



Organization of the Petroleum Exporting Countries



2020

Annual Report



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Organization of the Petroleum Exporting Countries
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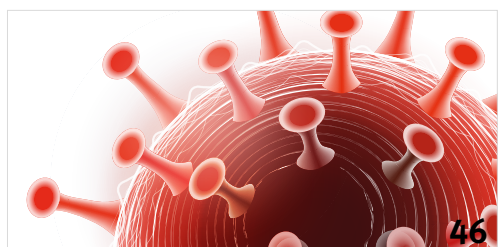
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Foreword



Mohammad Sanusi Barkindo

OPEC Secretary General

The year 2020 was like no other in living history. Not since the ‘Spanish Flu’ 100 years ago has a pandemic struck our planet. COVID-19 is most certainly the distinguishing feature of the year, for both the oil market and mankind.

At the World Economic Forum Meeting in Davos on 21–24 January, the feeling was overwhelmingly positive among leaders and commentators, and the outlook for the global economy in 2020 bright.

This feeling and any belief that the spread of COVID-19 would be limited was shattered in February, as the virus started to appear worldwide and hot spots like IR Iran and Italy came into focus. The devastation to health care systems and human life started to capture the world’s attention in earnest. Measurements required to slow its advance, such as lockdowns of entire cities, quickly took hold.

The outbreak would become critical in other European countries and the US in March, while its path of devastation in other parts of the world was just beginning. It would rush like wildfire throughout the year from one country and continent to another.

A wave of shock and growing uncertainty pushed aside the hopeful start to the year and the new decade. At the 178th (Extraordinary) Meeting of the OPEC Conference on 5 and 6 March, the full impact of COVID-19 was still not clear. It was not until 11 March that the World Health Organization declared a pandemic.

The year saw record demand destruction of nearly 10%, leaving around 90.4 mb/d. However, during the dark days of April, demand fell up to 22%. An all-time low occurred on April 20, now referred to as ‘Black Monday’, when WTI went negative for the first time in history, plummeting to –\$37/b. There were concerns storage hubs would reach tank top and a potential crude oversupply of 1.3 billion barrels was on the horizon.

Some commentators noted that the energy industry may have been the most impacted of all sectors by the pandemic. The world economy contracted by –3.7% in 2020, but global oil demand declined by 9.6 mb/d for the year. However, a solid economic recovery is now expected in 2021 of 5.1% and oil demand growth for 2021 is expected to increase by 5.9 mb/d.

In the face of this unprecedented crisis, strong and certain action was required to pull the market back from the brink of destruction. The need for not only Declaration of Cooperation (DoC) participants, but all producers to work together became more critical than ever before, and the DoC participants reacted quickly and effectively.

At the 10th (Extraordinary) OPEC and non-OPEC Ministerial Meeting (ONOMM) in April, the largest and longest adjustments in the history of OPEC and the industry were made of 9.7 mb/d, for an initial period of two months, later extended for an additional month. This was to be tapered off, with the agreement valid until the end of April 2022.

Furthermore, the Meeting took note of the G20 Extraordinary Energy Ministers' Meeting, which recognized the commitment of the producers in the OPEC+ group to stabilize energy markets and acknowledged the importance of international cooperation in ensuring the resilience of energy systems. Several countries openly backed the group's efforts, with some committing to adjusting production on their own, including Norway and Canada. Various oil companies revised down production plans and masses of production were shut in, particularly in North America.

Saudi Arabia, the United Arab Emirates, Kuwait and Oman pledged to make additional adjustments in order to boost market sentiment and draw down bloated stocks. Members of the meeting subscribed to the concept of compensation by those countries that were unable to reach full conformity, a plan that continued throughout the year. The supporting Joint Ministerial Monitoring Committee under the DoC was ordered to meet monthly until the end of the year to keep a close tab on general market conditions, along with production and conformity levels.

At the 12th ONOMM in early December, it was noted that conformity levels were positive, which most certainly brought optimism to market sentiment. It was agreed that starting in January 2021, DoC participating countries would voluntarily adjust production by 0.5 mb/d from 7.7 mb/d to 7.2 mb/d and that the ONOMM would be held monthly starting in January 2021 to assess conditions and determine production adjustments for the following month, with those being no more than 0.5 mb/d.

By the end of the year, great strides had been made to bring balance back to the oil market, though second and third waves of COVID-19 were still sweeping the world. These efforts continue to be extolled at the highest levels of government and from energy stakeholders in both the public and private sectors worldwide. The additional promise of a speedy vaccination rollout in 2021 saw market sentiment take an uptick.

Meanwhile, the OPEC Secretariat and staff had to scramble to adjust to the new and rapidly changing conditions. Essential meetings were deemed to be held via teleconference rather than face-to-face. As of 13 March, all OPEC staff were instructed to work remotely. Only duly authorized essential or critical staff were allowed to enter the Secretariat.

Contingency plans were prepared to hold all meetings scheduled to take place before the end of 2Q20 through teleconferencing. Closer to summer, staff were again allowed to work on the premises in limited amounts, but most of the year found host country Austria in lockdown and thus staff worked primarily from home. Overall, the Secretariat continued to function well under extreme and unprecedented circumstances.

The pandemic had an additional downside, overshadowing OPEC's 60th anniversary plans for its birthday on 14 September, which had to be cancelled. However, the challenging year saw OPEC shine brighter than ever. Few would have foreseen at the beginning of its history the heights the Organization has risen to in the global energy arena.

The 60th anniversary offered a time to reflect and appreciate the efforts of all those who have worked so hard throughout history to make OPEC the resounding success it is today. This includes generations of Heads of State and Government, Ministers, Governors and other high-level experts from outside and within the Secretariat, Secretaries General, Management and staff of all disciplines. They have enriched the Organization through their commitment, perseverance and sacrifice.

It also allowed the opportunity to thank the City of Vienna and Austria for being warm and generous hosts since OPEC took up residence at this grand location 55 years ago.

In order to celebrate, a special magazine, movie and book were created discussing the past, present and future of our upstanding Organization. Today one can clearly say that OPEC's best days are yet to come.

A handwritten signature in black ink, consisting of stylized, overlapping loops and lines, representing the name Mohammad Sanusi Barkindo.

Mohammad Sanusi Barkindo
OPEC Secretary General



The world economy

The year 2020 was almost entirely shaped by the COVID-19 pandemic. At the beginning of 1Q20, China was hit significantly by the pandemic, leading to lockdowns in large parts of the country and negatively affecting growth in the economy. While swift action in other Asian economies allowed a base for recovery, starting in 2Q20, western economies were hit, with a time-lag of around one quarter. Hence, global growth in 2Q20 saw an unprecedented trough, with double-digit declines in major Organisation for Economic Co-operation and Development (OECD) economies. As it became clear that the pandemic was having an unmatched negative effect on global growth, government-led stimulus was quickly provided. Fiscal stimulus measures

in the US, the Euro-zone and Japan provided important support to limit the annual gross domestic product (GDP) decline. These measures were accompanied by smaller, though also effective, stimulus measures in the major emerging economies. While not cash-effective, large state guarantees in all the major OECD economies played an additional vital role in recovering sentiment among business and consumers alike. Moreover, monetary stimulus packages were considerable. The US central bank, the Federal Reserve (Fed), took the lead in its push to lower interest rates and increase quantitative easing measures to historic levels. At the same time, the central banks of the Euro-zone, the European Central Bank and the Bank of Japan, all

Table 1

World economic growth rates, 2019–2020 (% change over previous period)

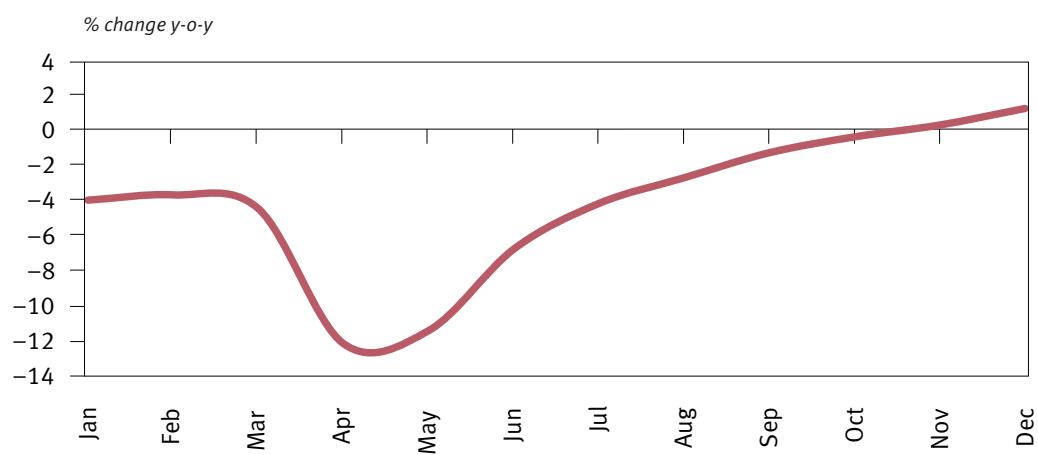
Grouping/country	2019	2020
OECD	1.6	–5.0
Other Europe	3.6	–5.4
Developing countries	2.8	–5.2
Africa	3.2	–3.3
Latin America and Caribbean	0.2	–6.8
Asia and Oceania	3.4	–5.2
Asia-Pacific	3.7	–3.8
OPEC	–1.1	–6.6
China	6.1	2.3
FSU	2.2	–3.3
Total world	2.8	–3.7

Sources

OPEC, OECD, IMF and International Financial Statistics.

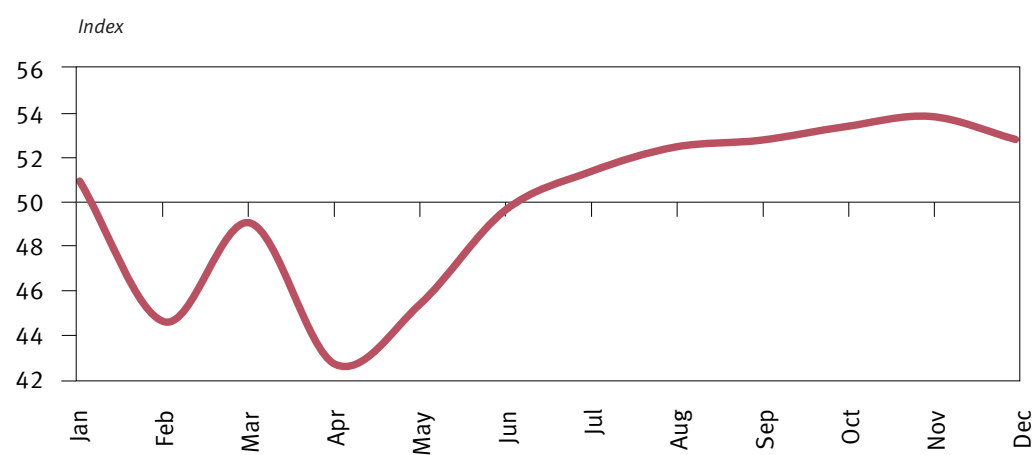
Note: Figures based on March 2021 Monthly Oil Market Report.

Figure 1
Global industrial production, 2020



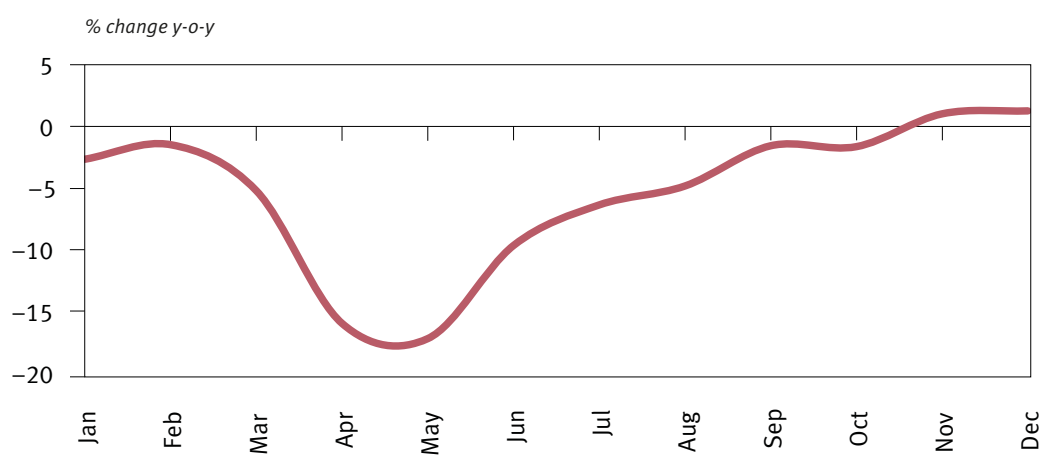
Source
Netherlands Bureau for Economic Policy Analysis and Haver Analytics.

Figure 2
Global manufacturing PMI, 2020



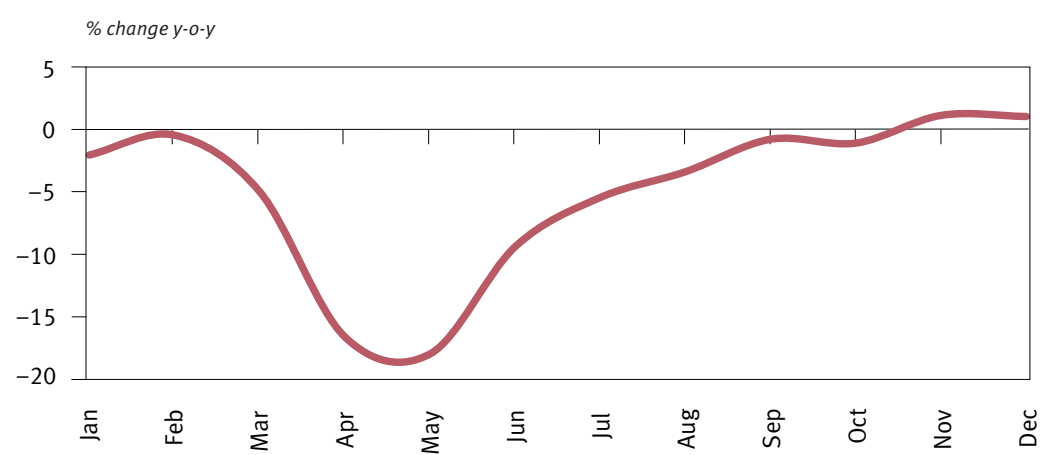
Source
IHS Markit and Haver Analytics.

Figure 3
World trade volumes, 2020



Source
Netherlands Bureau for Economic Policy Analysis and Haver Analytics.

Figure 4
World export volumes, 2020



Source
Netherlands Bureau for Economic Policy Analysis and Haver Analytics.

brought significant increases to their accommodative monetary policies.

With major lockdowns in place in most economies in 1H20, global growth turned negative in 1Q20, falling to –4.6% quarter-on-quarter (q-o-q), followed by –2.5% q-o-q in 2Q20. By the end of 2Q20, large incentive measures – in the form of fiscal and monetary stimulus, in addition to guarantees – accounted for more than 160% of global GDP. This lifted growth in 3Q20 and 4Q20. Global GDP growth is estimated to have risen by around 4.5% q-o-q in 3Q20 and by more than 1% q-o-q in 4Q20, leading to an estimated annual global GDP decline of –3.7% for the entirety of 2020.

OECD

OECD GDP contracted by 5.0% in 2020, compared with an expansion of 1.6% in 2019. As in the rest of the world, the majority of the decline materialized in 1H20, while a strong stimulus-led recovery took place in 2H20, albeit with re-emerging lockdown measures in 4Q20, which are estimated to have again dampened expansion. The US economy's contraction was reported at –3.5%, compared with growth of 2.2% in 2019. The Euro-zone's GDP contracted by -6.8%, compared with already slight growth of only 1.3% in 2019. Japan entered the year coming from a declining 4Q19. The country's GDP contraction in 2020 is reported at –4.9%, compared with only minor growth of 0.3% y-o-y in 2019.

OECD Americas

US

After the US made progress with China on numerous trade-related issues at the beginning of the year, there was some hope that

trade disputes that were a significant drag on global growth would be sorted out. However, it became obvious early in the year that the US economy would also be affected by the COVID-19 pandemic. While the impact was thought to be more trade related early on, it was clear by the end of 1Q20 that the pandemic had indeed hit the US economy directly. GDP declined in 1Q20 by 5% q-o-q seasonally adjusted annualized rate (SAAR) and further by 31.4% q-o-q SAAR in 2Q20. In 2Q20, the US implemented a vast fiscal stimulus package of significantly more than \$2 billion (\$/bn). This and additional fiscal stimulus measures throughout the year – in combination with support from the Fed's monetary policies – lifted growth in 3Q20 to 33.4% q-o-q SAAR and 4.1% q-o-q SAAR in 4Q20. However, due to the very large decline in 1H20, overall annual growth in 2020 was at –3.5%.

OECD Europe

Euro-zone

Similar to the rest of the world, and in particular peer OECD economies, the Euro-zone was significantly impacted by the pandemic in 1Q20. While it was thought that improvements in global trade negotiations, especially between the US and China, could also provide support to the export-driven economies of the Euro-zone, especially Germany, it quickly became clear that the COVID-19 pandemic would remain the overarching topic throughout 2020. As growth turned negative in 1Q20 at –14.2% q-o-q SAAR, EU leaders quickly coordinated fiscal and monetary stimulus, which was accompanied by an array of governmentally supported guarantees. So, after another massive decline of 38.8% q-o-q SAAR in 2Q20, growth

Table 2
Comparison: OPEC and total world, 2019–2020*

	OPEC 2019	Total world 2019	OPEC 2020	Total world 2020
Real GDP growth rate (%)	–1.1	2.8	–6.6	–3.7
Petroleum export value (\$ bn)	564.9	1,614.0	312.6	939.7
Value of non-petroleum exports (\$ bn)	515.3	16,892.0	88.7	15,437.3
Oil exports (as percentage of total exports %)	52.3	8.7	44.6	5.7
Value of imports (\$ bn)	728.1	18,629.4	581.7	16,434.3
Current account balance (\$ bn)	82.6	402.0	–97.4	202.6
Crude oil production (mb/d)	29.34	75.16	25.65	69.08
Reserves, excluding gold (\$ bn)	1,010.3	12,199.5	899.3	13,120.9

*2020 data are preliminary estimates.

