destinations outside OECD Europe recovered in October, averaging 0.6 mb/d to mark a seven-month high. This represents a gain of 199 tb/d, or around 55%. Compared with the same period of the previous year, crude exports were 80 tb/d, or 17%, higher.

In terms of **destination**, China remained the top buyer of OECD Europe crude exports outside the region, purchasing 359 tb/d in October. South Korea was second with 178 tb/d, followed by Canada with 21 tb/d.

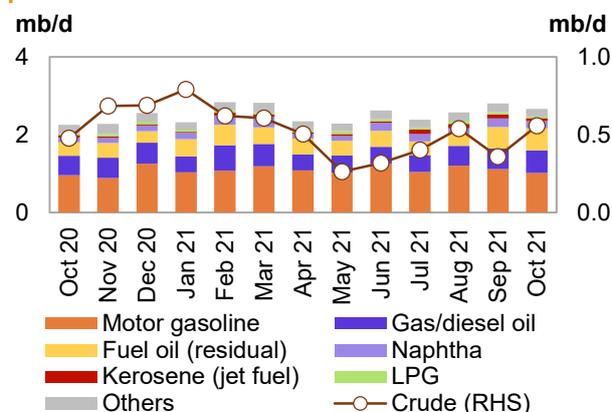
Net crude imports averaged 8.7 mb/d in October, for a gain of 0.4 mb/d, or 5%, from the month before and 1.4 mb/d, or 20%, compared with the same month of 2020.

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.

On the **product** side, **imports** slipped in October from an upwardly revised September figure, averaging 2.9 mb/d, as a sharp decline in fuel oil offset gains in diesel and jet fuel. LPG and gasoline were also lower. Product imports declined by 0.1 mb/d or 3% m-o-m and fell by 0.2 mb/d, or 6%, compared with October 2020 levels.

Meanwhile, **product exports** declined by 0.1 mb/d or 5% m-o-m to average 2.7 mb/d in October, with losses across most major products, except diesel and fuel oil. However, outflows were 0.4 mb/d, or 18%, lower than in the same month of 2020.

Net product imports averaged 201 tb/d in October, compared with 165 tb/d the previous month and 788 tb/d in October 2020.

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

| OECD Europe | Aug 21 | Sep 21 | Oct 21 | Change Oct 21/Sep 21 |
|---------------------------------|-------------|-------------|-------------|-------------------------|
| Crude oil | 8.18 | 8.34 | 8.72 | 0.38 |
| Total products | 0.25 | 0.16 | 0.20 | 0.04 |
| Total crude and products | 8.43 | 8.50 | 8.92 | 0.42 |

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

Sources: IEA and OPEC.

Combined, **net crude and product imports** averaged 8.9 mb/d in October, compared with 8.5 mb/d the previous month, and 8.0 mb/d in October 2020.

Looking ahead, tanker tracking data shows crude imports staying strong through November, before easing in December amid lockdown measures and increased regional supply. Crude exports were lower y-o-y in 4Q21, with reduced Norwegian flows to Asia.

Eurasia

Total crude oil exports from Russia and Central Asia increased in **December**, averaging 6.7 mb/d. M-o-m, crude exports from the region rose 0.3 mb/d, or over 5%. Compared with the same month of the previous year, total crude exports from the region were about 0.7 mb/d, or 12%, higher.

Crude exports through the **Transneft system** saw mixed moments in December. On the whole, outflows rose by 61 tb/d, or about 2%, to average 3.8 mb/d. Compared with the same month the previous year, exports were 0.5 mb/d, or 14%, higher.

Within the system, total shipments from the **Black Sea** increased by 37 tb/d m-o-m, or 11%, to average 373 tb/d. **Baltic Sea** exports declined by 21 tb/d m-o-m, or about 2%, to average 1.3 mb/d. This was the result of shipments from Primorsk falling by 143 tb/d, or 17%, to 711 tb/d, while outflows from Ust-Luga rose 122 tb/d, or about 26%, m-o-m to average 598 tb/d. Meanwhile, shipments via the **Druzhba** pipeline edged up marginally higher m-o-m to average 735 tb/d. **Kozmino** shipments increased 28 tb/d, or around 4%, m-o-m, to average 778 tb/d. Exports to China via the **ESPO pipeline** increased 14 tb/d m-o-m to average 633 tb/d in December.

In the **Lukoil system**, exports via the Barents Sea edged down 3 tb/d, or around 3%, m-o-m to average 100 tb/d in December, while those from the Baltic Sea remained broadly unchanged.

On other routes, **Russia's Far East** exports slipped by around 1% m-o-m to average 325 tb/d in December. This was 17% lower compared with the same month of the previous year.

Central Asian exports via the Lukoil system averaged around 206 tb/d in December, representing a drop of about 7% compared with the month before, but a gain of 1% y-o-y.

Black Sea total exports improved further in December, with a gain of 202 tb/d, or 14%, m-o-m and a 306 tb/d, or 23%, increase over the same month of the previous year. Outflows from the Novorossiysk port terminal (CPC) rose by 205 tb/d, while exports from Supsa slipped 3%. Exports via the **Baku-Tbilisi-Ceyhan (BTC) pipeline** increased by 73 tb/d, or almost 15%, to 566 tb/d, representing an increase of about 4% y-o-y.

Total product exports from Russia and Central Asia declined by 5% m-o-m to average 2.7 mb/d in December. Losses were seen across the board, except for VGO. Fuel oil saw the biggest decline, down 11%. Y-o-y, total product exports declined by 13% in December, similar to losses in all major categories, except VGO.

Commercial Stock Movements

Preliminary December data sees total OECD commercial oil stocks down m-o-m by 31.2 mb. At 2,725 mb, they were 311 mb less than the same time one year ago, 210 mb lower than the latest five-year average (2016-2020) and 202 mb below the 2015-2019 average. Within the components, crude and products stocks fell m-o-m by 18.3 mb and 12.9 mb, respectively.

At 1,330 mb, OECD crude stocks were 99 mb less than the latest five-year average and 100 mb below the 2015-2019 average. OECD product stocks stood at 1,395 mb, representing a deficit of 111 mb compared with the latest five-year average and 102 mb below the 2015-2019 average.

In terms of days of forward cover, OECD commercial stocks rose m-o-m in December by 0.1 days to stand at 61.1 days. This is 10.6 days below December 2020 levels, 2.9 days less than the latest five-year average and 1.3 days lower than the 2015-2019 average.

Preliminary data for January showed that total US commercial oil stocks fell m-o-m by 15.8 mb to stand at 1,179 mb. This is 152.2 mb, or 11.4%, lower than the same month in 2021 and 113.9 mb, or 8.8%, below the latest five-year average. Crude and product stocks fell m-o-m by 2.7 mb and 13.1 mb, respectively.

OECD

Preliminary December data sees **total OECD commercial oil stocks** down m-o-m by 31.2 mb. At 2,725 mb, they were 311 mb less than the same time one year ago, 210 mb lower than the latest five-year average and 202 mb below the 2015-2019 average.

Within the components, crude and product stocks fell m-o-m by 18.3 mb and 12.9 mb, respectively. Total commercial oil stocks in December declined in all OECD regions.

OECD **commercial crude stocks** stood at 1,330 mb in December. This is 147 mb lower than the same time a year ago and 99 mb below the latest five-year average. Compared with the previous month, OECD Americas saw a stock draw of 16.1 mb, OECD Europe fell by 3.8 mb, and OECD Asia Pacific had a stock build of 1.6 mb.