Note

Figures are partly estimated.

Sources

IMF, EIU, World Bank Development Indicators and OPEC.

Table 3
OPEC Member Countries' real GDP growth rates, 2019–2020 (% change over previous period)

Member Country	2019	2020
Algeria	8.8	–7.4
Angola	–0.9	–3.8
Congo	–0.6	–6.8
Equatorial Guinea	–6.1	–8.6
Gabon	3.8	–3.0
IR Iran	–6.5	–9.5
Iraq	4.4	–9.0
Kuwait	0.4	5.2
Libya	9.9	–25.0
Nigeria	2.2	–1.9
Saudi Arabia	0.3	–4.5
UAE	1.7	–4.5
Venezuela	–22.0	–25.0
Total OPEC	–1.1	6.6

Sources

IMF, EIU, official OPEC Member Country statistics and OPEC.

recovered significantly in 3Q20, almost reaching 60% q-o-q SAAR. However, with infections rising again in 4Q20, new lockdown measures had to be implemented and growth in the quarter turned negative again, declining by 2.6% q-o-q SAAR, and leading to an annual decline of –6.8% in the Euro-zone economy.

OECD Asia-Pacific

Japan

Contrary to the US and the Euro-zone, Japan already entered 2020 with a negative growth rate from 4Q19. This materialized after the government decided to go ahead with a sales tax increase in 4Q19, which considerably impacted domestic demand at the beginning of 2020. With the COVID-19 pandemic emerging in its largest Asian trading partner, China, at the beginning of the year, it became clear that the economy would continue to be negatively impacted not only by slowing domestic momentum, but also by an external trade pattern that was likely to dampen growth. In addition to these already apparent issues, Japan was also caught by the pandemic and had to implement strict lockdown measures in 1H20. With this, 1Q20 growth declined by –2.2% q-o-q SAAR and it became clear to the Japanese government that it would need to counterbalance the decline. Fiscal stimulus measures of around 20% of Japan's GDP were consequently implemented and monetary stimulus accompanied this support. So, after a further significant 2Q20 decline of 29.3% q-o-q SAAR, growth recovered significantly in 3Q20, reaching 22.8% q-o-q SAAR. However, with infections rising once more towards the end of 4Q20, new lockdown measures and voluntary social distancing impacted 4Q20 development and

growth slowed again, reaching 11.7% q-o-q SAAR, leading to an overall annual decline of –4.9% in Japan.

Emerging countries

Brazil

Brazil's GDP contracted by 4.1% in 2020, following growth of 1.1% in 2019. Imports stood at \$18.41 bn in December, higher by 47% y-o-y. Imports of primary products, semi-manufactured products and manufactured products all increased in December. Exports dropped by 0.7% y-o-y in December, registering \$18.37 bn. The trade balance shifted to a \$0.04 bn deficit in December 2020 from a \$5.95 bn surplus in the same month of the previous year on the impact of the global pandemic.

Russia

The country's GDP contraction is estimated at –3.1% y-o-y in 2020, down from 1.1% y-o-y growth in 2019. The reported contraction was less severe compared with other major regions due to the relatively small share of sectors directly affected by COVID-19 restrictions, a relatively higher contribution from the public sector and significant benefit from government COVID-19 policy support. Consumer price inflation posted at 4.9% y-o-y in December, up from 4.4% y-o-y in November. During 2020, the central bank reduced its benchmark one-week repo rate to 4.25% in December from 7.75% in February as part of monetary easing measures to support the economy in coping with the ramifications of COVID-19 restrictions.

India

India's economy recorded a GDP contraction of almost –7.0% in 2020. The country's economic growth had been decelerating

since mid-2018, then it was struck by unprecedented COVID-19 restrictions, which paralyzed most economic activities, especially in 2Q20. India's inflation rose sharply in 2020, especially in the second half of the year, due to a strong increase in vegetable prices. The Reserve Bank of India cut its policy rate by 115 basis points to 4.0% as part of monetary easing efforts to help mitigate the negative impact of the coronavirus pandemic on the economy. The reverse repo rate was also lowered to 3.35% and the marginal standing facility rate to 4.25%, but the inflation rate kept surging during the later months of 2020, restraining any further monetary policy easing. As a result, the Monetary Policy Committee voted at its last meeting in favour of maintaining the status quo on its key interest rate for the short term at 4.0%. India's yearly average composite Purchasing Managers' Index (PMI) stood at 44.3 in 2020, down from 52.2 in 2019. Meanwhile, the average manufacturing PMI dropped to 49.4 compared with 52.2

in 2019, and the average services PMI was at 41.7, down from 51.4 in 2019.

China

China's GDP grew by 2.3% in 2020, far less than growth of 6.1% y-o-y seen in 2019. It was the lowest growth rate the country has experienced since the global financial crisis, amid the intense impact of COVID-19, which weakened domestic demand and led to considerable off-balance-sheet borrowing by local governments. Yet, China was the only major economy that reported growth in 2020. The country's latest industrial production data shows that output rose by 7.3% y-o-y in December 2020. This was the sharpest growth level seen since March 2019, as activity continued to recover from the COVID-19 shock. China's retail trade increased by 4.6% y-o-y in December 2020, after reaching 5.0% y-o-y growth in November. This data further indicates that consumption recovered from the COVID-19 disruption.

Table 4

Summary of macroeconomic performance of the 'BRIC' countries in 2020

	GDP growth rates	Consumer price index	Current account balance	Governmental fiscal balance	Net public debt
		% y-o-y change	\$ bn	% of GDP	% of GDP
Brazil	-4.1	3.2	-9.6	-15.8	94.8
Russia	-3.1	3.4	30.4	-3.8	17.5
India	-7.0	6.6	33.9	-7.2	61.6
China	2.3	2.5	220.9	-5.2	21.6

Sources

Source: OPEC, Consensus Forecast and Economist Intelligence Unit.

Table 5

Average quarterly and yearly spot prices for selected crudes, 2019–2020

\$/b

	2019	1Q20	2Q20	3Q20	4Q20	2020	% Change 2020/19
OPEC Reference Basket	64.04	51.39	26.82	43.36	43.97	41.47	–35.2
OPEC Basket crudes							
Arab Light	64.96	52.87	26.64	43.62	44.20	41.91	–35.5
Basrah Light	63.64	50.56	26.46	44.25	44.58	41.55	–34.7
Bonny Light	65.63	52.19	26.70	43.18	43.74	41.53	–36.7
Djeno	61.80	48.64	22.15	35.40	36.67	35.77	–42.1
Es Sider	63.81	50.10	26.16	41.65	42.04	40.06	–37.2
Girassol	66.11	51.53	29.04	44.24	45.47	42.64	–35.5
Iran Heavy	61.85	49.32	25.86	43.41	44.13	40.77	–34.1
Kuwait Export	64.25	51.92	25.95	43.47	44.26	41.49	–35.4
Merey	54.04	36.89	16.16	30.48	28.69	28.12	–48.0
Murban	64.72	52.79	30.67	43.67	44.56	42.98	–33.6
Qatar Marine	63.21	51.83	30.09	43.53	44.40	42.58	–32.6
Rabi Light	63.18	47.91	26.93	42.23	43.49	40.22	–36.3
Saharan Blend	64.49	52.31	28.18	43.55	44.14	42.12	–34.7
Zafiro	65.74	50.79	27.21	43.19	44.63	41.54	–36.8
Other OPEC crudes							
Arab Heavy	63.85	51.31	26.18	43.46	44.51	41.45	–35.1
Dubai	63.48	50.60	30.96	42.83	44.62	42.31	–33.3
Dukhan	63.65	52.20	29.46	43.45	44.18	42.44	–33.3
Forcados	66.19	51.34	27.12	43.10	43.99	41.56	–37.2
Iran Light	62.74	47.40	28.72	41.82	42.92	40.36	–35.7
Other non-OPEC crudes							
Zueitina	63.57	49.94	26.22	41.80	42.29	40.14	–36.9
Brent Dated	64.19	50.02	29.42	42.85	44.12	41.67	–35.1
Isthmus	63.00	42.32	22.83	39.21	41.69	36.61	–41.9
Oman	64.00	51.39	33.03	43.19	45.00	43.20	–32.5
Suez Mix	62.61	47.27	28.59	41.69	42.79	40.23	–35.7
Tapis	69.15	56.55	28.18	43.80	44.17	43.24	–37.5
Urals	64.38	48.97	30.06	43.42	44.58	41.83	–35.0
West Texas Intermediate	57.02	45.87	27.95	40.88	42.72	39.43	–30.8
West Texas Sour	56.29	45.34	28.00	41.00	43.24	39.47	–29.9
Differentials							
Bonny Light – Arab Heavy	1.78	0.88	0.52	–0.28	–0.77	0.08	
Bonny Light – Saharan Blend	1.14	–0.12	–1.48	–0.37	–0.40	–0.59	
Brent Dated – WTI	7.17	4.15	1.47	1.97	1.40	2.24	
Brent Dated – Dubai	0.71	–0.58	–1.54	0.02	–0.50	–0.64	

Notes

Quarterly and yearly averages based on daily quotations.

Source

Platts, Argus, direct communication and OPEC.

China's yearly average composite PMI stood at 51.4 in 2020 compared with 51.7 in 2019. The country's yearly average manufacturing PMI was 51.0 in 2020 compared with 50.4 in 2019. Meanwhile, its average services PMI was 51.1 in 2020 compared with 52.5 in 2019.

Developing Countries

Economic growth in developing countries is estimated to have contracted by -5.2% y-o-y in 2020. Africa's growth is estimated to have shrunk by -3.3%, following growth of 3.2% in 2019. Latin America contracted by -6.8% in 2020, down from growth of 0.2% in 2019. Other Asia's economic growth is estimated to have contracted by -4.6% in 2020, compared with an expansion of 1.8% in 2019. GDP growth in the Middle East and North Africa region contracted by -5.3% y-o-y in 2020, following growth of 0.8% in 2019.

Exchange rate of the US dollar

On the currency markets, the US dollar generally declined against major currencies amid relatively large monetary stimulus by the Fed through various channels. The dollar declined by 8.6% y-o-y against the euro and 9.6% against the Swiss franc. Its decline was less accentuated against the pound sterling, falling by 1.8% y-o-y amid Brexit uncertainties. Against the yen, the dollar declined by 4.8% y-o-y.

The dollar was mixed against emerging market currencies. It declined by 6.7% y-o-y against China's yuan in view of the country's fast recovery and improving trade balance, increased by 3.4% y-o-y against the Indian rupee and rose by 25.2% against the Brazilian real, with a series of interest rate reductions by the Central Bank adding weakness to the real. Against the Russian ruble, the dollar rose by 17.9% y-o-y, mainly impacted by lower oil prices during the year.



Oil market developments

Crude oil price movements

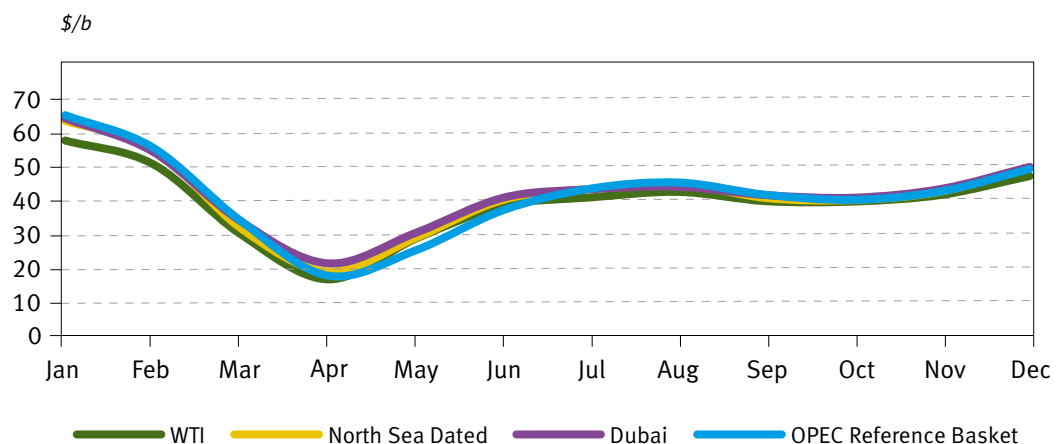
The year 2020 was exceptional for the global oil market and for most commodity markets due to the outbreak of the COVID-19 pandemic, described as one of the most severe health crises in recent history, resulting in extreme oil market volatility and unstable market conditions. The outbreak led countries to shut down their economies and close their borders in order to stop the fast spread of the virus. This caused an historical collapse in global oil demand, which fell by 15.9 million barrels per day (mb/d) in 2Q20. Consequently, Brent prices fell in April to their lowest point in decades, while the NYMEX WTI first-month contract fell to an unprecedented negative figure for the first time. However, the global oil market saw a gradual recovery starting in May and continuing over 2H20, mainly supported by successful historic decisions taken at the 9th and 10th (Extraordinary) OPEC and non-OPEC Ministerial Meetings, which brought

about sharp adjustments to ease the market overhang and help return stability. Market confidence strengthened further amid exemplary cooperation among OPEC+ producers, which translated into strong conformity levels regarding voluntary production adjustments. The oil market was also buoyed by exceptional fiscal and monetary stimulus policies that helped in supporting economic activity, along with the development of COVID-19 vaccines and the start of vaccination programmes, which boosted the oil demand outlook.

OPEC Reference Basket

The value of the OPEC Reference Basket (ORB) fell for the second consecutive year in 2020, along with a decline in all other spot and futures crude oil benchmarks. The ORB fell by \$22.57, or 35.2%, on average over the year compared with 2019 figures, to settle at \$41.47 per barrel (\$/b), the lowest yearly average since 2016.

Figure 1
Monthly oil price movements, 2020



Source
Argus, OPEC and Platts.

All ORB component values dropped alongside their perspective crude oil benchmarks, and decreasing official selling prices were seen along with low crude differentials amid weak crude demand. Crude oil physical benchmarks North Sea Dated, WTI and Dubai spot prices fell by \$22.52, \$17.60 and \$21.17, respectively, in 2020 to average \$41.67/b, \$39.43/b and \$42.31/b.

Crude oil spot prices witnessed a sharp downward trend in the first four months of 2020, with North Sea Dated hitting its lowest point since March 1999 in April 2020, while the assessment of US crude WTI fell to negative territory for the first time on 20 April. The physical crude market showed signs of weakness starting at the beginning of the year due to slowing global oil demand on the back of the COVID-19 outbreak, lower refinery runs and the onset of the refinery maintenance season in several regions, along with a sharp increase in OECD oil stocks. Spot prices fell the most in March and April due to a large overhang in the market, exacerbated by an unprecedented oil demand shock caused by the COVID-19 pandemic, which pushed almost all countries to take drastic measures to contain the unprecedented health crisis. Rising global oil supply and the increasing availability of unsold cargoes weighed further on the spot market. Crude differentials of almost all grades priced at deep discounts, reflecting the surplus in the market.

Crude oil spot prices reversed their downward trend in May and started to recover from the April crash. They continued to increase for four consecutive months to August, amid an easing supply overhang and gradual market rebalancing, thanks to strong conformity levels to production adjustments by participating OPEC and non-OPEC producers of the DoC, declining non-OPEC supply, specifically

from the US, and a gradual recovery in crude demand from refiners. From April to August, both North Sea Dated and WTI first month rose by 90% on a monthly basis, to reach \$44.79/b and \$42.36/b, respectively, while Dubai first month rose 74% over the same period to settle at \$43.89/b. The lifting of COVID-19-related lockdowns and easing of some travel restrictions, as well as the increase in mobility during the summer holiday season, contributed to increasing oil demand and the raising of refinery throughput in main refinery hubs. Strong crude buying from China since May also helped mop up large crude volumes in the market and hence supported spot prices. The recovery in physical market fundamentals was reflected in the decline in global crude oil stocks, including floating storage, around the world. Nonetheless, crude spot prices steadied in late August and fell in September and October, due to signs of stalling oil demand recovery, a heavy refinery maintenance season, and weak refining margins in all regions, amid a well-supplied crude market. Furthermore, bearish sentiment in the futures market fueled by an ongoing rise in new COVID-19 cases globally raised concerns about the world oil demand outlook and put further pressure on spot prices.

Spot crude oil prices bounced back in November and continued to increase over December to settle at a ten-month high, as news on COVID-19 vaccine developments raised optimism for oil demand recovery in the short term, in addition to further improvements in physical market fundamentals and strong crude buying from Asian Pacific refiners, specifically from China and India. Spot prices rose alongside futures contracts on the expectation of a gradual lifting of mobility restrictions and accelerating demand recovery after the rollout of COVID-19 vaccines in sev-

eral countries. On the supply side, OPEC and non-OPEC participating countries in the DoC continued to achieve strong conformity levels in their production adjustments.

The spread between light/sweet and medium/heavy sour crudes also showed volatility in the three main markets, fluctuating between premiums and discounts over 2020. The implementation of International Maritime Organization (IMO) 2020 regulations, which were expected to tighten the supply of low-sulphur bunker fuel in the maritime transportation sector, was totally offset by the sharp decline in global oil demand and sufficient supply of compliant fuels. Furthermore, the rising supply of light sweet crude, mainly from the US, was curbed amid low oil prices. Meanwhile, production adjustments from OPEC and participating non-OPEC countries in the DoC significantly reduced the supply of sour crude.

The sweet/sour crude differential was relatively wide in most of 1Q20, particularly in Asia and on the US Gulf Coast (USGC), as demand from refiners for sweeter crudes increased to comply with new IMO 2020 rules that mandate a maximum sulphur content of 0.5% in marine fuels. The sweet/sour crude differentials were most wide in Asia on weakening East of Suez sour crude markets and high availability of sour crude supply, while in Europe and the USGC, the spread was little changed amid high availability of light sweet crude in the Atlantic Basin. Furthermore, the product quality spread between light and heavy distillates widened. However, the premium of light sweet crudes over heavy sour started to drop in the second part of March, particularly in Asia and the USGC, turning to a discount late in the month and continuing to settle in negative territory in April.

The sweet/sour crude differential re-

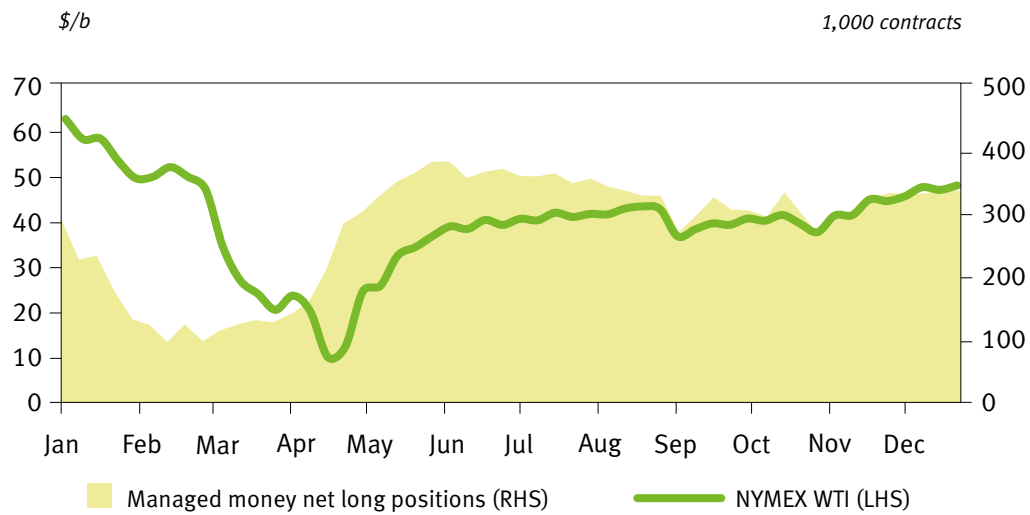
mained narrow in all markets in 2H20 as the supply of sour crude remained tight relative to light sweet crude due to planned and unplanned production adjustments/cuts, in addition to better performance in heavy product margins compared with lighter distillate products. The latter experienced depressed margins due to lockdowns that limited demand for road transport fuels. In 2H20, the premium of North Sea Dated, a benchmark of light sweet crude in the Atlantic Basin, to sour crude Urals turned to a discount, meaning that the value of light sweet crude was lower than that of medium sour crude. Similarly, the premium of light sweet crude Tapis in the Asia-Pacific to the Dubai sour crude benchmark flipped to a discount between September and November 2020.

Crude oil futures

Crude oil futures prices averaged lower in 2020 for the second consecutive year, with international benchmark ICE Brent crude futures dropping by \$20.95, or 32.7%, y-o-y to average \$43.21/b. The US WTI benchmark fell \$17.70, or 31.0%, y-o-y to average \$39.34/b.

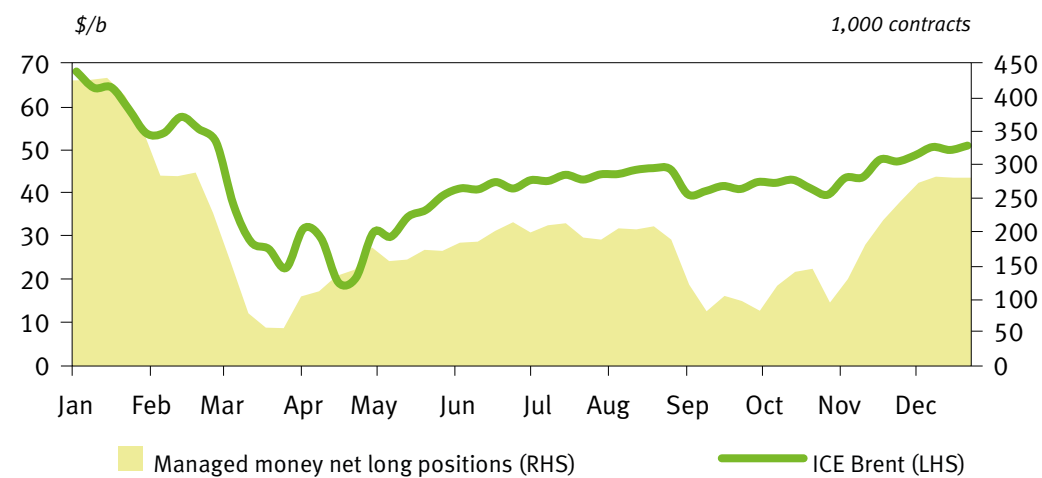
Crude oil futures prices experienced a severe downward trend in 1Q20, with ICE Brent falling about \$44, or 66%, over the quarter and NYMEX WTI dropping by \$41, or 67%. Oil prices continued to settle lower in April amid a sharp contraction in the global economy and an unprecedented demand shock due to the emergence of COVID-19 in December 2019, and its rapid spread worldwide. Governments around the world took drastic measures to contain the pandemic by confining billions of people, who were requested to stay home and enact social distancing measures, as well as lockdowns and travel restrictions, which caused an abrupt slowdown in global

Figure 2
NYMEX WTI price versus managed money net long positions, 2020



Source
 Commodity Futures Trading Commission, CME Group and OPEC.

Figure 3
ICE Brent price versus speculative activity, 2020



Source
 Intercontinental Exchange and OPEC.

economic activity and an historic oil demand shock. Meanwhile, the global oil supply continued to grow, resulting in large increases in crude oil stocks worldwide and creating an unprecedented surplus in the market. Futures prices hit historically low levels in March and April, amid worries that the expected surplus on the market could exceed global oil storage capacity in 2Q20 and overwhelm oil supply chains and logistics. Oil prices remained extremely volatile, and the CBOE Crude Oil Volatility Index rose to its highest value on record in April.

Crude oil futures prices recovered slightly in the first week of April on optimism that international cooperation to adjust crude oil supply would reduce the glut in the oil market. However, prices failed to stabilize, and the upward trend reversed, starting a steep price decline in the second part of April.

The NYMEX WTI prompt contract plunged to an unprecedented low, trading at a negative price for the first time ever, reaching its low point at $-\$37.63/\text{b}$ on 20 April, reflecting the panic in the market, especially in the US, and demonstrating how investors can react when oil logistical limits are tested. The historic drop was a combination of extremely weak oil market fundamentals in the US and probably a dysfunction in the futures market. An Interim Staff Report from the Commodity Futures Trading Commission on trading and volatility in the NYMEX WTI crude oil futures contract, released on 23 November, has provided only limited insight into the factors that led to negative prices on 20 April, a criticism widely shared by market participants. The price decline came one day before expiry of the front-month May NYMEX WTI contract on 21 April amid low liquidity and a delivery problem for physical May crude at the landlocked Cushing, Oklahoma, trading hub, the delivery

point for US crude contracts.

Global oil market fundamentals witnessed a significant improvement after the bleak month of 'Black April'. They continued to recover gradually over 2H20, mainly supported by historic decisions taken at the 9th and 10th (Extraordinary) OPEC and non-OPEC Ministerial Meetings, which brought about sharp supply adjustments to ease the market overhang and help return stability. Strong conformity levels to the supply adjustments from participating countries of the DoC, in addition to the decision by some participating countries to compensate for overproduced volumes, added confidence to the market and helped improve oil market conditions. The easing of the oil market overhang and gradual oil demand recovery, along with easing related-COVID-19 restrictions and declining global oil stocks, specifically floating storage, helped push futures prices higher in 2H20. On a quarter-on-quarter basis, ICE Brent and NYMEX WTI rose by $\$9.96$ and $\$12.92$, respectively, or 30% and 46%, in 3Q20, to average $\$43.34/\text{b}$ and $\$40.92/\text{b}$. Nonetheless, futures prices turned downward in September and October due to a worsening global oil demand outlook following a spike in, or second wave of, global COVID-19 infections, including in main consuming regions, such as Europe, the US, India and Latin America.

Crude oil futures prices returned to an up-trend over November and December, buoyed by COVID-19 vaccine developments and the initiation of COVID-19 vaccines in several regions. Many countries approved different vaccines, which brightened the outlook for global oil demand and offset concerns about the rise of infections. Oil prices also rose on firm crude oil demand in the Asia-Pacific region, specifically in China and India. The market consolidated further amid a brighten-

ing global oil market balance outlook after OPEC and participating non-OPEC countries of the DoC decided in early December to voluntarily undertake modest production adjustments from January 2021 and agreed to extend the compensation period. In December, ICE Brent and NYMEX WTI jumped by 14.2% and 13.8%, respectively, m-o-m, reaching their highest levels since February of 2020. Nonetheless, concerns about new variants of the COVID-19 virus in the UK and other countries slowed the uptrend in oil prices.

The spread between ICE Brent and NYMEX WTI benchmarks narrowed significantly in 2020, falling by \$3.26, or 45.7%, to \$3.87/b on a yearly average, as the WTI price performed better than Brent. The WTI benchmark's performance reflected the easing supply glut in Cushing, Oklahoma and the Permian Basin. The increase in pipeline transportation capacity from PADD2 and PADD3 to the USGC, which exceeded production levels in these regions, led to a narrowing of the Brent-WTI spread. Declining US crude oil production and lower crude flow to the Cushing trading hub also contributed to narrowing the transatlantic spread. The ICE Brent/NYMEX WTI spread narrowed over 1Q20 and reached its lowest daily level in March and early April since November 2016, as the WTI price was supported by expanding pipeline takeaway capacity from the Permian region to the USGC, hence lessening flow to the Cushing, Oklahoma, trading hub. Rising US crude oil exports also played a role. However, the Brent-WTI spread widened again in April after the spread of the COVID-19 pandemic caused a sharp collapse in the NYMEX WTI price amid a large glut in the US PADD2 and PADD3 regions and a large build in US crude oil stocks due to a sharp decline in US oil demand and significant refinery run cuts.

The spread recovered gradually over 2Q20 to stand below \$3/b in June and over 3Q20 amid a drop in US crude oil stocks of around 50 million barrels (mb) between early June and mid-October, as well as lower-than-expected US crude oil production, specifically tight oil production, which contributed to supporting WTI compared with Brent-related grades. The ICE Brent/NYMEX WTI spread widened slightly in November and December month-on-month (m-o-m) as the value of Brent strengthened on continued easing of the global oil supply overhang and declining floating storage in the Atlantic Basin, thanks to robust demand from the Asia-Pacific region. However, the increase in WTI price slowed amid high crude oil stocks at Cushing, Oklahoma, which remained at about 58 mb on average during the four weeks of December, according to US Energy Information Administration data. Furthermore, US refinery utilization remained low on average at about 79% of operable capacity during the four weeks of December, when the ICE Brent/NYMEX WTI spread averaged \$3.15/b.

In terms of speculative activity, hedge funds and other money managers sharply cut their bullish positions in both ICE Brent and NYMEX WTI contracts in 1Q20, amid declining crude oil prices. Speculators reduced their net long positions by around 87% between early January and late March on weakening global oil market fundamentals, exacerbated by the demand shock and contraction of the global economy due to the COVID-19 pandemic. NYMEX WTI speculative net long positions also fell by about 56% during the same period. However, speculators started recovering net long positions in both contracts from April, as they bet that oil prices would recover after hitting their lowest level in about two decades, along

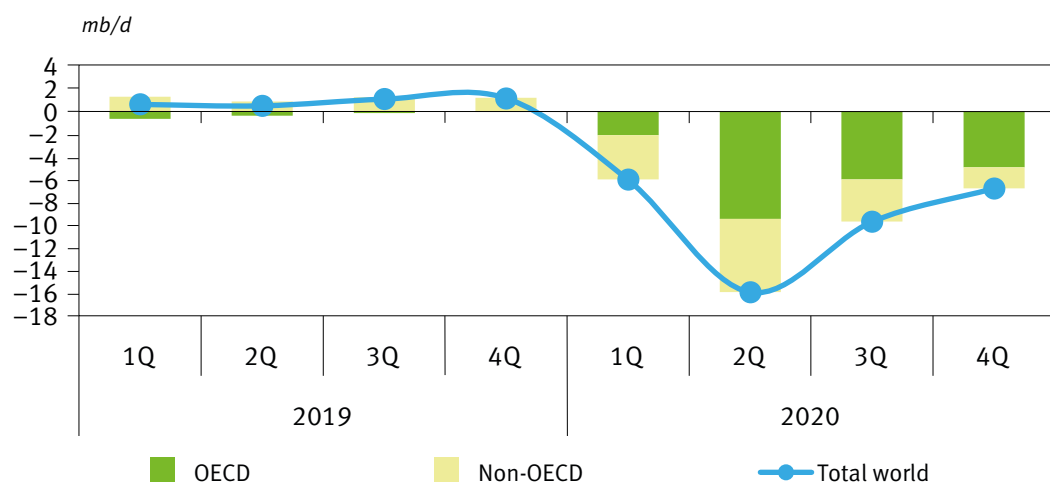
with expectations that the global production adjustment agreement could ease the surplus. Nonetheless, the rising of net long positions in 2Q20 was concentrated most in the NYMEX WTI contract. Between late March and late June, NYMEX WTI net long positions rose by 242,885 lots, or 192%, to 369,335 contracts, while ICE Brent net long positions rose by 157,772 lots, or 280%, to 214,141 contracts. From May, hedge funds and other money managers exhibited cautiousness, keeping their net long positions little changed between June and early August due to high uncertainty regarding the global oil demand outlook, as a worldwide surge of COVID-19 infections led to the reimposition of lockdowns in some regions. In September and October, speculators turned less bullish, as the outlook for the supply and demand balance worsened further amid a stalling global oil demand recovery

and worries about the impact of a second wave of COVID-19. However, speculators turned positive on the outlook of oil prices in November and December and continued to boost bullish wagers and close out bearish positions amid prospects for improving global oil demand fundamentals, driven by COVID-19 vaccine developments and expectations of a delay in the planned easing of DoC oil production adjustments. Combined futures and options net long positions in ICE Brent and NYMEX WTI rose in December to their highest levels since January 2020, providing additional momentum to the ongoing steady gains seen in crude oil prices. By the end of the week of 29 December, money managers held net long positions equivalent to about 614 mb in the two main crude oil futures and options contracts, the highest level since January 2020.

Market structure

Figure 4

World oil demand by main region, y-o-y growth, 2019–2020



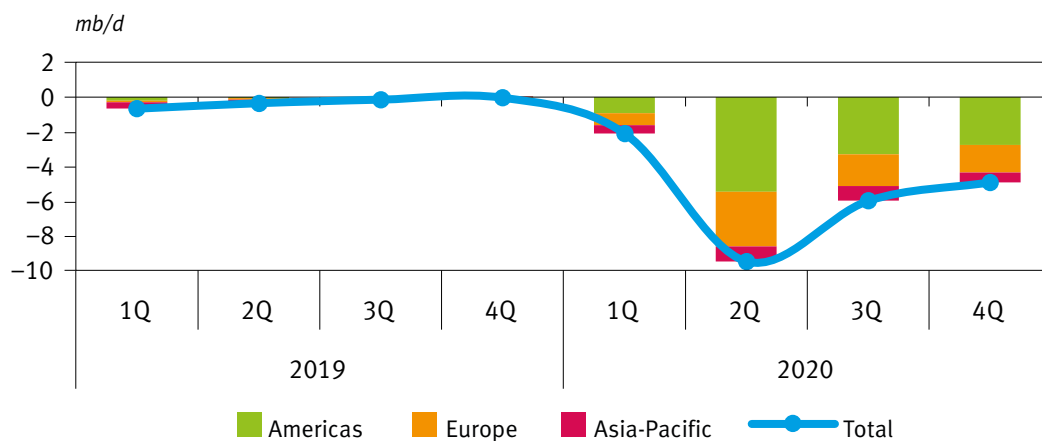
Source
OPEC Secretariat.

The term structure of all crude benchmarks moved gradually from backwardation to contango in 1Q20 on deteriorating global oil market fundamentals and rising global oil stocks. The term structures of futures prices moved deeper into contango in late March and April to reach an unprecedented supercontango, as prompt prices were heavily impacted by rapid increases in oil stocks worldwide, particularly in the US. Nonetheless, between May and July, the contango structure of oil futures prices flattened considerably in all three markets, suggesting that supply-demand fundamentals were gradually returning to balance from an unprecedented global oil surplus witnessed in March and April, even as global oil stocks remained elevated. Oil futures prices remained in contango in 3Q20 and in October amid high global oil stocks. In November, prompt ICE Brent time spreads flipped into

backwardation for several sessions in the second part of the month and the rest of the curve remained in shallow contango, while the front of the DME Oman crude forward curve moved deeper into backwardation over the month. Prompt month futures prices rose sharply in November compared with forward months on growing optimism about COVID-19 vaccines that could accelerate the global oil demand recovery, in addition to strong crude demand from Asia. The markets remained optimistic about a possible delay in the planned easing of crude production adjustments by participating DoC countries.