Total product inventories stood at 1,395 mb in December. This is 164 mb less than the same time a year ago, and 111 mb lower than the latest five-year average. Product stocks in OECD Asia Pacific, OECD Americas and OECD Europe fell m-o-m by 3.4 mb, 2.8 mb and 6.7 mb, respectively.

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

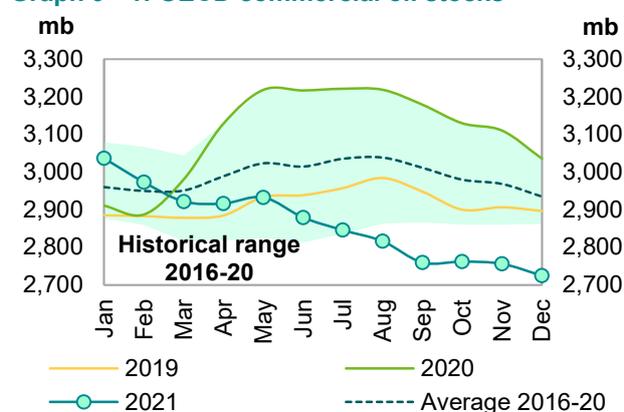
| OECD stocks | Dec 20 | Oct 21 | Nov 21 | Dec 21 | Change Dec 21/Nov 21 |
|------------------------------|--------------|--------------|--------------|--------------|-------------------------|
| Crude oil | 1,477 | 1,337 | 1,348 | 1,330 | -18.3 |
| Products | 1,558 | 1,425 | 1,407 | 1,395 | -12.9 |
| Total | 3,035 | 2,762 | 2,756 | 2,725 | -31.2 |
| Days of forward cover | 71.8 | 60.8 | 61.0 | 61.1 | 0.1 |

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

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

In terms of **days of forward cover**, OECD commercial stocks rose m-o-m by 0.1 days in December to stand at 61.1 days. This is 10.6 days below December 2020 levels, 2.9 days less than the latest five-year average and 1.3 days lower than the 2015-2019 average. All three OECD regions were below the latest five-year average: the Americas by 2.0 days at 62.0 days, Asia Pacific by 2.2 days at 46.7 days and Europe by 5.5 days at 67.6 days.

Graph 9 - 1: OECD commercial oil stocks



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

OECD Americas

OECD Americas total commercial stocks fell by m-o-m in December 18.9 mb to settle at 1,500 mb. This is 112 mb less than the same month in 2020 and 55 mb lower than the latest five-year average.

Commercial crude oil stocks in OECD Americas fell m-o-m by 16.1 mb in December to stand at 761 mb, which is 57 mb lower than in December 2020 and 15 mb less than the latest five-year average. The stock draw came on the back of higher December crude runs.

Total product stocks in OECD Americas fell m-o-m by 2.8 mb in December to stand at 739 mb. This was 55 mb lower than the same month of 2020 and 40 mb below the latest five-year average. Higher total consumption in the region was behind the stock build.

OECD Europe

OECD Europe total commercial stocks fell m-o-m by 10.5 mb in December to settle at 880 mb. This is 164 mb less than the same month in 2020 and 99 mb below the latest five-year average.

OECD Europe's **commercial crude stocks** in December fell m-o-m by 3.8 mb to end the month at 400 mb, which is 48 mb lower than one year ago and 23 mb below the latest five-year average. The fall in crude oil inventories came despite lower m-o-m refinery crude runs in the EU-14, plus the UK and Norway.

OECD Europe's **commercial product stocks** fell m-o-m by 6.7 mb to end December at 480 mb. This is 116 mb lower than a year ago and 76 mb below the latest five-year average.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks fell m-o-m by 1.8 mb in December to stand at 345 mb. This is 35 mb lower than a year ago and 56 mb below the latest five-year average.

OECD Asia Pacific's **crude inventories** rose by 1.6 mb m-o-m to end December at 169 mb, which is 42 mb lower than one year ago and 61 mb below the latest five-year average.

In contrast, OECD Asia Pacific's **total product inventories** fell m-o-m by 3.4 mb to end December at 175 mb. This is 7.0 mb higher than the same time a year ago and 4.7 mb above the latest five-year average.

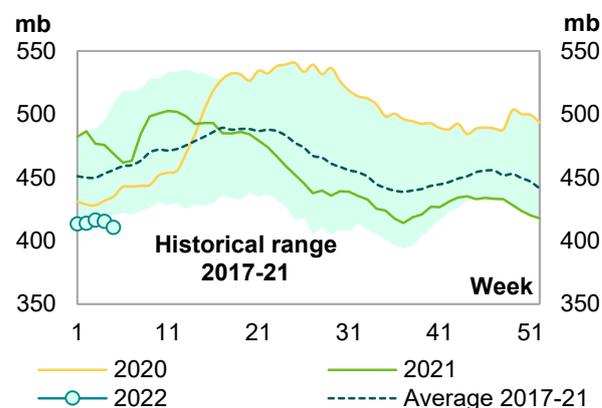
US

Preliminary data for January showed that **total US commercial oil stocks** fell m-o-m by 15.8 mb to stand at 1,179 mb. This is 151.2 mb, or 11.4%, lower than the same month in 2021 and 113.9 mb, or 8.8%, below the latest five-year average. Crude and product stocks fell m-o-m by 2.7 mb and 13.1 mb, respectively.

US commercial crude stocks in January stood at 415.1 mb. This is 60.7 mb, or 12.8%, lower than the same month of the previous year, and 43.4 mb, or 9.5%, below the latest five-year average. The stock draw came on the back of lower crude imports, and despite lower crude runs.

Total product stocks in January stood at 763.8 mb. This is 90.5 mb, or 10.6%, below January 2021 levels, and 70.5 mb, or 8.5%, lower than the latest five-year average. The stock draw was mainly driven by higher overall US consumption, with the exception of gasoline.

Graph 9 - 2: US weekly commercial crude oil inventories



Sources: EIA and OPEC.

Commercial Stock Movements

Gasoline stocks in January, however, rose m-o-m by 17.3 mb to settle at 250.0 mb. This is 5.1 mb, or 2.0%, below the same month in 2021, and 8.6 mb, or 3.3%, lower than the latest five-year average. The monthly stock build came mainly on the back of lower gasoline consumption.

Jet fuel stocks rose m-o-m by 2.3 mb, ending January at 37.3 mb. This is 5.3 mb, or 12.4%, lower than the same month of 2021, and 5.2 mb, or 12.3%, below the latest five-year average.

In contrast, **distillate stocks** fell m-o-m in January by 4.1 mb to stand at 122.7 mb. This is 40.1 mb, or 24.6%, lower than the same month of the previous year, and 28.8 mb, or 19%, below the latest five-year average.

Residual fuel oil stocks also fell m-o-m in January, dropping by 0.8 mb. At 25.1 mb, this was 6.9 mb, or 21.6%, lower than a year earlier, and 7.5 mb, or 23%, below the latest five-year average.

Table 9 - 2: US commercial petroleum stocks, mb

| US stocks | Jan 21 | Nov 21 | Dec 21 | Jan 22 | Change Jan 22/Dec 21 |
|-------------------|---------|---------|---------|---------|-------------------------|
| Crude oil | 475.9 | 434.0 | 417.9 | 415.1 | -2.7 |
| Gasoline | 255.1 | 220.6 | 232.8 | 250.0 | 17.3 |
| Distillate fuel | 162.8 | 131.6 | 126.8 | 122.7 | -4.1 |
| Residual fuel oil | 32.0 | 27.6 | 25.9 | 25.1 | -0.8 |
| Jet fuel | 42.6 | 36.7 | 35.0 | 37.3 | 2.3 |
| Total products | 854.2 | 794.7 | 776.9 | 763.8 | -13.1 |
| Total | 1,330.1 | 1,228.7 | 1,194.8 | 1,178.9 | -15.8 |
| SPR | 638.1 | 601.5 | 593.7 | 588.9 | -4.8 |

Sources: EIA and OPEC.