The futures price structure strengthened further in December, and the front of the ICE Brent forward curve stood in backwardation most of the month. The DME Oman and Dubai price structures remained in backwardation, reflecting expectations of tighter sour supply, a more balanced oil market and lower

Figure 5
OECD oil consumption by quarter and region, y-o-y growth, 2019–2020



Source
OPEC Secretariat.

global crude oil inventory levels, specifically global floating storage. These movements were mainly due to production adjustments by OPEC and participating non-OPEC producers in the DoC and the gradual recovery of oil demand, mainly in the Asia-Pacific region. The NYMEX WTI forward curve improved slightly in December, though it remained in contango, mirroring supply/demand market fundamentals in and around the US trading hub at Cushing, Oklahoma.

World oil demand in 2020

The largest-ever losses in world oil demand, 9.6 mb/d year-on-year (y-o-y), occurred in 2020 as a result of the COVID-19 pandemic, which also prompted a relative break in the established relationship between oil demand and global economic growth. While demand for all petroleum products declined sharply,

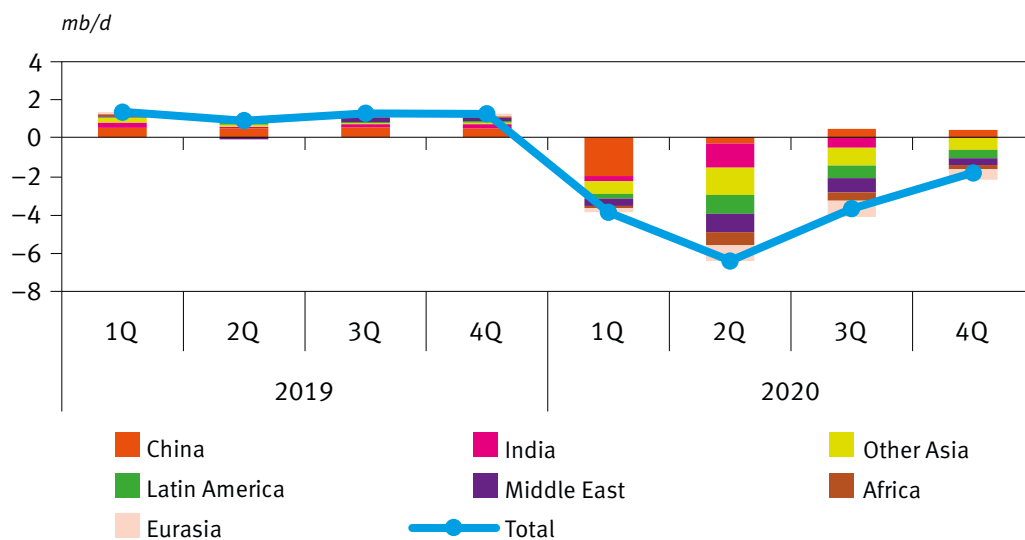
the transportation sector, and aviation in particular, was disproportionately affected.

Within the OECD, all three major regions showed sharp declines in 2020, although of differing degrees. In the Americas, oil demand for the petrochemical sector partially offset large losses in gasoline, jet kerosene and diesel, leading to a y-o-y decline of 3.1 mb/d. In Europe, lockdown measures were the most stringent and longest lasting during 2Q20 and 4Q20, leading to a y-o-y decline of 1.8 mb/d. Oil demand in the Asia-Pacific was the least affected, declining by only 0.7 mb/d y-o-y.

In the non-OECD region, oil demand declines in 2020 were less pronounced. Following a drop in 1H20, China's oil demand returned to positive growth in 2H20 – supported by successful containment of the pandemic and a healthy petrochemical sector – to show a y-o-y decline of 0.4 mb/d. In India

Figure 6

Non-OECD oil consumption by region and quarter, y-o-y growth, 2019–2020



Source
OPEC.

and Other Asia, oil demand fell on the back of restricted mobility, particularly during 1H20, but improved thereafter, to decline y-o-y by 0.5 mb/d and 0.9 mb/d, respectively, for the whole of 2020.

OECD America

Oil demand data for 2020 indicate falling oil demand in OECD Americas by around 3.1 mb/d compared with the same period in 2019, led by the US. In terms of petroleum products, transportation fuels suffered substantially in 2020, with gasoline weakening the most y-o-y, followed by jet fuel. COVID-19 significantly impaired transportation fuels, as economic activity came to a near standstill in 2Q20 and unemployment soared. Additionally, delays in the start-up of a number of ethane crackers aggravated the negative impact on demand for light distillates. However, demand for plastics remained somewhat healthy during the lockdowns due to an increase in single-use plastics and an uptick in the health sector. Light distillates registered marginal increases compared with 2019. Diesel demand was also down compared with 2019, despite higher demand for heating fuel. Diesel was affected by generally slower industrial activity, particularly in the US. In Mexico, oil demand was steeply down y-o-y, with gasoline, jet/kerosene and diesel accounting for the bulk of the decline. Canadian oil demand shrank largely due to weak gasoline and jet kerosene requirements.

OECD Europe

European oil demand fell by 1.8 mb/d in 2020, with losses originating mainly in transportation fuel. Demand for petroleum products declined sharply in the region and in the four main consuming countries. Oil demand in the UK and France shrank by around 0.3

mb/d each and in Germany and Italy by approximately 0.2 mb/d each, compared with 2019. Oil demand losses were attributed to weaker consumption of jet fuel, road diesel and gasoline, as well as light distillates. COVID-19 containment measures contributed to declining oil consumption across the region, with significant variations between countries. Other important indicators also declined in 2020, such as new passenger car registrations. This index fell by an average of 35% in 2020 compared with 2019, as reported by the European Automobile Manufacturers' Association and Haver Analytics. Furthermore, industrial production, despite marginal improvements towards the end of the year, remained sharply down in all four major economies, exacerbating the negative impact on diesel demand. Some surprising support emerged from increased heating fuel requirements for winter stocking, largely due to cheaper retail prices compared with 2019.

OECD Asia-Pacific

Oil demand fell by approximately 0.7 mb/d in the whole of the OECD Asia-Pacific region. Similar to other OECD and non-OECD regions, the negative impact resulted from slowing economic momentum due to COVID-19. Japanese oil demand fell by an average of 0.5 mb/d compared with 2019. Industrial production remained negative, showing a slight improvement in 2H20 compared with 1H20. Vehicle sales also posted grim data, dropping sharply after 4Q19 to average a decline of –10.3% in 2020. The data are reported by Japan's Ministry of Economy, Trade and Industry; Japan Auto Dealers; Manufacturers' Association; and Haver Analytics. South Korea's oil demand fell by 0.1 mb/d during the same period, with major losses for naphtha, jet kerosene and diesel. In Australia, demand fell by almost 0.2 mb/d

Table 1
World oil demand and supply balance, 2017–2020

	2017	2018	2019	1Q20	2Q20	3Q20	4Q20	2020
World oil demand and supply balance								
World demand (mb/d)								
Americas	25.11	25.73	25.65	24.35	20.01	22.72	23.04	22.53
of which US	20.27	20.82	20.86	19.67	16.38	18.67	18.83	18.39
Europe	14.41	14.32	14.25	13.35	11.03	12.85	12.50	12.44
Asia-Pacific	8.15	7.95	7.79	7.75	6.54	6.69	7.42	7.10
Total OECD	47.68	47.99	47.69	45.44	37.58	42.26	42.97	42.07
China	12.47	13.01	13.48	10.94	13.25	13.87	14.28	13.09
India	4.53	4.73	4.91	4.84	3.58	4.01	5.15	4.40
Other Asia	8.69	8.91	9.04	8.30	7.79	8.11	8.33	8.13
Latin America	6.51	6.53	6.59	6.11	5.61	6.20	6.12	6.01
Middle East	8.23	8.13	8.20	7.88	6.91	7.94	7.65	7.60
Africa	4.20	4.33	4.45	4.37	3.77	3.95	4.28	4.09
Eurasia	5.36	5.50	5.61	5.21	4.58	4.85	5.35	5.00
of which Russia	3.48	3.55	3.61	3.44	3.04	3.20	3.43	3.28
of which other Eurasia	1.88	1.95	2.00	1.78	1.54	1.65	1.92	1.72
Total non-OECD	49.99	51.14	52.29	47.65	45.49	48.94	51.16	48.32
(a) Total world demand	97.67	99.13	99.98	93.10	83.07	91.20	94.13	90.39
Y-o-y change	1.79	1.46	0.85	-6.01	-15.91	-9.72	-6.77	-9.60
Non-OPEC liquids production								
Americas	21.51	24.05	25.77	26.59	23.55	24.10	24.63	24.72
of which US	14.42	16.69	18.43	19.05	16.81	17.34	17.27	17.61
Europe	3.83	3.84	3.71	4.03	3.88	3.77	3.87	3.89
Asia-Pacific	0.39	0.41	0.52	0.53	0.54	0.54	0.52	0.53
Total OECD	25.73	28.30	30.01	31.16	27.97	28.41	29.02	29.14
China	3.97	3.98	4.04	4.13	4.12	4.13	4.08	4.12
India	0.86	0.86	0.82	0.79	0.76	0.76	0.75	0.77
Other Asia	2.80	2.72	2.69	2.61	2.47	2.46	2.46	2.50
Latin America	5.72	5.79	6.09	6.35	5.83	6.14	5.91	6.06
Middle East	3.14	3.21	3.20	3.19	3.20	3.15	3.17	3.17
Africa	1.50	1.50	1.50	1.44	1.44	1.40	1.37	1.41
Eurasia	14.46	14.72	14.80	14.95	13.41	12.85	13.27	13.62
of which Russia	11.33	11.52	11.61	11.68	10.38	10.01	10.31	10.59
of which other Eurasia	3.14	3.20	3.19	3.28	3.03	2.84	2.96	3.03
Total non-OECD	32.45	32.78	33.14	33.46	31.22	30.89	31.01	31.64
Total non-OPEC production	58.18	61.08	63.15	64.61	59.20	59.30	60.03	60.78
Processing gains	2.22	2.25	2.26	2.15	1.85	2.15	2.15	2.07
Total non-OPEC liquids production	60.40	63.33	65.41	66.76	61.05	61.45	62.17	62.85
OPEC NGL + non-conventional oils	5.18	5.33	5.26	5.35	5.09	5.04	5.05	5.13
(b) Total non-OPEC liquids production and OPEC	65.58	68.66	70.67	72.11	66.14	66.48	67.23	67.98
Y-o-y change	0.88	3.09	2.01	2.13	-3.98	-3.98	-4.88	-2.69
OPEC crude oil production (secondary sources)	31.48	31.34	29.34	28.24	25.58	23.86	24.95	25.65
Total liquids production	97.06	100.01	100.01	100.35	91.72	90.34	92.17	93.63
Balance (stock change and miscellaneous)	-0.61	0.88	0.03	7.25	8.65	-0.86	-1.96	3.25
OECD closing stock levels (mb)								
Commercial	2,860	2,875	2,889	2,978	3,214	3,178	3,063	3,063
SPR		1,569	1,552	1,535	1,537	1,561	1,551	1,541
Total	4,428	4,427	4,425	4,515	4,776	4,730	4,604	4,604
Oil-on-water	1,025	1,058	1,011	1,186	1,329	1,174	1,148	1,148
Days of forward consumption in OECD (days)								
Commercial onland stocks	60	60	69	79	76	74	70.748	68.623
SPR		33	33	36	41	37	36	35.586
Total	92	93	105	120	113	110	106.33	103.14
Memo items								
(a) – (b)	32.09	30.47	29.31	20.99	16.93	24.72	26.90	22.40

Note

Totals may not add up due to independent rounding.

Source

OPEC.

in 2020, with gasoline and jet kerosene accounting for the bulk of the losses.

Non-OECD

China

In 2020, China's oil demand declined by 0.4 mb/d compared with 2019. Most of this was registered in 1Q20 during the onset of COVID-19, which eliminated substantial volumes of petroleum product demand in the country. Data from 1Q20 shows a drop of more than 2.0 mb/d compared with the same period in 2019. However, improvements in oil requirements were observed thereafter, with 2Q20 data showing notable expansion, while 2H20 data shows gains compared with the same period in 2019. Weakness was seen in transportation fuel, particularly jet fuel, which declined substantially y-o-y. Gasoline was also affected by the

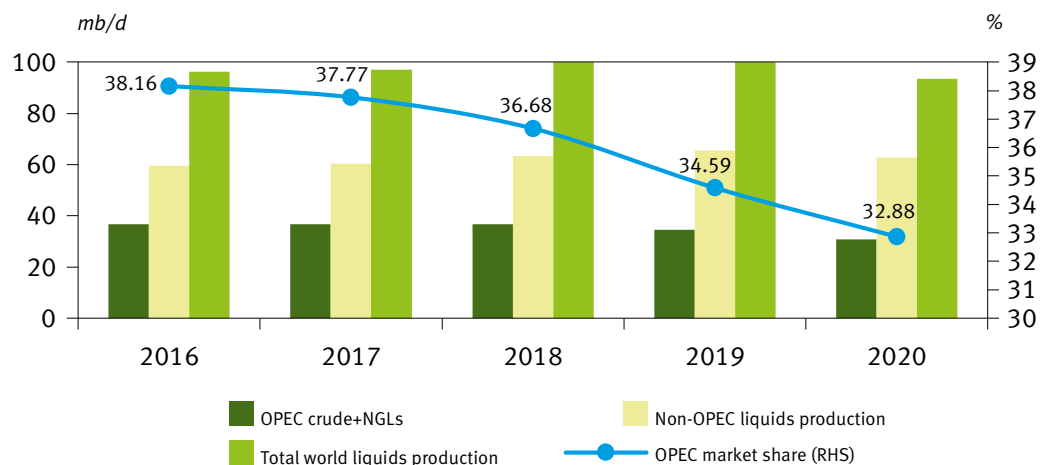
economic slowdown in 1Q20. COVID-19 containment measures, particularly those that restricted mobility, affected transportation fuel demand, particularly in 1Q20. Diesel also fell compared with 2019, though positive developments in industrial activity supported stronger demand for fuel in the sector in 2H20. Light distillates outperformed initial expectations and recorded gains y-o-y, particularly naphtha, which posted a healthy rise compared with 2019.

Other Asia – India

Indian oil demand data indicates falling oil requirements for 2020, by 0.5 mb/d y-o-y, led by a steep weakening in transportation fuel, mainly in 2Q20. Extended lockdown measures, coupled with limitations on mobility, diminished oil product requirements. Gasoline and jet fuel recorded historical declines compared with the same period in 2019. In

Figure 7

OPEC¹, non-OPEC² and total world supply, as well as OPEC market share, 2016–2020



Notes

¹ OPEC – including OPEC NGLs+non-conventional oils.

² Non-OPEC – including processing gains.

Source

OPEC.

line with that, vehicle sales posted a drop in 2020, falling by around 30% compared with 2019, as reported by the Society of Indian Automobile Manufacturers and Haver Analytics. Additionally, weak aviation sector activity resulted in declining international and domestic flight operations. Diesel was down, in line with weakness in industrial activity, as well as in road construction and agriculture. Industrial production was historically low for most of 2020. The indicator dropped by more than 11% in 2020, with most declines appearing in 2Q20. Light distillates, liquefied petroleum gas and naphtha also faced pressure due to slower industrial activity.

Latin America

The impact of COVID-19 on Latin America's economy is reflected in oil demand data for 2020. Oil demand declined by around 0.6 mb/d compared with 2019. Gasoline de-

mand suffered the most during this period, while the other product categories, including ethanol, were also sharply lower during the same period. A drop in miles travelled during lockdown was noticeable across many economies, particularly in Brazil and Argentina. This was compounded by a deterioration in vehicle sales data and major challenges facing the region's economy.

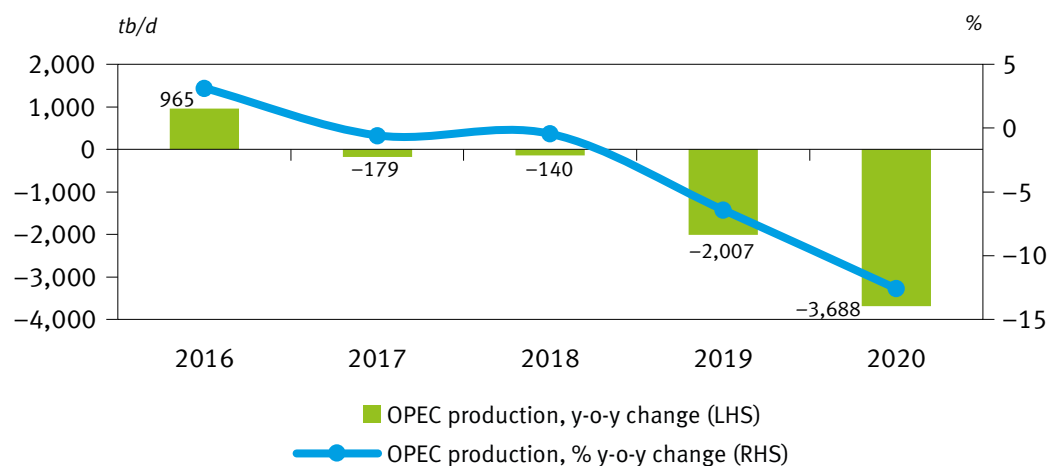
Middle East

Data for 2020 show a decline of 0.6 mb/d compared with the same period in 2019, with gasoline and jet fuel suffering the most damage. Direct crude burning for power generation was only slightly in negative territory. Rising air-conditioning utilization during the summer, coupled with required lockdown measures, contributed positively in Saudi Arabia, Iraq and Kuwait.

World oil supply in 2020

Figure 8

Year-on-year percentage change in OPEC production, 2016–2020



Source
OPEC.

According to preliminary estimates, the world liquids supply declined by 6.4 mb/d to average 93.6 mb/d. OPEC crude production decreased by 3.7 mb/d y-o-y to average 25.6 mb/d. Impacted by a collapse in demand and prices due to the COVID-19 pandemic, liquids output from non-OPEC producers fell by 2.6 mb/d. The non-OPEC countries showing the largest liquids supply declines in 2020 were Russia, the US, Canada, Colombia, Kazakhstan and Malaysia, while oil production increases were seen primarily in Norway, Brazil, China and Guyana.

OPEC natural gas liquids (NGLs) and unconventional liquids output averaged 5.1 mb/d, representing a drop of 0.13 mb/d y-o-y.

Non-OPEC countries produced an aver-

age of 62.8 mb/d of liquids, including processing gains, indicating a contraction of 2.6 mb/d in 2020. In terms of the breakdown, non-OPEC countries produced 43.43 mb/d of crude oil (–2.40 mb/d y-o-y), 11.25 mb/d of NGLs (+0.30 mb/d y-o-y) and 6.08 mb/d of unconventional liquids (–0.28 mb/d y-o-y). Processing dropped by 0.19 mb/d to average 2.07 mb/d in 2020.

Non-OPEC supply

The non-OPEC liquids supply averaged 62.85 mb/d in 2020, a decline of 2.56 mb/d over the previous year. The drop was driven by Eurasia (–1.19 mb/d), OECD Americas (–1.06 mb/d), Other Asia (–0.19 mb/d), Af-

Table 2
OPEC crude oil production based on secondary sources, 2016–2020 (tb/d)

	2016	2017	2018	2019	1Q20	2Q20	3Q20	4Q20	2020	Change 2020/19
Algeria	1,105	1,047	1,042	1,022	1,016	878	840	857	897	–125
Angola	1,718	1,634	1,505	1,401	1,373	1,260	1,211	1,171	1,253	–148
Congo	216	252	317	324	295	296	286	273	287	–37
Equatorial Guinea	160	133	125	117	122	110	112	110	114	–4
Gabon	221	200	187	208	195	201	186	182	191	–18
IR Iran	3,515	3,813	3,553	2,356	2,052	1,949	1,948	1,993	1,985	–371
Iraq	4,392	4,446	4,550	4,678	4,560	4,127	3,697	3,817	4,049	–630
Kuwait	2,853	2,708	2,745	2,687	2,741	2,460	2,245	2,293	2,434	–253
Libya	389	811	951	1,097	348	84	121	916	368	–728
Nigeria	1,556	1,658	1,718	1,786	1,808	1,624	1,468	1,450	1,587	–199
Saudi Arabia	10,406	9,954	10,311	9,771	9,796	9,212	8,766	8,962	9,182	–588
UAE	2,979	2,916	2,986	3,094	3,202	2,880	2,617	2,515	2,802	–292
Venezuela	2,154	1,911	1,354	796	730	501	362	408	500	–297
Total OPEC	31,663	31,484	31,344	29,337	28,238	25,582	23,858	24,946	25,649	–3,688

Note

Totals may not add up due to independent rounding.

Source

OPEC.

Table 3

OPEC crude oil production based on direct communication, 2016–2020 (tb/d)

	2016	2017	2018	2018	1Q20	2Q20	3Q20	4Q20	2020	Change 2020/19
Algeria	1,146	1,059	1,040	1,023	1,018	874	843	862	899	–124
Angola	1,722	1,632	1,473	1,373	1,402	1,267	1,253	1,186	1,277	–96
Congo	225	263	323	329	308	311	296	285	300	–29
Equatorial Guinea	n/a	129	120	110	126	107	115	106	114	4
Gabon	229	210	193	218	224	227	201	178	207	–10
IR Iran	3,651	3,867	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Iraq	4,648	4,469	4,410	4,576	4,490	4,088	3,625	3,796	3,998	–578
Kuwait	2,954	2,704	2,737	2,678	2,744	2,474	2,245	2,293	2,438	–240
Libya	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Nigeria	1,427	1,536	1,602	1,737	1,761	1,515	1,351	1,283	1,477	–261
Saudi Arabia	10,460	9,959	10,317	9,808	9,755	9,317	8,813	8,975	9,213	–595
UAE	3,088	2,967	3,008	3,058	3,173	2,921	2,525	2,501	2,779	–279
Venezuela	2,373	2,035	1,510	1,013	821	568	395	450	557	–455
Total OPEC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Note

Totals may not add up due to independent rounding.

rica (–0.08 mb/d), India (–0.06 mb/d), Latin America (–0.04) and the Middle East (–0.02). In contrast, oil supply increased in OECD Europe (0.18 mb/d), China (0.07 mb/d) and OECD Asia-Pacific (0.01 mb/d).

OECD Americas

OECD Americas liquids supply experienced the largest decline among the OECD regions in 2020 by 1.06 mb/d. US supply fell by 0.81 mb/d y-o-y, followed by Canada, with a 0.24 mb/d y-o-y decline. US crude oil production in 2020 is estimated to have declined by 0.93 mb/d to average 11.31 mb/d. Production from the Gulf of Mexico is estimated to have dropped by 0.24 mb/d to average 1.65 mb/d, and onshore conventional crude is estimated to have declined by 0.24

mb/d to average 2.36 mb/d, largely due to the continued shut in of stripper wells. The latest estimation for tight crude production in 2020 shows a contraction of 0.46 mb/d y-o-y to average 7.30 mb/d. US NGLs production in 2020 showed growth of 0.34 mb/d y-o-y to average 5.16 mb/d, of which 4.26 mb/d comes from unconventional NGLs. Finally, unconventional liquids, mainly ethanol, are likely to have declined by 0.21 mb/d to average 1.15 mb/d.

OECD Europe

OECD Europe's liquids production in 2020 is estimated to have grown by 0.18 mb/d to average 3.89 mb/d. Higher oil production in Norway was the main reason for growth in 2020. Norway's oil supply for the

year is now estimated to have grown by 0.27 mb/d to average 2.00 mb/d. The UK's oil supply in 2020 is expected to decline by 0.07 mb/d to average 1.07 mb/d.

OECD Asia-Pacific

In OECD Asia-Pacific, liquids production is estimated to have risen by 0.01 mb/d to average 0.53 mb/d in 2020, compared with growth of 0.11 mb/d y-o-y in 2019.

Non-OECD

Non-OECD liquids production for 2020 is estimated to have declined by 1.50 mb/d y-o-y and average 31.64 mb/d. China's liquids supply is estimated to have grown by 0.07 mb/d y-o-y to average 4.12 mb/d. The impact of COVID-19 lockdowns and consequent lower demand dampened India's crude oil production in 2020, with output estimated to have contracted sharply by 0.06 mb/d y-o-y to average 0.77 mb/d.

Oil production in Other Asia is estimated to have declined by 0.19 mb/d to average 2.50 mb/d, with the steepest yearly decline seen in Malaysia, Thailand and Vietnam by 80 thousand barrels per day (tb/d), 51 tb/d and 29 tb/d, respectively. Meanwhile, Latin America is estimated to have also declined by 0.03 mb/d y-o-y, with growth in Brazil and Guyana offset by heavy declines in Colombia of 0.11 mb/d, in Ecuador of 0.05 mb/d and in Argentina of 0.04 mb/d, mainly due to the shutting in of wells in costly oil fields, to average 6.06 mb/d. Oil production in the Middle East is estimated to have declined by 0.03 mb/d y-o-y to average 3.17 mb/d, while Africa is estimated to have declined by 0.08 mb/d y-o-y to average 1.41 mb/d. Oil production in Eurasia is estimated to have declined by 1.19 mb/d y-o-y to average 13.62 mb/d.

OPEC crude oil production

According to secondary sources, OPEC crude oil production averaged 25.65 mb/d in 2020, a drop of 3.69 mb/d over the previous year. Year-on-year, production in 2020 decreased in Algeria by 0.13 mb/d, Angola by 0.15 mb/d, Congo by 0.04 mb/d, Equatorial Guinea by 4 tb/d, Gabon by 0.02 mb/d, the Islamic Republic of Iran (IR Iran) by 0.37 mb/d, Iraq by 0.63 mb/d, Kuwait by 0.25 mb/d, Libya by 0.73 mb/d, Nigeria by 0.20 mb/d, Saudi Arabia by 0.59 mb/d, the United Arab Emirates (UAE) by 0.29 mb/d and Venezuela by 0.30 mb/d. OPEC crude's share of the global liquids supply in 2020 decreased by 1.72% to 32.88%, from 34.59% in 2019.

OPEC NGLs and non-conventional oil

OPEC NGLs and non-conventional oil are estimated to have averaged 5.13 mb/d in 2020, including 5.02 mb/d of NGLs and 0.11 mb/d of non-conventional oil, representing an annual decline of 0.13 mb/d. NGL production increased in IR Iran by 39 tb/d and was unchanged in Congo and Gabon, while decreasing in all other Member Countries.

Transportation

Dirty tanker freight rates

The tanker market began 2020 in a buoyant state after a robust end to the previous year, with both fundamental and non-fundamental factors supporting healthy rates. Seasonal factors and IMO 2020 preparations kept shipowners active in January 2020. Rates took a sharp downturn in February to below y-o-y levels, as the outbreak of COVID-19 disrupted crude flows to China and following a surprise announcement that the US was lifting sanctions on a subsidiary of China's

state-owned shipping company Cosco, which immediately boosted tanker availability. The sanctions had been the main impetus behind a spike in prices the previous October. At the end of February, most analysts expected the market to settle down to a quiet second quarter, although that was not to be.

Clean tanker freight rates

March and April set records in the tanker market. While other segments of the oil market were reeling from the collapse in crude prices, the surge in crude oil exports, starting in early March and then continuing through April, pushed spot freight rates for very large crude carriers to their highest level since 2008. The collapse in crude futures prices sharply widened the market contango, triggering trading houses to fix tankers for floating storage. Moreover, fears of commercial crude oil stocks reaching capacity levels also led to a sudden need to export crude to overseas inventories, adding further pressure to the market.

By May, however, the factors driving gains in tanker spot freight rates had dissipated, causing rates to fall sharply from record levels. The implementation of historic production adjustments by OPEC and participating non-OPEC producers in the DoC led to a massive decline in crude exports, compounded by cuts in outflows from producers such as the US, Norway and Canada. Floating storage and unloading delays due to port congestion kept some strength in the market though, along with record-high imports by China, which peaked at 1.3 mb/d in June. By then, spot freight rates had fallen below y-o-y levels, where they remained until the end of the year, as lockdown measures to combat COVID-19 and high oil inventory levels weighed on demand for crude and product trade flows,

while production adjustments to balance the market further dampened tonnage demand.

Oil trade

Major trends in 2020

As with most segments of the oil market and the global economy as a whole, the disruptions caused by the COVID-19 pandemic led to considerable volatility in crude and product trading in 2020, with a number of records set on both sides of the spectrum.

US

After a relatively strong start to the year in January and February, US crude and product trade began to feel the impact of the pandemic by the start of the second quarter. In April, US crude imports bottomed out at 5.5 mb/d, as COVID-19 lockdowns weighed on fuel consumption, before surging to 6.4 mb/d by June, with a strong influx of long-haul cargoes. Crude imports fell steadily over the next three months, bottoming out at an almost three-decade low of 5.2 mb/d in September. In contrast, US crude exports hit a record high of 3.7 mb/d in February before declining over the next four months to 2.8 mb/d in June and then fluctuating around 3.0 mb/d, supported by strong Chinese buying. US crude imports finished 2020 near multi-decade lows, averaging 5.6 mb/d in December. In annual terms, US crude inflows averaged 5.9 mb/d in 2020, some 0.9 mb/d below the previous year and the lowest figure since 1991. Meanwhile, US crude exports edged up in December to finish the year just below 3 mb/d. This was some 2% higher than in the previous month but almost 18% below the level seen in the same month of the previous year, when steadily rising pipeline capacity facilitated then-record-high US crude exports. In yearly terms,

US crude exports averaged 3.1 mb/d in 2020, a gain of 0.2 mb/d over the previous year.

China

China, which took advantage of low crude prices to stock up on inventories, played an important role in supporting market stability on the consumer side. At the start of the year, Chinese crude imports were depressed due to the early impact of COVID-19 lockdowns. However, by May, inflows of crude to China had broken the 11 mb/d mark for the first time, continuing on to average 13.0 mb/d in June, testing the country's intake infrastructure. Amid related port congestion, Chinese crude imports remained high over the next four months, with September averaging 11.8 mb/d. China's crude imports hit a three-year low in December, averaging 9.1 mb/d. The decline came as independents were largely absent from the market and a backlog of ships waiting offshore cleared. Early indications point to a rebound in crude imports at the start of the year as independents received a fresh round of quotas. Complete data for 2020 show China set a new record high for crude imports last year, averaging 10.9 mb/d, an increase of 0.7 mb/d over the previous year. This surpasses the US record high of 10.2 mb/d set in 2005.

India

India managed to take more crude earlier in the year, as the country was impacted by COVID-19 later than elsewhere in the region. However, lockdown measures quickly undermined demand, and given the country's limited strategic and commercial inventories relative to China, they topped out by mid-May. Together with reduced consumption, this pushed India's crude imports below 4.0 mb/d for the first time since October 2015.

The country's crude imports continued to see healthy m-o-m gains in December, averaging 4.8 mb/d, the first y-o-y gain in eight months and the country's second-highest on record. In annual terms, India's crude imports averaged 4.0 mb/d in 2020, a decline of almost 11% y-o-y, representing a four-year low. Product imports saw a sharp 23% m-o-m increase in December, averaging 1.2 mb/d, with gains across all major products except naphtha. In 2020, India's product imports averaged above 1.0 mb/d for the first time on record, rising by 12% to average 1.2 mb/d in December, with gains led by diesel and naphtha. In annual terms, product exports were 11% lower y-o-y.

Japan

Elsewhere, Japan's crude imports fell to an average of 1.9 mb/d in June, the lowest on record, going back to at least 2006. For OECD Europe, crude imports hit their lowest point since at least 2005, while exports were volatile due to sporadic buying by Chinese independents amid high volumes from the Johan Sverdrup field, with exports in April moving above 0.8 mb/d for the first time since 2005. Japan's crude imports averaged 2.5 mb/d in 2020, the lowest average since around 1980. Product imports averaged 0.9 mb/d last year, representing a 3% increase y-o-y. Product exports, however, were at their lowest point since 2010.

Refinery industry

US

Product markets in the US suffered pressure from seasonal weakness brought on by reduced transportation fuel consumption during the winter season at the start of the year. In 1Q20, this weakness in fuel markets was exacerbated by the widening spread of

COVID-19, with losses more pronounced in complex configurations. Reports of major refinery outages led to a significant decline in US refinery intakes in the same quarter, with the fifth-largest fuel-producing plant in the US shutting due to a fire. The reduction in refining capacity helped ease the gasoline glut in the US and prompted a tighter product balance in February, which supported the market and kept losses in margins somewhat limited. Early 2Q20 product markets gained some ground, as processing rates tumbled by nearly 3 mb/d in April. Massive reductions in crude throughput countered further acceleration of core product inventory builds and provided backing to pricing signals, while a weak benchmark price environment in the USGC was positively reflected in refining margins. In 3Q20, the enforcement of strict lockdown measures, as well as tight air travel restrictions, continued to weigh on refining economics, although part of this downturn was offset by heavy intake cuts due to peak maintenance season, as well as hurricane-induced outages that drove at least six US refineries offline. Throughout 4Q20, margins trended continually upwards m-o-m, as the relaxation of confinement measures led to a recovery in product markets, allowing refiners to gradually increase their processing rates.

Europe

In Europe, refining margins remained at healthy levels throughout 1Q20, before climbing to a peak in April, supported by the relaxation of pandemic-related confinement measures and a decline in refinery product output, which provided a boost to naphtha and fuel oil markets and thus a competitive advantage to simple configurations. For the rest of 2Q20, European product markets

were severely weak, as stronger crude prices and the outbreak of a second wave of the COVID-19 pandemic led to a severe demand contraction and nearly pushed margins into negative territory. During 3Q20, European product markets suffered the most relative to other regions, showing a recovery and hovering around \$5–6/b, as a pandemic-related fuel consumption drop hindered any significant upturn. At the start of 4Q20, margins showed a slight recovery, backed by supply-side support. However, towards the end of the year, the already slow demand recovery was affected by a third round of hard lockdowns and the return of refineries from maintenance season, resulting in a rise in product output, a more pronounced product surplus and weaker margins.

Asia

Asian refining economics in 1Q20 showed high volatility and a steep but short-lived jump in February, as sizeable refinery intake cuts restricted product output, keeping fuel prices supported despite considerable damage to fuel demand, particularly in China due to the outbreak of COVID-19. Chinese refinery intakes were estimated to have dropped considerably compared with the previous month in response to declining fuel consumption due to transport, industrial and service disruptions implemented by local authorities to contain the outbreak. In 2Q20, Asian fuel markets came under added pressure, with margins plunging and remaining in negative territory for the entire quarter, pressured by a regional product surplus and lack of outlets overseas to accommodate extra volumes amid record-high freight rates. In May 2020, margins reached an all-year low of minus \$3.72/b. A rise in refinery runs was seen in the region as Chinese independ-

ent refiners – which are more focused on the domestic market – ramped up operations. This led to higher product availability and weighed on product markets, as more refineries in northern China lifted run rates and outpaced the overall recovery in domestic oil product demand triggered by the relaxation of confinement measures. In the third and fourth quarters of the year, margins remained somewhat stable at around \$1.00/b, pressured by stronger crude prices, which rose significantly in December.