Japan

In **Japan**, **total commercial oil stocks** in December fell m-o-m by 1.8 mb to settle at 119.5 mb. This is 11.4 mb, or 8.7%, lower than the same month in 2020, and 20.6 mb, or 14.7%, below the latest five-year average. Crude stocks rose by 1.6 mb, while product stocks fell m-o-m by 3.4 mb.

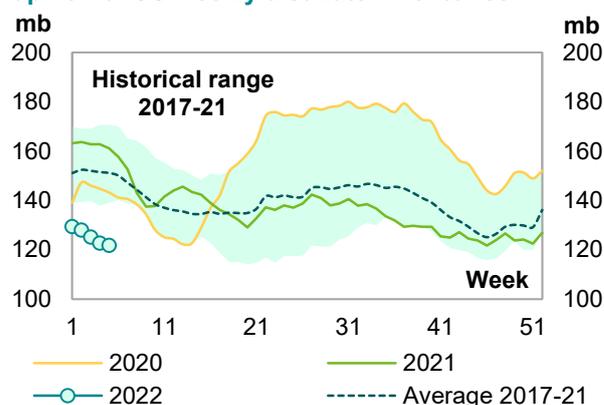
Japanese **commercial crude oil stocks** rose in December to stand at 60.3 mb. This is 6.1 mb, or 9.2%, below the same month of the previous year, and 18.8 mb, or 23.8%, lower than the latest five-year average. The build came on the back of higher imports, which increased by 6% m-o-m.

In contrast, Japan's **total product inventories** fell m-o-m by 3.4 mb to end December at 59.2 mb. This is 5.3 mb, or 8.2%, lower than the same month in 2020, and 1.8 mb, or 2.9%, below the latest five-year average.

Gasoline stocks rose m-o-m by 0.1 mb to stand at 10.5 mb. This was 2.1 mb, or 16.5%, lower than a year earlier, but 0.1 mb, or 0.6%, higher than the latest five-year average. Higher production, which rose by 8.6%, was behind the gasoline stock build.

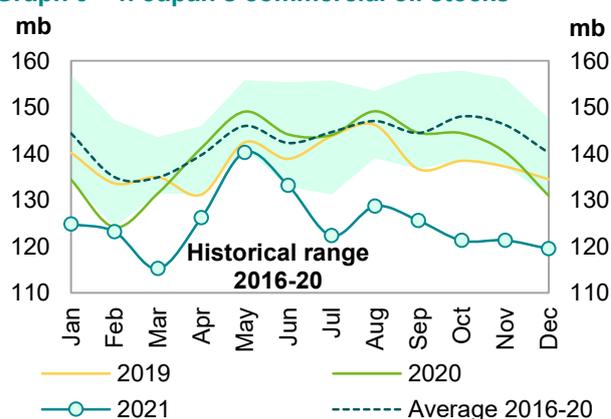
Total residual fuel oil stocks rose m-o-m by 0.7 mb to end December at 12.4 mb. This is 0.7 mb, or 5.6%, higher than in the same month of the previous year, but 0.4 mb, or 3.2%, below the latest five-year average. Within the components, fuel oil A stocks rose by 2.6%, while fuel oil B.C stocks fell by 12.3%.

Graph 9 - 3: US weekly distillate inventories



Sources: EIA and OPEC.

Graph 9 - 4: Japan's commercial oil stocks



Sources: METI and OPEC.

In contrast, **distillate stocks** fell m-o-m by 3.8 mb to end December 28.3 mb. This is 1.5 mb, or 5.1%, lower than the same month in 2020, and 0.3 mb, or 1%, below the latest five-year average. Within the distillate components, **kerosene and gasoil** fell m-o-m by 18.6% and 8.2%, respectively, while **jet fuel stocks** rose by 2.9%.

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

| Japan's stocks | Dec 20 | Oct 21 | Nov 21 | Dec 21 | Change Dec 21/Nov 21 |
|-----------------------|--------------|--------------|--------------|--------------|-------------------------|
| Crude oil | 66.4 | 55.9 | 58.7 | 60.3 | 1.6 |
| Gasoline | 12.6 | 11.7 | 10.5 | 10.5 | 0.1 |
| Naphtha | 10.4 | 9.8 | 8.5 | 8.1 | -0.4 |
| Middle distillates | 29.8 | 31.9 | 32.1 | 28.3 | -3.8 |
| Residual fuel oil | 11.7 | 12.0 | 11.7 | 12.4 | 0.7 |
| Total products | 64.5 | 65.4 | 62.7 | 59.2 | -3.4 |
| Total** | 130.9 | 121.3 | 121.4 | 119.5 | -1.8 |

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 December showed that **total European commercial oil stocks** fell m-o-m by 10.5 mb to stand at 1,018.7 mb. At this level, they were 127.4 mb, or 11.1%, below the same month a year earlier, and 78.0 mb, or 7.1%, lower than the latest five-year average. Crude and product stocks fell m-o-m by 3.8 mb and 6.7 mb, respectively.

European **crude inventories** fell in December to stand at 420.9 mb. This is 61.2 mb, or 12.7% lower than the same month in 2020, and 49.1 mb, or 10.4%, below the latest five-year average. The fall in crude oil inventories came despite lower m-o-m refinery throughputs in the EU-14, plus UK and Norway.

Total European product stocks fell m-o-m to end December at 597.9 mb. This is 66.2 mb, or 10%, lower than the same month of the previous year, and 28.9 mb, or 4.6%, below the latest five-year average.

Gasoline stocks fell m-o-m by 1.1 mb in December to stand at 106.8 mb. At this level, they were 13.4 mb, or 11.2%, lower than the same time a year earlier, and 11.1 mb/d, or 9.4%, less than the latest five-year average.

Distillate stocks fell m-o-m by 5.0 mb in December to stand at 404.4 mb. This is 45.2 mb, or 10.1%, below the same month in 2020, and 12.7 mb, or 3.0%, less than the latest five-year average.

Naphtha stocks fell by 1.0 mb in December, ending the month at 24.4 mb. This is 4.9 mb, or 16.8%, below December 2020 levels, and 3.3 mb, or 11.8%, below the latest five-year average.

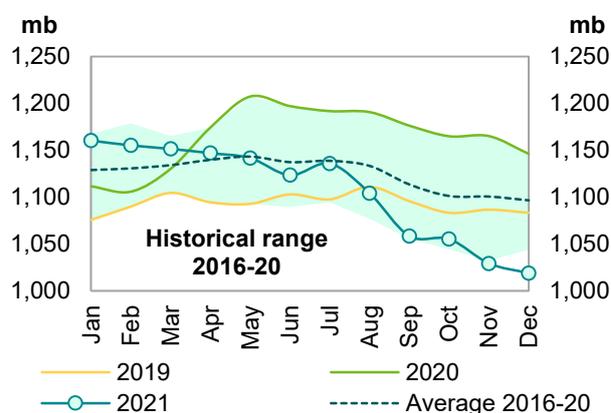
In contrast, **residual fuel stocks** rose m-o-m by 0.3 mb in December to stand at 62.3 mb. This is 2.7 mb, or 4.1%, lower than the same month in 2020, and 1.8 mb, or 2.8%, below the latest five-year average.

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

| EU stocks | Dec 20 | Oct 21 | Nov 21 | Dec 21 | Change Dec 21/Nov 21 |
|-----------------------|----------------|----------------|----------------|----------------|-------------------------|
| Crude oil | 482.0 | 438.8 | 424.6 | 420.9 | -3.8 |
| Gasoline | 120.2 | 108.6 | 107.9 | 106.8 | -1.1 |
| Naphtha | 29.3 | 25.3 | 25.3 | 24.4 | -1.0 |
| Middle distillates | 449.6 | 419.9 | 409.4 | 404.4 | -5.0 |
| Fuel oils | 65.0 | 62.6 | 62.0 | 62.3 | 0.3 |
| Total products | 664.1 | 616.4 | 604.6 | 597.9 | -6.7 |
| Total | 1,146.1 | 1,055.2 | 1,029.2 | 1,018.7 | -10.5 |

Sources: Argus, Euroilstock and OPEC.

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



Sources: Argus, Euroilstock and OPEC.

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

Singapore

In December, **total product stocks in Singapore** fell m-o-m by 0.5 mb to 39.9 mb. This is 11.2 mb, or 21.8%, lower than the same month in 2020.

Light distillate stocks fell m-o-m by 0.1 mb in December to stand at 11.9 mb. This is 2.0 mb, or 14.2%, lower than the same month of the previous year.

Middle distillate stocks also fell m-o-m by 0.1 mb in December to stand at 8.0 mb. This is 7.1 mb, or 47.3%, lower than a year earlier.

Residual fuel oil stocks fell m-o-m by 0.3 mb, ending December at 20.0 mb. This is 2.0 mb, or 9.3%, lower than in December 2020.

ARA

Total product stocks in ARA rose m-o-m in December by 0.7 mb to stand at 37.8 mb, reversing the fall of previous nine consecutive months. This is 13.9 mb, or 26.9%, lower than the same month in 2020.

Gasoline stocks in December rose m-o-m by 1.5 mb to stand at 8.7 mb, which is 1.7 mb, or 16.3%, lower than the same month of the previous year.

Jet oil stocks rose m-o-m by 0.7 mb to end December at 7.1 mb. This is 1.2 mb, or 14.7%, below the level registered one year earlier.

By contrast, **gasoil stocks** fell by 0.3 mb to end December at 13.0 mb. This is 6.3 mb, or 32.8%, lower than the level seen in December 2020.

Fuel oil stocks also fell m-o-m by 0.4 mb in December to stand at 7.5 mb, which is 1.4 mb, or 15.9%, lower than in December 2020.

Fujairah

During the week ending 31 January 2022, **total oil product stocks in Fujairah** rose w-o-w by 2.66 mb to stand at 19.60 mb, according to data from Fed Com and S&P Global Platts. At this level, total oil stocks were 3.68 mb lower than the same time a year ago. All products witnessed a stock build w-o-w.

Light distillate stocks rose by 1.05 mb w-o-w to stand at 6.36 mb in the week to 31 January 2022, which is 0.97 mb lower than the same period a year ago. **Heavy distillate stocks** increased by 1.54 mb to stand at 11.38 mb, which is 0.6 mb higher than the same time last year. **Middle distillate stocks** rose by 0.06 mb to stand at 1.86 mb, which is 3.31 mb lower than a year ago.

Balance of Supply and Demand

Demand for OPEC crude in 2021 was revised up by 0.1 mb/d from the previous MOMR to stand at 27.9 mb/d, which 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 1.1 mb/d lower than demand for OPEC crude in the same period. In 2Q21, OPEC crude production averaged 25.5 mb/d, which is 1.5 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 2.0 mb/d lower than demand for OPEC crude.

For the whole year 2021, OPEC crude production averaged 26.3 mb/d, which is 1.6 mb/d below the demand for OPEC crude.

Demand for OPEC crude in 2022 was revised up by 0.1 mb/d from the previous month to stand at 28.9 mb/d, which is around 1.0 mb/d higher than in 2021.

Balance of supply and demand in 2021

Demand for OPEC crude in 2021 was revised up by 0.1 mb/d from the previous MOMR to stand at 27.9 mb/d, which is around 5.0 mb/d higher than in 2020.

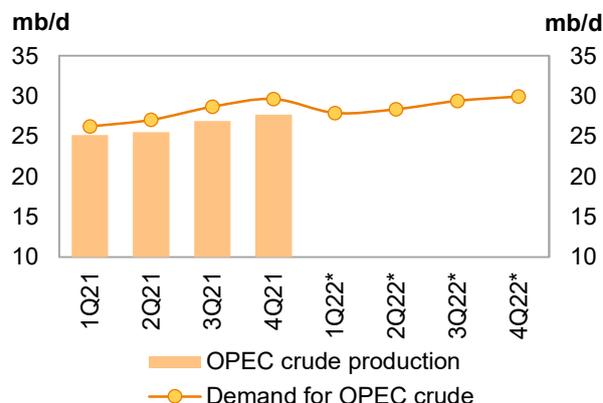
Compared with the previous assessment, 1Q21 and 2Q21 remained unchanged, while 3Q21 was revised up by 0.1 mb/d. At the same time, 4Q21 was revised up by 0.2 mb/d.

When compared with the same quarters in 2020, demand for OPEC crude in 1Q21 and 2Q21 was higher by 3.8 mb/d and 9.6 mb/d, respectively. 3Q21 and 4Q21 are estimated to show y-o-y increases of 3.8 mb/d and 2.5 mb/d, respectively.

According to secondary sources, OPEC crude production averaged 25.2 mb/d in 1Q21, which is 1.1 mb/d lower than demand for OPEC crude in the same period. In 2Q21, OPEC crude production averaged 25.5 mb/d, which is 1.5 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 2.0 mb/d lower than demand for OPEC crude.

For the whole year 2021, OPEC crude production averaged 26.3 mb/d, which is 1.6 mb/d below the demand for OPEC crude.

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



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

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

| | 2020 | 1Q21 | 2Q21 | 3Q21 | 4Q21 | 2021 | Change 2021/20 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| (a) World oil demand | 90.97 | 93.83 | 95.43 | 97.44 | 99.77 | 96.65 | 5.67 |
| Non-OPEC liquids production | 62.97 | 62.49 | 63.26 | 63.60 | 64.96 | 63.58 | 0.61 |
| OPEC NGL and non-conventionals | 5.05 | 5.10 | 5.12 | 5.17 | 5.18 | 5.14 | 0.10 |
| (b) Total non-OPEC liquids production and OPEC NGLs | 68.02 | 67.59 | 68.38 | 68.77 | 70.14 | 68.73 | 0.71 |
| Difference (a-b) | 22.95 | 26.23 | 27.05 | 28.67 | 29.63 | 27.92 | 4.96 |
| OPEC crude oil production | 25.65 | 25.15 | 25.52 | 26.89 | 27.68 | 26.32 | 0.67 |
| Balance | 2.69 | -1.08 | -1.53 | -1.79 | -1.95 | -1.60 | -4.29 |

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

Balance of supply and demand in 2022

Demand for OPEC crude in 2022 was revised up by 0.1 mb/d from the previous month to stand at 28.9 mb/d, which is around 1.0 mb/d higher than in 2021.

Compared with the previous assessment, 1Q22 remained unchanged, while 2Q22, 3Q22 and 4Q22 were revised up by 0.1 mb/d each.

Compared with the same quarters in 2021, demand for OPEC crude in 1Q22 and 2Q22 is forecast to be higher by 1.7 mb/d and 1.3 mb/d, respectively. Meanwhile, 3Q22 and 4Q22 are projected to show increases of 0.7 mb/d and 0.3 mb/d, respectively.