Stock movements

OECD

OECD stocks

Total OECD inventories – including commercial and government stocks – rose by 179 mb at the end of 2020 from the same time the previous year to stand at 4,604 mb. This stock build was attributed to a build in commercial oil inventories, which increased by 174 mb, while the OECD strategic petroleum reserve (SPR) rose slightly by 5 mb.

On a regional basis, stocks in OECD North America and OECD Europe rose by 121 mb and 72 mb, respectively, while OECD Asia-Pacific stocks fell by 14 mb. On a quarterly basis, total OECD inventories experienced stock builds of 90 mb and 261 mb in the first and the second quarters, respectively. In contrast, the third and fourth quarters witnessed stock draws of 46 mb and 125 mb, respectively.

The first and second quarters of 2020 saw builds in total commercial stocks of 88 mb and 237 mb, respectively, while the third and fourth quarters experienced stock draws of 36 mb and 115 mb, respectively.

At the end of 2020, OECD commercial

stocks finished the year 138 mb above the latest five-year average. It should be noted that the overhang fell by more than 161 mb since the implementation of the DoC at the end of December 2016. Within the OECD region, OECD Americas and OECD Europe saw a surplus of 92 mb and 75 mb above the latest five-year average by the end of 2020, while OECD Asia-Pacific saw a deficit of 29 mb below the latest five-year average.

Within the components, OECD commercial crude and product stocks witnessed stock builds of 101 mb and 74 mb, respectively, at the end of 2020, compared with the previous year at the same time. Crude stocks stood at 72 mb above the latest 2015–2019 five-year average, while product stocks witnessed a surplus of around 67 mb compared with the 2015–2019 average. Gasoline indicated a slight surplus of 8.0 mb above the latest five-year average, while middle distillates witnessed a higher surplus of around 41 mb above the latest five-year average.

Days of forward cover

In terms of days of forward cover, OECD commercial stocks stood at 69.2 days at the end of 2020, 7.1 days higher than 12 months before and 8.5 days above the latest five-year average. OECD Americas was 6.4 days above the latest five-year average to stand at 67.6 days at the end of 2020, while OECD Asia-Pacific stood 3.1 days above the latest five-year average to finish the year at 51.4 days. Meanwhile, OECD Europe indicated a surplus of 12.8 days, averaging 82.7 days.

Strategic Petroleum Reserves

Total SPR in the OECD at the end of 2020 rose by 5 mb from the previous year to stand at 1,541 mb. The build came mainly from OECD

North America, which increased by 5 mb to stand at 640 mb, followed by OECD Asia-Pacific, which was up by 3 mb to 414 mb, while OECD Europe fell by 3 mb to stand at 487 mb at the end of 2020, compared with last year at the same time.

Non-OECD

Non-OECD stocks

Estimated total non-OECD stocks – including commercial and SPR – stood at 2,580 mb at the end of 2020, up by 306 mb from the end of 2019. Crude and products experienced stock builds of 195 mb and 111 mb, respectively. Within the regions, China saw the bulk of the build, increasing by 244 mb to stand at 1,033 mb. India and Eurasia also experienced stock builds of 60 mb and 35 mb to stand at 148 mb and 403 mb, respectively.

Balance of supply and demand

World oil demand registered a sharp contraction of around 9.6 mb/d in 2020, averaging total demand of 96.3 mb/d. The OECD and non-OECD saw contractions of 5.6 mb/d and 4.0 b/d, respectively.

Meanwhile, the forecast for non-OPEC

supply growth in 2020 also experienced a downward revision from initial projections. Non-OPEC supply registered a decline of 2.6 mb/d to stand at 62.9 mb/d, while OPEC NGLs and non-conventional oil fell by 0.1 mb/d to stand at 5.1 mb/d in 2020.

Based on these revisions, the forecast demand for OPEC crude in 2020 was revised massively down from its initial position to stand at 22.4 mb/d. This represents a decline of 6.9 mb/d from 2019 levels. The downward revision mainly reflects lower demand outpacing the reduction in non-OPEC supply. On a quarterly basis, required OPEC crude in 2020 stood at 21.0 mb/d and 16.9 mb/d in the first and second quarters, respectively, and 24.7 mb and 26.9 mb/d in the third and fourth quarters, respectively.

Meanwhile, according to secondary sources, OPEC crude production averaged 28.2 mb/d in 1Q20, which was 7.3 mb/d higher than demand. In 2Q20, OPEC crude production averaged 25.6 mb/d, which was 8.6 mb/d above demand, while in 3Q20 it averaged 23.9 mb/d – 0.9 mb/d below demand. Meanwhile, OPEC crude production averaged 24.9 mb/d in 4Q20, which was 2.0 mb/d below demand. For all of 2020, it averaged 25.6 mb/d, around 3.2 mb/d greater than demand.



OPEC turns 60

Although there was not as much fanfare as planned in 2020 on OPEC's 60th birthday due to the COVID-19 virus appearing on the scene, OPEC nonetheless celebrated six decades of change, development and success. The Organization, born from an attempt by developing countries to gain control over their natural resources, has become a leader in the world energy dialogue and essential component for energy security.

In the heart of the Middle East, in the land of ancient Mesopotamia along the Euphrates and Tigris rivers lies Baghdad – the birthplace of OPEC.

The five Founding Fathers of OPEC, Dr Fuad Rouhani of Iran; Dr Tala'at al-Shaibani of Iraq; Ahmed Sayed Omar of Kuwait; Abdullah al-Tariki of Saudi Arabia; and Juan Pablo Pérez of Venezuela, gathered together within the hallowed walls of Al-Shaab Hall at this location to bring the Organization into the world on 14 September 1960.

The groundwork had already been laid with a Gentlemen's Agreement signed the previous year in Cairo at the Maadi Yacht Club on the sidelines of the First Arab Oil Congress. A meeting between Tariki and Alfonso, engineered by renowned journalist Wanda Jablonski, brought together these two strong personalities, each frustrated with international oil company dominance over his country's valuable resources. The rest, as they say, is history.

The swansong of OPEC has been written many times, and yet it meets every challenge and comes back stronger, rising like the phoenix to fight another battle.

In the intervening years, it has been an unforgettable journey. Inclusive dialogue has been a main ingredient in OPEC's success, aided by a clear Statute that all Members respect and understand. Its mission has remained remarkably constant over the decades: "to coordinate and unify the petroleum policies of its Member Countries and ensure the stabilization of oil markets in order to secure an efficient, economic and regular supply of petroleum to consumers, a steady income to producers and a fair return on capital for those investing in the petroleum industry."

The first years were spent organizing the structure of OPEC and inaugurating its ruling bodies. Over the next few decades, the role of OPEC in the oil market gained in recognition and strength. Membership doubled in a few short years, as this institution's honourable goals were recognized by other producer countries. The headquarters moved several times to settle finally in its current location in 2009. With 55 years in Vienna, which boasts the world's best living standards for many years running, the city has definitely provided a hospitable and sophisticated home for the Organization.





Dr Fuad Rouhani, Head of the Delegation of Iran and accompanying delegates.



Ahmed Sayed Omar, Assistant to the Secretary of State, Ministry of Finance, Head of the Delegation of Kuwait and accompanying delegates.



Dr Tala'at al-Shaibani, Head of the Delegation of Iraq and accompanying delegates.



Abdullah Al-Tariki, Minister of Petroleum, Head of the Delegation of Saudi Arabia and accompanying delegates.



Venezuelan Delegation at the 'Baghdad Conference' (Dr Juan Pablo Pérez Alfonzo, Minister of Mines and Hydrocarbons, headed the Delegation).

Declaration of Cooperation

The latest success story has been the Declaration of Cooperation (DoC), formed in December 2016 in reaction to the then-worst market crash that had faced the industry, and the subsequent Charter of Cooperation (CoC).

Not only did the DoC help stabilize the oil market and world economy during the 2014–2016 crash, it put the foundation in place for this producer group to be able to swiftly and effectively manage the unprecedented market crisis that followed the COVID-19 pandemic in 2020 and resulting demand destruction.

Economies took an unprecedented battering, unemployment rose to Depression-era highs and health care systems became overwhelmed. This crisis represents one of the most formidable challenges of OPEC's 60-year history.

In all the chaos and fear, DoC members calmly and coolly examined the oil market and made tremendous sacrifices in the form of unparalleled – in both depth and duration – production adjustments.

At OPEC, we are more prepared than ever, with tools that we did not have in the past to help us navigate choppy waters. With oil still expected to be the main source of energy in 2040, we believe the industry's – and OPEC's – best days are yet to come.

An extravagant celebration was planned at Al-Shaab Hall in Baghdad for OPEC's 60th to take place on the date of the Organization's birth. However, due to COVID-19-related restrictions, this had to be cancelled. Instead, the Secretariat produced a special 60th Anniversary edition of the OPEC Bulletin, a film following six decades of development and a book commemorating the journey in great detail.

OPEC and non-OPEC Ministers during the signing of the Declaration of Cooperation on 10 December 2016.



Comments and felicitations

“OPEC has been able to prove on its 60th birthday that it is still relevant. It has become the friendly uniting force under which all parties can work together to support stabilization in the oil market and by extension the world economy.” – **Abdelmadjid Attar, 2020 Conference President and Minister of Energy of Algeria.**



Abdelmadjid Attar, 2020 Conference President and Minister of Energy of Algeria.

“It is unreasonable to discuss the oil industry in Iraq or the Middle East without touching upon the Organization of the Petroleum Exporting Countries, the Organization that has played a key role in safeguarding the interests of oil-producing countries and embracing many legitimate rights that were impossible or difficult to acquire before OPEC.” – **Abdullah Ismail, last surviving participant at the founding of OPEC.**

“Equatorial Guinea believes OPEC will continue to be crucial to ensuring the stabilization of the global market in the oil sector and the growth of all countries.” – **Gabriel Mbaga Obiang Lima, Minister of Mines and Hydrocarbons, Equatorial Guinea.**

“Glancing at OPEC’s brilliant 60-year history, one may notice that greater cohesion

within OPEC and without has always led to greater global oil market stability.” – **Eng Bijan Namdar Zanganeh, Minister of Petroleum of the Islamic Republic of Iran.**



Eng Bijan Namdar Zanganeh, Minister of Petroleum of the Islamic Republic of Iran.

“Iraq’s economy is mainly dependent on oil revenues, and as a stakeholder in OPEC, Iraq – like other members – is benefiting from the outstanding achievements of the Organization... Moreover, on the international side, Iraq played a pivotal role in the establishment of OPEC as part of its commitment to regain its just rights over its oil resources. OPEC was established in Baghdad on 14 September 1960.” – **Thamir Abbas Al Ghadhban, Iraq’s former Deputy Prime Minister for Energy Affairs and Minister of Oil.**



Thamir Abbas Al Ghadhban, former Deputy Prime Minister for Energy Affairs and Minister of Oil of Iraq.

“OPEC’s history is rich in many significant milestones, from the very first resolution of the Organization to the current historic DoC signed by OPEC and non-OPEC countries. All of OPEC’s milestones have a shared significance in that they possess the same spirit, the spirit that this Organization was founded on.” – **Dr Khaled Ali Al-Fadhel, Minister of Oil, Minister of Electricity & Water, and Chairman of the Board, Kuwait Petroleum Corporation.**



Dr Khaled Ali Al-Fadhel, Minister of Oil, Minister of Electricity & Water, and Chairman of the Board, Kuwait Petroleum Corporation of Kuwait.

“Unity, solidarity and cooperation: these have been the culmination of all the goals and objectives of OPEC in its 60 years of operation. The current global situation, on the eve of the Anniversary of OPEC, has once again demonstrated the importance of these values for the present and the future, as well as for the past of mankind.” – **Parviz Shahbazov, Minister of Energy of the Republic of Azerbaijan.**

“Over the years OPEC has become a key player in the worldwide energy dialogue by ensuring a balance of interests between producer and consumer countries and thus contributing significantly to energy security for both private individuals and the economy. As one of the most important organizations in the energy sector, OPEC has indeed made a lasting con-

tribution to Vienna’s international visibility.”

– **Alexander Schallenberg, Federal Minister of European and International Affairs, Austria.**



Alexander Schallenberg, Federal Minister of European and International Affairs, Austria.

“With so much to draw comfort from, I am persuaded that OPEC will be more than able to weather the now gathering clouds of a major price crash triggered by COVID-19. Success will prove once again the Organization’s capacity to revalidate itself. May the drums roll in celebration of an Organization born in difficult circumstances in 1960, and which is turning 60 during an emerging global meltdown, the likes of which has rarely been seen in peace time.” – **King Edmund Maduabebe Daukoru, former Nigerian Minister of State for Energy and Secretary General of OPEC in 2006.**



King Edmund Maduabebe Daukoru, former Nigerian Minister of State for Energy and Secretary General of OPEC in 2006.

“...OPEC producers have done more than just satisfy growing demand for oil: it is their reliable supply of petroleum that enabled the global economic growth which in turn gave rise to increased consumption. In other words, OPEC production has fuelled the rise of developing nations while maintaining living standards in developed countries, and created access to energy for many of the world’s poorest communities and societies. So in many ways, OPEC’s reliable supply of petroleum is the foundation upon which the global economy has been built and which continues to underpin growth and prosperity.” – **Ali I Naimi, former Minister of Petroleum and Mineral Resources of the Kingdom of Saudi Arabia** for 20 years.



Ali I Naimi, former Minister of Petroleum and Mineral Resources of the Kingdom of Saudi Arabia.

“Over its 60 years, OPEC has encountered many challenges, starting from the ‘Seven Sisters’ authority over the oil market. From the first day of the Organization, stabilizing oil prices has been the basis of cooperation between all of its Member Countries... it is evident that OPEC, despite all the difficulties and differences that it faced, was able to act as a strong and effective force.” – **Prof Dr Mana Saeed Al Otaiba, former Minister of Petroleum and Mineral Resources of the United Arab Emirates and President of the OPEC Conference a record six times.**



Prof Dr Mana Saeed Al Otaiba, former Minister of Petroleum and Mineral Resources of the United Arab Emirates and President of the OPEC Conference a record six times.

“The pandemic brought to the fore the reality and indispensable role that OPEC has been playing for the last 60 years to stabilize the global economy. The pandemic took a huge toll on the global oil industry, seriously crippling it.” – **Dr Omar Farouk Ibrahim, Secretary General of the African Petroleum Producers’ Organization, former OPEC Governor for Nigeria, and a previous Head of the PR and Information Department of OPEC.**



Dr Omar Farouk Ibrahim, Secretary General of the African Petroleum Producers’ Organization, former OPEC Governor for Nigeria, and a previous Head of OPEC’s PR and Information Department.

“On an occasion such as this, the biggest gratitude should be reserved for all those people who have contributed to OPEC’s history: the Founding Fathers who set it up and

pointed it in the right direction; the Ministers, Secretaries General, Governors, National Representatives and other top officials who have continued to chart a sustainable path for the Organization over the years, and last but by no means least, the staff of the Secretariat, whose tireless effort, enthusiasm and support across a wide range of disciplines over six decades have provided a sound base from which OPEC has been able to achieve its aims and aspirations.” – **Abdalla Salem El-Badri, OPEC Secretary General from July–December 1994 and January 2007–July 2016.** He is the longest-serving Secretary General to date.



Abdalla Salem El-Badri, OPEC Secretary General from July–December 1994 and January 2007–July 2016.

“On the 60th Anniversary of OPEC, I believe that the key to a better future is good global co-operation. I believe that by working together, the technology gap will be solved, the available energy required by the world community will be supplied, and that petroleum’s contribution to the global economy will remain significant.” – **Dr Purnomo Yusgiantoro, Indonesian Minister of Energy and Mineral Resources from 2000–2009 and OPEC Secretary General from 1 January 2004–31 December 2004.**

“Petroleum is still the most important source of energy for human life. Therefore, it needs to be handled professionally...In my



Dr Purnomo Yusgiantoro, Indonesian Minister of Energy and Mineral Resources from 2000–2009 and OPEC Secretary General from 1 January 2004–31 December 2004.

opinion, the existence and the role of OPEC in the future will remain and become even more robust, especially in the global petroleum industry.” – **Dr Subroto, Indonesian Minister of Energy and Natural Resources between 1978 and 1988, and OPEC Secretary General between 1 July 1988 and 30 June 1994.**

“...this group of oil-exporting nations has reached the level of key world player and there is no return. It is not an easy task for the world and for each Member Country to, first and foremost, comprehend and admit to such a growing world role, coming from a gathering of developing nations richly endowed with the market-valuable natural resources oil and gas... one must consider the implicit re-



Dr Subroto, Indonesian Minister of Energy and Natural Resources between 1978 and 1988, and Secretary General of OPEC between July 1988 and June 1994.

sponsibility of this role...as part of the world community. What a change!” – **Rene G Ortiz of Ecuador was the 12th Secretary General of OPEC, holding the post from 1 January 1979 to 30 June 1981.**

“Besides the technical and political aspects of working for OPEC, there is the human side. Over the years, attending meetings in Vienna, Geneva or Member Country capitals all over the world was in itself a fantastic experience. Alongside work, you visited places and saw things you had not dreamt of before getting involved with OPEC. Beyond that, the diversity of people you met and friends you made was most rewarding.” – **Dr Ramzi Salman, former delegate, Iraqi Governor and Deputy Secretary General to OPEC.**



Dr Ramzi Salman, former delegate, Iraqi Governor and Deputy Secretary General.