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

| | 2021 | 1Q22 | 2Q22 | 3Q22 | 4Q22 | 2022 | Change 2022/21 |
|--|--------------|--------------|--------------|---------------|---------------|---------------|-------------------|
| (a) World oil demand | 96.65 | 99.13 | 99.75 | 101.32 | 102.92 | 100.80 | 4.15 |
| Non-OPEC liquids production | 63.58 | 65.99 | 66.13 | 66.63 | 67.66 | 66.61 | 3.02 |
| OPEC NGL and non-conventionals | 5.14 | 5.23 | 5.26 | 5.29 | 5.31 | 5.27 | 0.13 |
| (b) Total non-OPEC liquids production and OPEC NGLs | 68.73 | 71.22 | 71.38 | 71.92 | 72.97 | 71.88 | 3.15 |
| Difference (a-b) | 27.92 | 27.91 | 28.37 | 29.40 | 29.94 | 28.92 | 1.00 |

Note: * 2021 = Estimation and 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 | 25.47 | 22.44 | 22.73 | 24.33 | 24.74 | 24.89 | 24.19 | 24.04 | 25.42 | 25.77 | 25.70 | 25.24 |
| of which US | 20.60 | 20.65 | 18.35 | 18.65 | 20.21 | 20.39 | 20.56 | 19.96 | 19.69 | 21.07 | 21.36 | 21.28 | 20.86 |
| Europe | 14.31 | 14.31 | 12.43 | 11.91 | 12.63 | 13.84 | 13.64 | 13.02 | 12.63 | 13.22 | 14.49 | 14.16 | 13.63 |
| Asia Pacific | 8.01 | 7.93 | 7.14 | 7.67 | 7.04 | 7.11 | 7.72 | 7.39 | 7.91 | 7.22 | 7.25 | 7.83 | 7.55 |
| Total OECD | 47.73 | 47.72 | 42.02 | 42.31 | 44.00 | 45.70 | 46.26 | 44.59 | 44.58 | 45.86 | 47.50 | 47.69 | 46.43 |
| China | 13.01 | 13.65 | 13.52 | 13.79 | 14.55 | 14.52 | 15.21 | 14.52 | 14.64 | 15.44 | 15.00 | 15.65 | 15.18 |
| India | 4.93 | 4.99 | 4.51 | 4.94 | 4.50 | 4.59 | 5.12 | 4.79 | 5.48 | 4.82 | 4.97 | 5.44 | 5.18 |
| Other Asia | 8.91 | 9.06 | 8.13 | 8.56 | 8.98 | 8.34 | 8.62 | 8.63 | 9.25 | 9.59 | 8.93 | 8.95 | 9.18 |
| Latin America | 6.53 | 6.59 | 6.01 | 6.25 | 6.16 | 6.46 | 6.35 | 6.30 | 6.49 | 6.33 | 6.61 | 6.51 | 6.48 |
| Middle East | 8.13 | 8.20 | 7.55 | 7.95 | 7.77 | 8.24 | 7.99 | 7.99 | 8.30 | 8.01 | 8.49 | 8.22 | 8.26 |
| Africa | 4.33 | 4.35 | 4.08 | 4.37 | 4.08 | 4.15 | 4.40 | 4.25 | 4.54 | 4.21 | 4.27 | 4.53 | 4.39 |
| Russia | 3.55 | 3.57 | 3.39 | 3.65 | 3.42 | 3.63 | 3.76 | 3.61 | 3.75 | 3.47 | 3.68 | 3.81 | 3.68 |
| Other Eurasia | 1.21 | 1.19 | 1.07 | 1.23 | 1.24 | 1.09 | 1.28 | 1.21 | 1.30 | 1.29 | 1.12 | 1.32 | 1.26 |
| Other Europe | 0.74 | 0.76 | 0.70 | 0.78 | 0.72 | 0.73 | 0.79 | 0.75 | 0.80 | 0.73 | 0.74 | 0.81 | 0.77 |
| Total Non-OECD | 51.34 | 52.38 | 48.96 | 51.52 | 51.43 | 51.74 | 53.52 | 52.06 | 54.55 | 53.90 | 53.82 | 55.23 | 54.37 |
| (a) Total world demand | 99.07 | 100.10 | 90.97 | 93.83 | 95.43 | 97.44 | 99.77 | 96.65 | 99.13 | 99.75 | 101.32 | 102.92 | 100.80 |
| Y-o-y change | 1.40 | 1.03 | -9.12 | -0.71 | 11.82 | 6.00 | 5.51 | 5.67 | 5.30 | 4.32 | 3.87 | 3.14 | 4.15 |
| Non-OPEC liquids production | | | | | | | | | | | | | |
| Americas | 24.03 | 25.81 | 24.70 | 24.10 | 25.17 | 25.20 | 26.21 | 25.17 | 26.14 | 26.11 | 26.48 | 26.86 | 26.40 |
| of which US | 16.66 | 18.47 | 17.61 | 16.63 | 17.93 | 17.85 | 18.61 | 17.76 | 18.48 | 18.68 | 18.83 | 19.14 | 18.79 |
| Europe | 3.84 | 3.71 | 3.90 | 3.96 | 3.52 | 3.81 | 3.81 | 3.77 | 3.87 | 3.75 | 3.81 | 4.13 | 3.89 |
| Asia Pacific | 0.41 | 0.52 | 0.52 | 0.50 | 0.45 | 0.53 | 0.53 | 0.50 | 0.54 | 0.54 | 0.53 | 0.53 | 0.53 |
| Total OECD | 28.28 | 30.04 | 29.12 | 28.56 | 29.13 | 29.54 | 30.55 | 29.45 | 30.55 | 30.39 | 30.82 | 31.53 | 30.82 |
| China | 3.98 | 4.05 | 4.16 | 4.30 | 4.34 | 4.33 | 4.25 | 4.30 | 4.31 | 4.31 | 4.35 | 4.43 | 4.35 |
| India | 0.86 | 0.82 | 0.77 | 0.76 | 0.75 | 0.75 | 0.74 | 0.75 | 0.73 | 0.75 | 0.78 | 0.80 | 0.77 |
| Other Asia | 2.73 | 2.69 | 2.51 | 2.52 | 2.46 | 2.33 | 2.36 | 2.42 | 2.44 | 2.41 | 2.39 | 2.38 | 2.41 |
| Latin America | 5.79 | 6.08 | 6.04 | 5.94 | 5.97 | 6.09 | 5.82 | 5.96 | 6.25 | 6.20 | 6.14 | 6.35 | 6.23 |
| Middle East | 3.19 | 3.19 | 3.19 | 3.22 | 3.23 | 3.24 | 3.27 | 3.24 | 3.34 | 3.34 | 3.36 | 3.36 | 3.35 |
| Africa | 1.49 | 1.51 | 1.41 | 1.37 | 1.35 | 1.32 | 1.32 | 1.34 | 1.29 | 1.27 | 1.25 | 1.22 | 1.25 |
| Russia | 11.52 | 11.61 | 10.59 | 10.47 | 10.74 | 10.81 | 11.16 | 10.80 | 11.49 | 11.83 | 11.88 | 11.88 | 11.77 |
| Other Eurasia | 3.08 | 3.07 | 2.91 | 2.96 | 2.89 | 2.79 | 3.08 | 2.93 | 3.10 | 3.13 | 3.17 | 3.22 | 3.15 |
| 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 | 32.75 | 33.14 | 31.71 | 31.65 | 31.85 | 31.77 | 32.13 | 31.85 | 33.05 | 33.34 | 33.42 | 33.74 | 33.39 |
| Total Non-OPEC production | 61.03 | 63.19 | 60.82 | 60.21 | 60.98 | 61.32 | 62.68 | 61.30 | 63.60 | 63.73 | 64.24 | 65.27 | 64.21 |
| 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 | 63.37 | 65.55 | 62.97 | 62.49 | 63.26 | 63.60 | 64.96 | 63.58 | 65.99 | 66.13 | 66.63 | 67.66 | 66.61 |
| OPEC NGL + non-conventional oils | 5.29 | 5.21 | 5.05 | 5.10 | 5.12 | 5.17 | 5.18 | 5.14 | 5.23 | 5.26 | 5.29 | 5.31 | 5.27 |
| (b) Total non-OPEC liquids production and OPEC NGLs | 68.66 | 70.76 | 68.02 | 67.59 | 68.38 | 68.77 | 70.14 | 68.73 | 71.22 | 71.38 | 71.92 | 72.97 | 71.88 |
| Y-o-y change | 3.05 | 2.10 | -2.74 | -4.56 | 2.18 | 2.20 | 2.96 | 0.71 | 3.63 | 3.00 | 3.15 | 2.83 | 3.15 |
| OPEC crude oil production (secondary sources) | 31.35 | 29.36 | 25.65 | 25.15 | 25.52 | 26.89 | 27.68 | 26.32 | | | | | |
| Total liquids production | 100.01 | 100.13 | 93.67 | 92.75 | 93.90 | 95.66 | 97.82 | 95.05 | | | | | |
| Balance (stock change and miscellaneous) | 0.94 | 0.03 | 2.69 | -1.08 | -1.53 | -1.79 | -1.95 | -1.60 | | | | | |
| OECD closing stock levels, mb | | | | | | | | | | | | | |
| Commercial | 2,873 | 2,896 | 3,035 | 2,921 | 2,879 | 2,759 | 2,725 | 2,725 | | | | | |
| SPR | 1,552 | 1,535 | 1,541 | 1,546 | 1,524 | 1,513 | 1,485 | 1,485 | | | | | |
| Total | 4,425 | 4,432 | 4,577 | 4,467 | 4,402 | 4,272 | 4,209 | 4,209 | | | | | |
| Oil-on-water | 1,058 | 1,033 | 1,148 | 1,138 | 1,131 | 1,169 | 1,201 | 1,201 | | | | | |
| Days of forward consumption in OECD, days | | | | | | | | | | | | | |
| Commercial onland stocks | 60 | 69 | 68 | 66 | 63 | 60 | 61 | 59 | | | | | |
| SPR | 33 | 37 | 35 | 35 | 33 | 33 | 33 | 32 | | | | | |
| Total | 93 | 105 | 103 | 102 | 96 | 92 | 94 | 91 | | | | | |
| Memo items | | | | | | | | | | | | | |
| (a) - (b) | 30.41 | 29.34 | 22.95 | 26.23 | 27.05 | 28.67 | 29.63 | 27.92 | 27.91 | 28.37 | 29.40 | 29.94 | 28.92 |

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 | - | - | - | - | - | 0.04 | 0.05 | 0.02 | - | - | 0.04 | 0.05 | 0.02 |
| of which US | - | - | - | - | - | - | 0.05 | 0.01 | - | - | - | 0.05 | 0.01 |
| Europe | - | - | - | - | - | - | 0.15 | 0.04 | - | - | - | 0.15 | 0.04 |
| Asia Pacific | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total OECD | - | - | - | - | - | 0.03 | 0.20 | 0.06 | - | - | 0.03 | 0.20 | 0.06 |
| China | - | - | - | - | - | - | 0.05 | 0.01 | - | - | - | 0.05 | 0.01 |
| India | - | - | - | - | - | - | -0.20 | -0.05 | - | - | - | -0.20 | -0.05 |
| Other Asia | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Latin America | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Middle East | - | - | - | - | - | - | -0.02 | - | - | - | - | -0.02 | - |
| Africa | - | - | - | - | - | - | -0.03 | -0.01 | - | - | - | -0.03 | -0.01 |
| Russia | - | - | - | - | - | - | 0.02 | 0.01 | - | - | - | 0.02 | 0.01 |
| Other Eurasia | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Other Europe | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total Non-OECD | - | - | - | - | - | - | -0.18 | -0.04 | - | - | - | -0.17 | -0.04 |
| (a) Total world demand | - | - | - | - | - | 0.03 | 0.02 | 0.01 | - | - | 0.03 | 0.02 | 0.01 |
| Y-o-y change | - | - | - | - | - | 0.04 | 0.02 | 0.02 | - | - | - | - | - |
| Non-OPEC liquids production | | | | | | | | | | | | | |
| Americas | - | - | - | - | - | 0.01 | 0.01 | - | 0.06 | -0.02 | -0.02 | -0.02 | - |
| of which US | - | - | - | - | - | 0.01 | 0.08 | 0.02 | 0.05 | - | - | - | 0.01 |
| Europe | - | - | - | - | - | 0.01 | -0.05 | -0.01 | 0.01 | - | - | - | - |
| Asia Pacific | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total OECD | - | - | - | - | - | 0.01 | -0.04 | -0.01 | 0.07 | -0.02 | -0.02 | -0.02 | - |
| China | - | - | - | - | - | - | -0.07 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| India | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Other Asia | - | - | - | - | - | -0.01 | - | - | - | - | - | - | - |
| Latin America | - | - | - | -0.02 | -0.02 | -0.02 | -0.08 | -0.04 | -0.05 | -0.04 | -0.04 | -0.04 | -0.04 |
| Middle East | - | - | - | - | - | - | -0.01 | - | - | - | - | - | - |
| Africa | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Russia | - | - | - | - | - | - | -0.01 | - | -0.02 | - | - | - | - |
| Other Eurasia | - | - | - | - | - | - | 0.02 | 0.01 | - | 0.01 | 0.01 | - | 0.01 |
| Other Europe | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total Non-OECD | - | - | - | -0.02 | -0.02 | -0.03 | -0.16 | -0.06 | -0.09 | -0.05 | -0.05 | -0.06 | -0.06 |
| Total Non-OPEC production | - | - | - | -0.02 | -0.02 | -0.02 | -0.19 | -0.06 | -0.02 | -0.07 | -0.07 | -0.08 | -0.06 |
| Processing gains | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total Non-OPEC liquids production | - | - | - | -0.02 | -0.02 | -0.02 | -0.19 | -0.06 | -0.02 | -0.07 | -0.07 | -0.08 | -0.06 |
| OPEC NGL + non-conventional oils | - | - | - | - | - | - | - | - | - | - | - | - | - |
| (b) Total non-OPEC liquids production and OPEC NGLs | - | - | - | -0.02 | -0.02 | -0.02 | -0.19 | -0.06 | -0.02 | -0.07 | -0.07 | -0.08 | -0.06 |
| Y-o-y change | - | - | - | -0.02 | -0.02 | -0.02 | -0.19 | -0.06 | - | -0.05 | -0.05 | 0.12 | - |
| OPEC crude oil production (secondary sources) | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - |
| Total liquids production | - | - | - | -0.02 | -0.02 | -0.02 | -0.18 | -0.06 | - | - | - | - | - |
| Balance (stock change and miscellaneous) | - | - | - | -0.02 | -0.02 | -0.05 | -0.20 | -0.07 | - | - | - | - | - |
| mb | | | | | | | | | | | | | |
| Commercial | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| SPR | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Oil-on-water | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Days of forward consumption in OECD, days | | | | | | | | | | | | | |
| Commercial onland stocks | - | - | - | - | - | - | - | - | - | - | - | - | - |
| SPR | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Memo items | | | | | | | | | | | | | |
| (a) - (b) | - | - | - | 0.02 | 0.02 | 0.05 | 0.21 | 0.08 | 0.02 | 0.07 | 0.10 | 0.10 | 0.07 |