“The Organization is esteemed by the peoples of Member Countries as the only developing countries’ commodity organization



Saadallah Al Fathi, former Head of the Energy Studies Department at the OPEC Secretariat.

that has stood the test of time. Even during difficult times in the oil market, when OPEC decisions may have been criticized by many, the greater majority of these peoples held to OPEC as the only stabilizing element in an often volatile market. Equally so, consumers and international oil companies gradually came to respect and understand OPEC’s positions.” – **Saadallah Al Fathi, former Head of the Energy Studies Department at the OPEC Secretariat (1986–1994).**

“More than 30 years have passed. The world and the oil market are now both very different. There have been major changes and crises in the world economy and in politics. Advances in technology have revolutionized all our lives, including the oil industry. OPEC has successfully managed these challenges.” – **Dr Manouchehr Takin, former Senior Research Officer at the OPEC Secretariat (1981–1990).**

CALL FOR PAPERS



The OPEC Energy Review is a quarterly energy research journal published by the OPEC Secretariat in Vienna. Each issue consists of a selection of original well-researched papers on the global energy industry and related topics, such as sustainable development and the environment. The principal aim of the OPEC Energy Review is to provide an important forum that will contribute to the broadening of awareness of these issues through an exchange of ideas. Its scope is international.

The three main objectives of the publication are to:

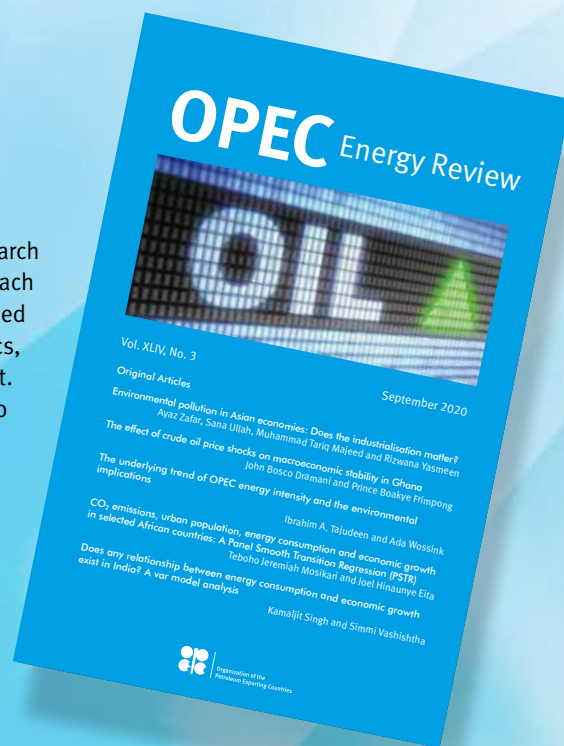
1. Offer a top-quality platform for publishing original research on energy issues in general and petroleum related matters in particular.
2. Contribute to the producer-consumer dialogue through informed robust analyses and objectively justified perspectives.
3. Promote the consideration of innovative or academic ideas that may enrich the methodologies and tools used by stakeholders.

Recognizing the diversity of topics related to energy in general and petroleum in particular which might be of interest to the journal's readership, articles will be considered covering relevant economics, policies and laws, supply and demand, modelling, technology and environmental matters.

The OPEC Energy Review welcomes submissions from academics and other energy experts. Submissions should be made via Scholar One at: <https://mc.manuscriptcentral.com/opec> (registration required).

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**COVID-19 turns oil market
on its head in 2020**

What started out as a bright year in 2020 quickly spiraled into a disaster in the making, as COVID-19 reared its ugly head. Blazing a trail of wreckage through lives, economies and the oil industry, its relentless trajectory was the hallmark of the year.

With over 110 million cases over 2020 and over two million dead, it was the first pandemic the world had experienced in 100 years. Along with the devastating human toll and impact on fragile health care systems worldwide, it had an unprecedented impact on the world economy and individual countries, with lockdowns affecting services, closing businesses and bringing industry to a standstill.

This, in turn, had an unprecedented effect on the global oil market. Some commentators have noted that the energy industry may have been the most impacted of all sectors by the pandemic. As the world economy contracted by 4.1% in 2020, global oil demand

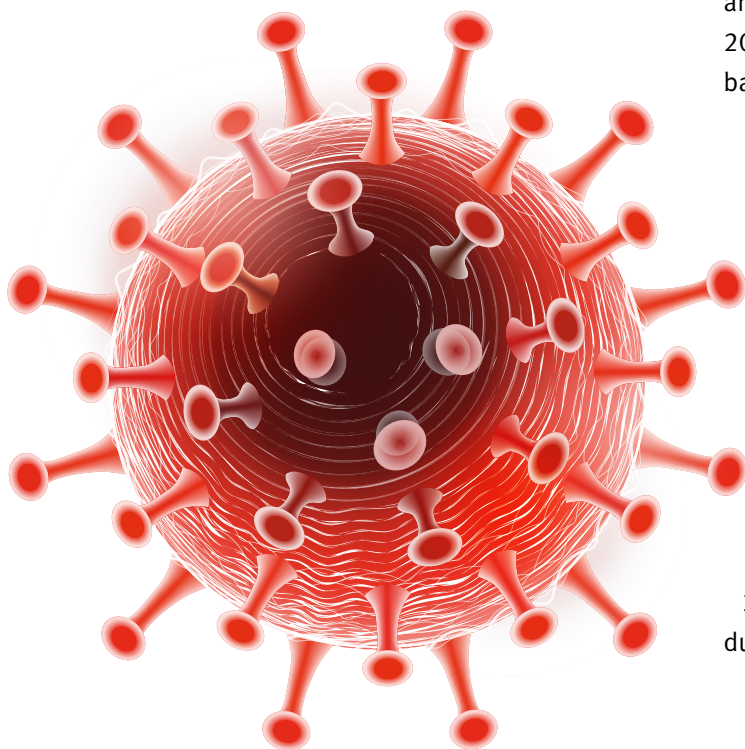
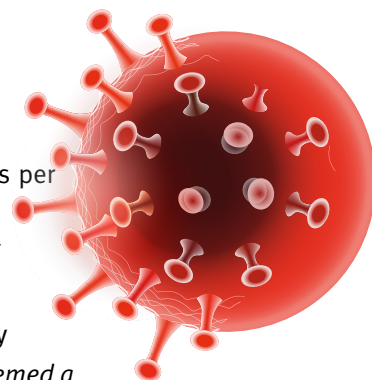
declined by 9.7 million barrels per day (mb/d), almost 10%.

The great historian of the energy industry, Daniel Yergin, said it most succinctly when he wrote, *“The world seemed a different planet at the end of March [2020] from what it had been in the beginning of March [2020]... such a sudden, massive decline in oil demand that has never been seen before.”*

The work undertaken since 2016 to establish the Declaration of Cooperation (DoC) paid off in great style throughout 2020.

The DoC was signed on 10 December 2016 to counter the severe market imbalance of 2014–2016. Back at the start of 2017, the DoC was focused on returning balance and stability to the oil market in the aftermath of the devastating downturn, which had brought the industry to its knees. At that time, nearly half a million people lost their jobs, and about one trillion in investments were frozen or deferred. Record bankruptcies were filed and by July 2016 the OECD commercial stock overhang had soared to a record high of around 403 mb over the five-year industry average.

The following three years until 2020 saw the market recover, the industry revived, and the global economy



COVID-19

revitalized. This optimism extended into the beginning of 2020.

By March, however, the COVID-19 pandemic had pervaded nearly every aspect of our daily lives. Lockdowns, major economic distress and collapsing health care systems were the order of the day. Economies had not been hit so hard since the Great Depression of the 1930s.

Thirty per cent of the world oil demand suddenly evaporated. During 'Black April', transportation, industry and all but the most basic services came to a halt for many. The lowest point came on 20 April when the NYMEX West Texas Intermediate prompt contract for May plunged by \$56 per barrel (\$/b) to nearly -\$38/b – the first time the benchmark has ever fallen into negative territory.

At this time the industry faced a potential crude oversupply of nearly 1.3 billion barrels. There were serious concerns that some storage hubs could hit tank top. Thankfully, this never came to pass, due in part to the crucial actions of the DoC. This producer group continued to operate with courage and flexibility, adapting to the changing market dynamics as second and third waves of the pandemic swept the world.

Throughout the year, industry bankruptcies reached an all-time high as unemployment skyrocketed. Projects were deferred and cancelled, with investment dropping up to 30% for the year, even more than in the 2014–2016 downturn, from which the oil industry was still recovering when COVID-19 struck. The cumulative effect of these two downturns has been devastating to the oil market in terms of investment.

Time for action

DoC members jumped into action and signed off on the largest and longest production adjustments in the history of OPEC and the industry.

The group's contributions to market stability during this crucial time most certainly saved the industry and indeed the world economy from much more serious consequences. This will surely be remembered as a critical point in OPEC history.

In these dire times of chaos and disaster, OPEC managed to offer something that is a rare commodity – hope.

This stems from historic decisions taken at the 9th and 10th Extraordinary OPEC and non-OPEC Ministerial Meetings on 9 and 12 April, as well as the 179th Meeting of the OPEC Conference and 11th OPEC and non-OPEC Ministerial Meeting held on 6 June.

Members agreed to the largest-ever production adjustment in history of 9.7 mb/d for May and June, which was then extended over July. Further adjustments were agreed for two years.

The Joint Ministerial Monitoring Committee (JMMC), under the DoC, decided to meet monthly until the end of the year to ensure compliance among OPEC+ members.

The April 2020 meetings also saw DoC participants receive broader encouragement and support from the highest levels of government, the G20 and the largest global oil producers, including Norway, the US and Canada, as well as consumers.

The market quickly started to restabilize. Strong conformity, and extra measures to ensure it, provided another boost.

The year also proved the value of multilateral dialogue, which also took a great leap. Regular dialogues took place with the

International Energy Agency, the International Energy Forum and the Gas Exporting Countries' Forum. Talks were also held with the G20, the International Monetary Fund, the World Bank and various United Nations (UN) entities. Consumer-producer dialogues deepened and included the EU, India, China, the Russian Federation and US energy stakeholders. These relationships were vital in 2020 while facing the unprecedented impacts of the COVID-19 pandemic.

The DoC has, through this dramatic event, ushered in a new era in global energy cooperation. There has been broad acknowledgement of mutual interdependence and the benefits of working together for stability in the global oil market.

Effect on OPEC

As with every individual, business or organization in the world, OPEC had to find a way to cope with the fallout from the COVID-19 pandemic.

OPEC'S job during this unprecedented time has become even more critical, given the impact the pandemic has had on the oil industry and energy markets in general.

Starting in March, several meetings were postponed, visitors were prohibited in the

Secretariat and further essential meetings were deemed to be held via teleconference rather than face-to-face.

On 13 March, the Secretary General sent a memo to staff stating that, in line with orders of the Austrian Government and the community of International Organizations based in Vienna to mitigate and prevent the spread of COVID-19, the Secretariat was issuing an Administrative Instruction that all OPEC staff were to work remotely, via Virtual Protocol Network (VPN). Portable computers were provided by the Organization, reducing the work force at the Secretariat premises to the minimum possible from 16 March to 3 April. Only duly authorized essential or critical staff were allowed to enter the Secretariat during this period.

On 24 March, staff were informed that the Secretariat premises would remain closed until further notice due to the severe health crisis in Austria.

Contingency plans were being prepared to hold all meetings scheduled to take place before the end of the 2nd quarter 2020 through teleconferencing.

On 7 April, a memo extending remote work until 30 April was sent to all employees. The staff were continuously updated in English about the legal requirements outlined by host country Austria taken to avoid the spread of the virus.

The Secretary General wrote: "As the Austrian Government, the UN and the World Health Organization have all indicated, everyone has a collective and individual responsibility to take means to reduce the risk of transmission of COVID-19.

"I appreciate the last few weeks have not been easy on anyone. It has been a time of heightened anxiety and I am sure we would all like to see a return to normal life. However,



we must remain focused, patient and stay vigilant in the fight against this virus. In this way, we will be able to walk into the light of a better tomorrow, with a renewed gratitude for the blessings in our lives.”

Staff continued to work primarily in home office through to the end of the year.

New challenges

New challenges arose in attempting to accommodate the unprecedented situation of most staff working remotely. Despite the drastic and sudden measures put in place, OPEC managed to continue to effectively function throughout the pandemic with the help of its dedicated staff. The Head of the Petroleum Studies Department (PSD), Behrooz Baikalizadeh, stated in an OPEC Bulletin article in May: “It is a new environment the dimensions

of which we are still discovering. The global oil market as a component of the world economy also has entered into a new phase. We are witnessing a period of significantly diminishing demand, huge high oil stocks, unprecedented oil price behaviour, and tremendous efforts to stabilize the oil market.

“We can understand that the world after COVID-19 will never be the same as before. However, there are constant concepts and values that are valid forever, such as moral values and professionalism.”

These are the two pillars upon which OPEC’s new working environment are based on during this tragic period of human history, he added.

Throughout 2020, PSD continued to regularly deliver its daily, weekly and monthly oil market reports, along with respective presentations. It initiated a twice-weekly briefing report on COVID-19, covering the impact of the pandemic on oil prices, oil demand, oil refining, transportation and trade as well as financial markets and exchange rates. Colleagues carried out their regular duties and responsibilities without delay or pause.

“I am sure that this valuable experience gained by all staff at the OPEC Secretariat will be another successful page in the history of OPEC that illustrates the vital role of OPEC in stabilizing the oil market while considering the interests of its stakeholders, as well as consumer nations,” said Baikalizadeh.

Transition to teleworking

Head of the Administration and IT Services Department, Abdullah Alakhawand, stated in the May article that the transition to teleworking was cumbersome at the beginning. His IT department has been responsible for pro-



Behrooz Baikalizadeh, Head of the Petroleum Studies Department.



Abdullah Alakhawand, Head of the Administration & IT Services Department.

viding all staff with the capability of working from home.

He added meetings ran smoothly via videoconferencing, and there were nearly no issues regarding communication. All internal meetings were done via teleconferencing, and the connections were secure, as they are based on a server located at the OPEC premises.

IT Senior Systems Administrator, Nicolae Mihalache, said it was quite a challenge to manage the IT side of things.

“When it struck, it was a disaster. It was unexpected. We had to extremely quickly reconfigure our IT services to offer teleworking, remote access to our users.”

In terms of lessons learned from the experience, there have been plenty, according to Mihalache. These can be applied to prepare for the future, he said.

“We will definitely never be caught in such a situation again...We are going to maybe completely change the way we are working in OPEC. My guess would be that OPEC will never be the same as it was before.”

He said OPEC IT operations are by definition a really crazy business with something new always happening and issues always requiring fixing. But, in his ten years at OPEC, this is definitely the craziest situation he has experienced. His workload more than doubled, in part because all day-to-day business and meetings were being held via teleconferencing. These meetings sometimes ran two or three in parallel.

Alakhawand also said the Secretariat would be better prepared in the face of a similar event, adding the infrastructure may be changed to accommodate any future mishaps, pandemics or epidemics.

“Definitely there are a lot of lessons learned, and a lot of practices that staff need to learn as well. Not only the IT part, but the user part. The staff are very cooperative and understanding.”

Ena Romic from the coffee staff stated: “The most peculiar thing for me is to see the OPEC headquarters so quiet. It’s just one big, empty building. I miss people inside. Maybe you don’t feel like seeing each and every one of them every day, but I wouldn’t trade my colleagues for all the fortune in the world. Many can make a fortune, but very few can build a family – and that is what OPEC is already for 60 years.”



Activities of the Secretariat

Office of the Secretary General

OPEC Secretary General, Mohammad Sanusi Barkindo, participated as a keynote speaker and panelist in a plethora of high-profile international conferences, meetings and events throughout the year, the majority of which were undertaken via videoconference due to the outbreak of the COVID-19 pandemic in early 2020.

The Secretary General delivered keynote speeches to the 10th Gulf Intelligence United Arab Emirates (UAE) Energy Forum in Abu Dhabi; the International Petroleum Technology Conference in Dhahran; the International Carbon Capture, Utilization and Storage Conference in Riyadh; the Azerbaijan Centre of Analysis of International Relations; the African Ministerial Roundtable, co-hosted by Senegal's Ministry of Petroleum and the International Energy Agency (IEA); the India Energy Forum by CERAWEEK; the Nigeria Oil and Gas Conference; the G20 Energy Extraordinary and Annual Ministerial Meetings; and the 31st Meeting of the Energy Charter Conference and Ministerial Meeting.

The Secretary General also participated in a variety of virtual panel sessions, including at the World Economic Forum (WEC) in Davos; the Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC); Strategic Conference and Energy Dialogues; the CERAWEEK Leadership Dialogue with IHS; the Energy Intelligence Forum; the International Monetary Fund (IMF) Plenary Session; and the Crescent Ideas Forum. He also conducted a number of briefing sessions with international media.

The Secretariat additionally hosted and participated in a number of dialogue-related meetings throughout the year with the Secretary General as chair or co-chair. This included energy dialogues with the Russian Federa-

tion, India, China, the European Union (EU), the Gas Exporting Countries Forum (GECF), technical meetings, such as the OPEC-African Energy Commission (AFREC) Technical Meeting and the 6th Technical Meeting on Asian Energy and Oil Outlooks, as well as a number of workshops as part of the IEA-International Energy Forum (IEF)-OPEC work programme.

The Office of the Secretary General (SGO) was directly involved in organizing the Secretary General's participation in all of the above-mentioned events and in coordinating his busy schedule. It was also actively involved in organizing and supporting the OPEC and non-OPEC Ministerial Conferences, along with meetings of the Board of Governors (BoG), Economic Commission Board (ECB), OPEC and non-OPEC Joint Ministerial Monitoring Committee (JMMC) and Joint Technical Committee (JTC). The SGO documented these meetings, drafted and edited formal minutes, writing a *précis* of the discussions that took place and prepared summaries of the decisions taken for distribution to Ministers, Governors and Management, as deemed appropriate. Additionally, the SGO was responsible for coordinating the Secretariat's protocol.