Note: * This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the January 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 | 4Q19 | 1Q20 | 2Q20 | 3Q20 | 4Q20 | 1Q21 | 2Q21 | 3Q21 | 4Q21 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Closing stock levels, mb | | | | | | | | | | | | |
| OECD onland commercial | 2,896 | 3,035 | 2,725 | 2,896 | 2,980 | 3,217 | 3,179 | 3,035 | 2,921 | 2,879 | 2,759 | 2,725 |
| Americas | 1,525 | 1,612 | 1,500 | 1,525 | 1,581 | 1,718 | 1,688 | 1,612 | 1,573 | 1,548 | 1,511 | 1,500 |
| Europe | 978 | 1,043 | 880 | 978 | 1,033 | 1,099 | 1,079 | 1,043 | 1,002 | 973 | 892 | 880 |
| Asia Pacific | 394 | 380 | 345 | 394 | 366 | 400 | 411 | 380 | 346 | 358 | 355 | 345 |
| OECD SPR | 1,535 | 1,541 | 1,485 | 1,535 | 1,537 | 1,561 | 1,551 | 1,541 | 1,546 | 1,524 | 1,513 | 1,485 |
| Americas | 637 | 640 | 595 | 637 | 637 | 658 | 644 | 640 | 640 | 623 | 620 | 595 |
| Europe | 482 | 488 | 480 | 482 | 484 | 487 | 490 | 488 | 493 | 487 | 485 | 480 |
| Asia Pacific | 416 | 414 | 409 | 416 | 416 | 416 | 417 | 414 | 413 | 413 | 408 | 409 |
| OECD total | 4,432 | 4,577 | 4,209 | 4,432 | 4,517 | 4,778 | 4,730 | 4,577 | 4,467 | 4,402 | 4,272 | 4,209 |
| Oil-on-water | 1,033 | 1,148 | 1,201 | 1,033 | 1,187 | 1,329 | 1,174 | 1,148 | 1,138 | 1,131 | 1,169 | 1,201 |
| Days of forward consumption in OECD, days | | | | | | | | | | | | |
| OECD onland commercial | 69 | 68 | 59 | 64 | 80 | 76 | 74 | 72 | 66 | 63 | 60 | 61 |
| Americas | 68 | 67 | 59 | 63 | 80 | 76 | 73 | 71 | 65 | 63 | 61 | 62 |
| Europe | 79 | 80 | 65 | 73 | 94 | 85 | 86 | 88 | 79 | 70 | 65 | 70 |
| Asia Pacific | 55 | 51 | 46 | 50 | 55 | 59 | 56 | 50 | 49 | 50 | 46 | 44 |
| OECD SPR | 37 | 35 | 34 | 34 | 41 | 37 | 36 | 36 | 35 | 33 | 33 | 33 |
| Americas | 28 | 26 | 24 | 26 | 32 | 29 | 28 | 28 | 26 | 25 | 25 | 25 |
| Europe | 39 | 37 | 35 | 36 | 44 | 38 | 39 | 41 | 39 | 35 | 36 | 38 |
| Asia Pacific | 58 | 56 | 54 | 53 | 63 | 62 | 57 | 54 | 59 | 58 | 53 | 52 |
| OECD total | 107 | 104 | 93 | 97 | 121 | 113 | 110 | 108 | 102 | 96 | 92 | 94 |

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

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

| Non-OPEC liquids production and OPEC NGLs | Change | | | | | | | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 2018 | 2019 | 2020 | 3Q21 | 4Q21 | 2021 | 21/20 | 1Q22 | 2Q22 | 3Q22 | 4Q22 | 2022 | 22/21 |
| US | 16.7 | 18.5 | 17.6 | 17.8 | 18.6 | 17.8 | 0.2 | 18.5 | 18.7 | 18.8 | 19.1 | 18.8 | 1.0 |
| Canada | 5.3 | 5.4 | 5.2 | 5.4 | 5.7 | 5.5 | 0.3 | 5.7 | 5.4 | 5.7 | 5.8 | 5.6 | 0.2 |
| Mexico | 2.1 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 0.0 | 1.9 | 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 | 26.1 | 26.1 | 26.5 | 26.9 | 26.4 | 1.2 |
| Norway | 1.9 | 1.7 | 2.0 | 2.1 | 2.0 | 2.0 | 0.0 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 0.1 |
| 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 Europe | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 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 | 3.9 | 3.8 | 3.8 | 4.1 | 3.9 | 0.1 |
| Australia | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.0 | 0.5 | 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 | 0.5 | 0.5 | 0.5 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.0 |
| Total OECD | 28.3 | 30.0 | 29.1 | 29.5 | 30.5 | 29.5 | 0.3 | 30.5 | 30.4 | 30.8 | 31.5 | 30.8 | 1.4 |
| China | 4.0 | 4.0 | 4.2 | 4.3 | 4.3 | 4.3 | 0.1 | 4.3 | 4.3 | 4.3 | 4.4 | 4.3 | 0.0 |
| India | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.0 | 0.7 | 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 | 0.8 | 0.0 | 0.8 | 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 | 0.1 |
| Thailand | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 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 | 2.7 | 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 | 0.0 |
| Brazil | 3.3 | 3.6 | 3.7 | 3.7 | 3.5 | 3.6 | -0.1 | 3.8 | 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 others | 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 | 6.2 | 6.1 | 6.3 | 6.2 | 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 | 3.3 | 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 | 0.0 | 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 | 0.5 | 0.5 | 0.5 | 0.0 |
| Ghana | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |
| South Africa | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |
| Sudans | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 |
| Africa other | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |
| Africa | 1.5 | 1.5 | 1.4 | 1.3 | 1.3 | 1.3 | -0.1 | 1.3 | 1.3 | 1.2 | 1.2 | 1.3 | -0.1 |
| Russia | 11.5 | 11.6 | 10.6 | 10.8 | 11.2 | 10.8 | 0.2 | 11.5 | 11.8 | 11.9 | 11.9 | 11.8 | 1.0 |
| Kazakhstan | 1.9 | 1.9 | 1.8 | 1.7 | 2.0 | 1.8 | 0.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 0.2 |
| Azerbaijan | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.0 | 0.8 | 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 | 0.3 | 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 | 3.1 | 3.2 | 3.2 | 3.2 | 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 | 33.1 | 31.7 | 31.8 | 32.1 | 31.9 | 0.1 | 33.1 | 33.3 | 33.4 | 33.7 | 33.4 | 1.5 |
| Non-OPEC production | 61.0 | 63.2 | 60.8 | 61.3 | 62.7 | 61.3 | 0.5 | 63.6 | 63.7 | 64.2 | 65.3 | 64.2 | 2.9 |
| 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 | 65.5 | 63.0 | 63.6 | 65.0 | 63.6 | 0.6 | 66.0 | 66.1 | 66.6 | 67.7 | 66.6 | 3.0 |
| OPEC NGL | 5.2 | 5.1 | 4.9 | 5.1 | 5.1 | 5.0 | 0.1 | 5.1 | 5.2 | 5.2 | 5.2 | 5.2 | 0.1 |
| OPEC Non-conventional | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |
| OPEC (NGL+NCF) | 5.3 | 5.2 | 5.0 | 5.2 | 5.2 | 5.1 | 0.1 | 5.2 | 5.3 | 5.3 | 5.3 | 5.3 | 0.1 |
| Non-OPEC & OPEC (NGL+NCF) | 68.7 | 70.8 | 68.0 | 68.8 | 70.1 | 68.7 | 0.7 | 71.2 | 71.4 | 71.9 | 73.0 | 71.9 | 3.1 |

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

Appendix

Table 11 - 5: World rig count, units

| World rig count | 2019 | 2020 | Change | | 1Q21 | 2Q21 | 3Q21 | 4Q21 | Dec 21 | Jan 22 | Change |
|----------------------------|--------------|--------------|--------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|
| | | | 2021 | 2021/20 | | | | | | | Jan/Dec |
| US | 944 | 436 | 475 | 39 | 393 | 452 | 498 | 559 | 580 | 601 | 21 |
| Canada | 134 | 90 | 133 | 43 | 145 | 73 | 151 | 161 | 149 | 190 | 41 |
| Mexico | 37 | 41 | 45 | 4 | 46 | 42 | 43 | 48 | 47 | 45 | -2 |
| OECD Americas | 1,116 | 567 | 654 | 87 | 585 | 568 | 694 | 770 | 778 | 837 | 59 |
| Norway | 17 | 16 | 17 | 1 | 16 | 18 | 17 | 18 | 18 | 17 | -1 |
| UK | 15 | 6 | 8 | 2 | 8 | 8 | 9 | 8 | 8 | 8 | 0 |
| OECD Europe | 74 | 59 | 58 | -1 | 54 | 59 | 59 | 61 | 61 | 58 | -3 |
| OECD Asia Pacific | 29 | 22 | 23 | 1 | 16 | 21 | 28 | 25 | 23 | 24 | 1 |
| Total OECD | 1,219 | 648 | 735 | 87 | 656 | 648 | 781 | 856 | 862 | 919 | 57 |
| Other Asia* | 221 | 187 | 174 | -13 | 161 | 170 | 181 | 182 | 185 | 189 | 4 |
| Latin America | 128 | 58 | 91 | 33 | 76 | 89 | 93 | 105 | 109 | 112 | 3 |
| Middle East | 68 | 57 | 57 | 0 | 57 | 56 | 57 | 59 | 60 | 58 | -2 |
| Africa | 55 | 43 | 42 | -1 | 33 | 39 | 47 | 49 | 52 | 56 | 4 |
| Other Europe | 14 | 12 | 9 | -3 | 12 | 7 | 9 | 9 | 9 | 10 | 1 |
| Total Non-OECD | 486 | 357 | 373 | 16 | 338 | 362 | 385 | 404 | 415 | 425 | 10 |
| Non-OPEC rig count | 1,705 | 1,005 | 1,108 | 103 | 994 | 1,010 | 1,166 | 1,260 | 1,277 | 1,344 | 67 |
| Algeria | 45 | 31 | 26 | -5 | 22 | 27 | 24 | 31 | 34 | 33 | -1 |
| Angola | 4 | 3 | 4 | 1 | 4 | 4 | 4 | 5 | 6 | 6 | 0 |
| Congo | 3 | 1 | 0 | -1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Equatorial Guinea** | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Gabon | 7 | 3 | 2 | -1 | 1 | 1 | 3 | 4 | 4 | 3 | -1 |
| Iran** | 117 | 117 | 117 | 0 | 117 | 117 | 117 | 117 | 117 | 117 | 0 |
| Iraq | 74 | 47 | 39 | -8 | 32 | 36 | 42 | 45 | 44 | 46 | 2 |
| Kuwait | 46 | 45 | 25 | -20 | 28 | 23 | 25 | 23 | 25 | 25 | 0 |
| Libya | 14 | 12 | 13 | 1 | 12 | 12 | 14 | 14 | 14 | 15 | 1 |
| Nigeria | 16 | 11 | 7 | -4 | 6 | 5 | 10 | 7 | 6 | 6 | 0 |
| Saudi Arabia | 115 | 93 | 62 | -31 | 62 | 62 | 59 | 64 | 65 | 70 | 5 |
| UAE | 62 | 54 | 42 | -12 | 43 | 44 | 39 | 42 | 42 | 38 | -4 |
| Venezuela | 25 | 24 | 25 | 1 | 25 | 25 | 25 | 25 | 25 | 25 | 0 |
| OPEC rig count | 529 | 441 | 362 | -79 | 352 | 356 | 361 | 380 | 384 | 386 | 2 |
| World rig count*** | 2,234 | 1,446 | 1,470 | 24 | 1,346 | 1,366 | 1,527 | 1,640 | 1,661 | 1,730 | 69 |
| <i>of which:</i> | | | | | | | | | | | |
| Oil | 1,788 | 1,125 | 1,162 | 37 | 1,044 | 1,076 | 1,212 | 1,316 | 1,344 | 1,386 | 42 |
| Gas | 415 | 275 | 275 | 0 | 269 | 257 | 281 | 293 | 288 | 316 | 28 |
| Others | 31 | 46 | 33 | -13 | 33 | 33 | 34 | 31 | 29 | 28 | -1 |

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

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

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

Totals may not add up due to independent rounding.

Sources: Baker Hughes and OPEC.

Glossary of Terms

Abbreviations

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

Acronyms

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

Glossary of Terms

| | |
|-------|--|
| FAI | fixed asset investment |
| FCC | fluid catalytic cracking |
| FDI | foreign direct investment |
| Fed | US Federal Reserve |
| FID | final investment decision |
| FOB | free on board |
| FPSO | floating production storage and offloading |
| FSU | Former Soviet Union |
| FX | Foreign Exchange |
| 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 11.03 in January

| | |
|---------------------|--------------|
| January 2022 | 85.41 |
| December 2021 | 74.38 |
| Year-to-date | 85.41 |

January OPEC crude production

mb/d, according to secondary sources



up 0.06 in January

| | |
|---------------|-------|
| January 2022 | 27.98 |
| December 2021 | 27.92 |

Economic growth rate

per cent

| | World | OECD | US | Euro-zone | Japan | China | India |
|-------------|-------|------|-----|-----------|-------|-------|-------|
| 2021 | 5.6 | 5.2 | 5.7 | 5.2 | 1.8 | 8.1 | 8.8 |
| 2022 | 4.2 | 3.6 | 4.0 | 3.9 | 2.2 | 5.6 | 7.2 |

Supply and demand

mb/d

| 2021 | | 21/20 | 2022 | | 22/21 |
|-----------------------------|-------------|--------------|-----------------------------|-------------|--------------|
| World demand | 96.6 | 5.7 | World demand | 100.8 | 4.2 |
| Non-OPEC liquids production | 63.6 | 0.6 | Non-OPEC liquids production | 66.6 | 3.0 |
| OPEC NGLs | 5.1 | 0.1 | OPEC NGLs | 5.3 | 0.1 |
| Difference | 27.9 | 5.0 | Difference | 28.9 | 1.0 |

OECD commercial stocks

mb

| | Dec 20 | Oct 21 | Nov 21 | Dec 21 | Dec 21/Nov 21 |
|-----------------------|---------------|---------------|---------------|---------------|----------------------|
| Crude oil | 1,477 | 1,337 | 1,348 | 1,330 | -18.3 |
| Products | 1,558 | 1,425 | 1,407 | 1,395 | -12.9 |
| Total | 3,035 | 2,762 | 2,756 | 2,725 | -31.2 |
| Days of forward cover | 71.8 | 60.8 | 61.0 | 61.1 | 0.1 |

Next report to be issued on 15 March 2022.