These activities enabled the OPEC Secretariat, together with its Member Countries (MCs), to work diligently throughout the COVID-19-related crisis to help restore balance and stability to the oil market and guide the global economy on a path to recovery, with a view beyond turbulent 2020.

It is noteworthy that despite restrictions related to the COVID-19 pandemic, with the OPEC Secretariat operating under remote working conditions for much of the year, the SGO continued to remain functional, meeting all demands involved in coordinating the busy activities of the Organization.

The Legal Office

In line with its objectives and responsibilities, grounded on the Long-Term Strategy (LTS) and detailed in the Mid-Term Programme-IV (MTP-IV), the Legal Office (LO) contributed to the conduct of the Organization's affairs by promoting the rule of law within the Organization and in its relations with governments, organizations, enterprises and individuals.

As a main deliverable, it provided legal advice to the Secretary General and OPEC governing bodies, supervised the Secretariat's legal and contractual affairs and evaluated legal issues of concern to the Organization, reporting its findings to the Secretary General.

Specifically, the LO's main tasks and accomplishments for the year 2020 were as follows:

Internal legal support

- The LO provided legal advice to the Secretary General on various procedural matters regarding the BoG and the Meetings of the Conference.
- The LO closely monitored Austrian, European and international legal cases relating directly/indirectly to OPEC, participating in interpreting relevant articles of the Host Agreement between OPEC and the Republic of Austria in cooperation with the Austrian Federal Ministry for European and International Affairs, and reported to the Secretary General.
- Support was provided to the Internal Audit function for proper execution of audits planned throughout the year (focusing on: Legal Office Audit and Reserve Fund Audit).
- The LO reviewed Information Security Policy documents, such as Informa-

tion Policies, Information Asset Naming Policy, Information Classification Policy, Information Technology (IT) Policies and Procedures Manual and Document Retention Policy.

- Following the approval of an Internal Dispute Resolution Mechanism by the BoG, which was incorporated into the OPEC Staff Regulations, the LO proposed an amendment to the OPEC Statute to further strengthen the Organization's immunity, which was approved by the Conference.
- Following the proposal of a new set of Contracting Guidelines using best international organization practices, the LO sought the assistance of the Data Services Department (DSD) to develop a Contracts Management Application to fully encompass the Secretariat's contracting procedures.
- Contracts and agreements with external entities and individuals were reviewed and guidance in related legal matters was provided to different user departments.
- The LO participated in the Personnel Committee, Contracts Committee, Academic Committee and 60th Anniversary Organizing Committee, providing legal support for their activities as established by the Organization's rules and the Secretary General's instructions.
- Acknowledging the importance of various academic-level programmes for OPEC MCs, the LO assisted the Academic Committee in crafting a revised framework, expanding it through inclusion of the Vienna Energy Scholarship Programme. This element, with a launch planned in 2021, will be executed together with the City of Vienna.

- With the year marked by challenges caused by the COVID-19 pandemic, the LO provided extensive assistance with regard to the Secretariat's implementation of safety measures by the Austrian Government from a legal point of view.

Improvement of internal LO work

- The processes of main LO activities are monitored on an ongoing basis, as well as formats for permanent reporting and reviewing of work progress.
- Upon establishing a yearly review of rules and regulations to keep them duly up to date, the LO, with the cooperation and support of the Finance and Human Resources Department (FHRD), commenced with a review of the Staff Regulations.
- The LO is continuing to progressively enhance its supporting role in order to become a Legal Operations Support Service aligned with best practices for the provision of legal services.

Development of cooperation with non-OPEC countries

- With regard to the Charter of Cooperation (CoC), the LO provided legal advice and support on the process of engagement with the 24 participating countries, as well as in reports and presentations to the Secretary General and the Secretariat's governing bodies.
- With the input of other OPEC departments, the LO worked on a preliminary Work Programme (WP) for the CoC, which has been shared with the countries chairing the Declaration of Cooperation (DoC) framework meetings.

- Regular legal support was provided for implementation of the DoC and the operations of its bodies, including OPEC and non-OPEC Ministerial Meetings, the JMMC and the JTC.

Information and analysis products

- Developments of legal aspects pertaining to the energy sector were monitored and reported, as relevant, to the Secretary General, generally in preparation for the OPEC dialogues.
- Following its introduction in 2019, the LO continued to produce a *Monthly Legal Report*, comprising relevant legal energy issues, for distribution within the OPEC Legal Network of MC lawyers and delegates.
- Intensive research on legal documents and information commenced to create an Energy Legal Database.
- Extensive assistance was provided to the Public Relations and Information Department (PRID) by reviewing the different chapters of OPEC's book commemorating its 60th Anniversary.

Training

- Following the successful launch of the 1st OPEC-Energy Charter Secretariat-OPEC Fund Annual Legal Workshop in 2019, to promote the Secretariat's endeavor to serve as a platform of cooperation and a forum for the exchange of ideas between OPEC and other international organizations and institutions, the LO organized the 2nd Legal Workshop. Acknowledging the pressing subject of climate change and measures for mitigation, the main theme in 2020 was *The Law of the Energy Transition*.

- The Workshop was attended by MCs and countries participating in the DoC. It attracted speakers from international law firms, national and international oil companies, energy and service companies and international organizations that focused on challenges and opportunities related to the energy transition from a legal perspective, considering the viewpoint of fossil-fuel extracting businesses and resource-rich countries.
- In line with its Work Programme, work has started on the design of two training sessions to be delivered to OPEC MCs and participating countries in the DoC on the topics climate change and the energy transition.

Research Division

The Secretariat's Research Division (RD) continued to perform its regular activities in 2020, tailored to the extraordinary circumstances accompanying the COVID-19 pandemic, which substantially affected the energy sector and OPEC MCs. In line with OPEC's third LTS and the MTP-IV, the RD continued an intensive research programme on energy and related matters in accordance with the Organization's requirements and guidance and that of its MCs, while accommodating the introduction of necessary adjustments imposed by the COVID-19 pandemic.

The RD consists of:

- **Petroleum Studies Department (PSD):** responsible for the continuous monitoring of oil and product market developments in the short term.
- **Energy Studies Department (ESD):**

monitors, analyzes and forecasts world energy developments in the medium and long term.

- **Data Services Department (DSD):** responsible for the identification, collection and processing of energy-related data and information in support of research activities of the OPEC Secretariat and its MCs.
- **Environmental Matters Unit (EMU):** focuses on climate change and sustainable development issues, in particular energy and related matters, including but not limited to the Paris Agreement and the United Nations (UN) 2030 Agenda for Sustainable Development.

Activities of the RD during 2020, among others, included:

- preparing up-to-date and reliable analysis for the Ministerial Conference, the BoG, the ECB, meetings of the JTC the JMMC and similar bodies, in addition to energy dialogues, as the basis for energy policy-related decision-making, including identification of the key driving forces behind global, regional, and national oil and energy markets (PSD, ESD, DSD, EMU).
- monitoring of short-term energy market developments and prospects, particularly related to oil markets, which were heavily impacted by the outbreak of the COVID-19 pandemic (PSD, DSD).
- conducting comprehensive energy market analysis and forecasts for the medium and long term, with an emphasis on the outlook for demand and supply – in particular COVID-19 impacts and spill-overs – as well as developing long-term oil-market scenarios, and updating the models

required for performing such analysis (ESD, DSD).

- gathering, compiling and dispensing of pertinent up-to-date statistical data and information to provide a reliable basis for the analysis of relevant energy developments (DSD).
- arranging a series of meetings between the secondary sources that are used in deriving the monthly average crude oil production volumes and representatives from participating countries in the DoC, with the objective to improve the accuracy of data reporting and contribute to further transparency through the regular exchange of information and dialogue (DSD).
- developing further IT applications, in addition to relevant specialized information and reference services (DSD).
- monitoring of energy policies, important technological developments and dynamic structures in the international energy industry (ESD, EMU);
- following relevant negotiations and policy developments in international fora, multilateral discussions and multidisciplinary taskforces in order to assist MCs in formulating their common positions with the aim to defend their interests and to play a key role in multilateral fora and dialogues (EMU).
- undertaking comprehensive analyses of the most recent developments regarding multilateral negotiations under the UN Framework Convention on Climate Change (UNFCCC) and the High-level Political Forum on Sustainable Development, reviewing work by the AR6 Working Group III (EMU).
- providing focused insight on the relationship between climate change ac-

tions and oil demand, the energy mix, and understanding the energy and environmental policies of key international players (ESD, EMU).

Activities within the framework of the DoC

The DoC, with its strong foundation, effective role and broad recognition, has been instrumental in countering the unprecedented impact of COVID-19 on the oil market. The DoC's successful engagement at the highest levels, including with the G20, further strengthened its firm response to the crisis. This follows on from its huge contribution to global market stability over the previous three years, which also provided a robust platform from which to confront the COVID-19 crisis.

The decisions taken at the 10th (Extraordinary) OPEC and non-OPEC Ministerial Meeting (ONOMM) on 12 April 2020 were historic both in magnitude and duration. In the follow-up June 2020 ministerial meetings, ministers reaffirmed their commitment to production adjustments, including a compensation scheme to enable full conformity by each participating country.

Further support for DoC efforts was in evidence at the G20 Energy Ministerial Meeting of 27 and 28 September 2020, held under the Presidency of the Kingdom of Saudi Arabia. It reaffirmed the spirit of solidarity shown throughout the year to support energy security and market stability amid the impact of the COVID-19 pandemic. The establishment of the Energy Focus Group is a continuation of historic G20 efforts on market stability, which are aligned in part with the DoC.

Under such unparalleled market conditions and considering the impact of the massive supply and demand imbalance in 2020, the DoC has once again proven to be an agile and effective platform that has taken

timely, credible and swift actions. Furthermore, these efforts were recognized and supported by other energy stakeholders, with benefits for consumers, the oil industry, investors and the world economy at large.

The RD provided regular technical support for all efforts, fostering closer cooperation between OPEC and non-OPEC producers. This was particularly important for the close monitoring of market developments, conducting related workshops, submitting specific analyses and *ad hoc* reports (e.g. COVID-19 impacts, expanded dashboard with high-frequency data) that all contributed to the meetings of the JMMC and JTC, and thus to the timely and effective implementation of decisions under the DoC.

Within the framework of the DoC, there were seven JMMC meetings and ten JTC meetings during 2020. As of March 2020, when the outbreak of the COVID-19 pandemic led to global lockdowns, all meetings were held via videoconference.

Additionally, two OPEC and non-OPEC producing country technical meetings were held in 2020 under the umbrella of the DoC. The 7th Technical Meeting of OPEC and non-OPEC Producing Countries took place on 4 June 2020 at the OPEC Secretariat. The event was dedicated to assessing the impact of the COVID-19 pandemic and measures implemented to limit contagion on the global economy, world oil demand, and ensuing developments in market fundamentals, which also impacted global crude oil production, investment in the industry and oil stock levels. It also presented an outlook for the short and medium term. The 8th Technical Meeting of OPEC and non-OPEC Countries participating in the DoC was held on 27 November 2020 at the OPEC Secretariat. The main theme of this meeting was to assess recent developments

in non-OECD regions, particularly in Asia and China, with regard to the increased creation of storage capacity, and to explore ways to overcome a lack of good quality data on oil inventories in non-OECD regions. Due to the outbreak of the COVID-19 pandemic, both meetings were held via videoconference.

Flagship publications, regular reports and studies

During 2020, the RD continued its research into energy-related subjects and produced a number of flagship publications, regular reports and specific studies addressing questions related to short-term oil market monitoring and developments, future energy prospects, technology, climate change and policy perspectives in the context of sustainable development.

Daily and weekly reports: Regular daily and weekly reports provided a concise and timely summary of oil market trading news and other relevant headlines, as well as focused themes directly related to short-term market developments. Important oil market news related to the outbreak of COVID-19 was covered in daily market reports. There were also specific analyses of its impact on the oil market, which were discussed in the focus section of the *Weekly Oil Market Report*. In addition to these reports, a new weekly COVID-19 report was developed to closely monitor the impact of COVID-19 developments on the oil market in the short term. This new weekly report, with leading indicators and high-frequency data, specifically reviewed COVID-19 infection numbers and subsequent developments in financial markets, prices, economy, supply, demand, refining and stocks.

The OPEC *Monthly Oil Market Report (MOMR)*: The *MOMR* focuses on short-term oil market developments. It is the Organization's

most-viewed report and is frequently quoted and referred to by major media outlets, as well as a wide range of respected industry analysts. The *MOMR* contains ten chapters covering a wide range of information pertaining to the oil market, from oil prices and futures markets, commodity markets and the world economy, to oil demand and supply, the downstream segment of refining and product markets, transportation, trade, oil inventories and the balance of supply and demand.

Feature articles in the *MOMR* provide concise and in-depth analyses of important events and outlooks, focusing on global oil demand, non-OPEC supply and summer and winter product markets, as well as the assessment of timely economic issues. The July *MOMR* and its feature article presented new forecasts for the economy, world oil demand and non-OPEC supply for the following year. In addition, feature articles reviewed crude and product prices and the assessment of global oil inventories.

The highest number of views on the OPEC website were recorded with the April 2020 issue of the *MOMR* – a record-high of 50,726. For the year, website views averaged around 30,600 per monthly issue, which is around a 15% increase from the year before.

The *MOMR* video was uploaded to the OPEC website at the time of the publication as a complementary feature of the report, highlighting the key changes from the previous month's forecasts. The *MOMR* app presents a concise and comprehensive overview of the key messages of each report, enhanced and supported by graphs and tables containing the latest relevant data sets. The *MOMR* app can be downloaded free of charge from any app store.

The *World Oil Outlook (WOO)*: The 14th edition of the *WOO* highlighted future developments in the oil and energy scene, as well

as identifying the main challenges and opportunities facing the oil industry in the years to come. The 2020 version of the *WOO* presented a comprehensive outlook for oil demand and supply, as well as the downstream for the medium (2019–2025) and long term (2019–2045).

The 14th edition of the *WOO* was launched via videoconference in Vienna on 8 October 2020. The roll-out programme involved presentations via videoconference to: organisations (including the IEA, British Petroleum [BP] and Institut Français du Pétrole [IFP]), OPEC MCs and members of the DoC (Kazakhstan and Azerbaijan), and various international fora (including the Vienna Energy Strategy Dialogue, Turkey's TESPAM, IHS CERA Week and ADIPEC). In addition, the *WOO* was presented at meetings of the OPEC Energy Dialogue programme to dialogue partners from Russia, China, the EU, India, the GECF and the Technical Meeting on Asian Energy and Oil Outlooks. From its launch on 8 October 2020 until mid-December, the interactive edition of the 2020 *WOO* was viewed more than 54,200 times. In the same period, the main *WOO* page was visited nearly 13,400 times and *WOO* apps (Android and iOS) were downloaded more than 437 times, while the *WOO* pdf was downloaded nearly 3,390 times.

Since the publication of the *WOO* 2019 in November of last year, the market has been transformed by the unprecedented scale and reach of the COVID-19 pandemic.

The COVID-19-induced recession and extension of the forecast period to 2045 have brought average long-term global GDP growth down to 2.9% per annum (p.a.). In the long-term, incremental GDP growth will be mainly driven by non-OECD countries. These countries are expected to grow by 3.7% p.a. on average between 2019 and 2045, largely on the

back of improving labour productivity, even as the pace of GDP growth begins to slow.

Reflecting the underlying assumed developments of key drivers, global primary energy demand is forecast to increase from 289 million barrels of oil equivalent per day (mboe/d) in 2019 to 361 mboe/d in 2045. This represents an average growth rate of 0.9% p.a. over the forecast period. In this period, energy demand in non-OECD countries is expected to increase by 76.5 mboe/d, while demand in the OECD is estimated to drop by around 4.4 mboe/d. In 2019, oil represented more than 31% of global energy demand and is projected to remain the largest contributor to the energy mix to 2045.

After recovering from a turbulent 2020 in the medium term, global oil demand is projected to continue growing at relatively high annual rates to reach a level of 103.7 million barrels per day (mb/d) by 2025. Long-term global oil demand is expected to increase by almost 10 mb/d over the long term, rising from 99.7 mb/d in 2019 to 109.3 mb/d in 2040 and to 109.1 mb/d in 2045.

On the supply side, following an unexpected sharp decline of 3.3 mb/d in 2020, its first annual drop since 2016, non-OPEC liquids supply will grow modestly in 2021 and pick up momentum in the following years, thus increasing from 65 mb/d in 2019 to 70.7 mb/d in 2025.

Only a small number of non-OPEC producers show meaningful supply growth post-2025, including Canada, Qatar, Kazakhstan and Guyana. Most other non-OPEC producers see output stagnate or decline. As such, non-OPEC supply declines from a peak of 71.8 mb/d in 2027 to 65.4 mb/d by 2045, and thus is broadly flat when comparing 2019 and 2045. OPEC liquids will increase from 33.8 mb/d in 2019 to 43.9 mb/d in 2045, re-

sulting in MCs' share of global liquids rising from 34% in 2019 to 40% in 2045.

Possible downside risks to the global supply outlook could stem from reduced upstream investment, which is forecast to decline by over 30% in 2020. To meet global oil demand, future upstream spending will need to average \$380 billion p.a. over the long term. Cumulatively, this means \$9.9 trillion (tn) (in 2020 dollars) will be required. Added to \$1.5 tn for the downstream, and \$1.2 tn in the midstream, cumulative oil-related investment requirements over the long term will be \$12.6 tn.

International cooperation could allow a more coherent, balanced and integrated approach to realizing Paris Agreement goals in the context of sustainable development. The Paris Agreement stipulates the relationship that climate change actions, responses and impacts could have with equitable access to sustainable development. Recognizing the specific needs and special circumstances of developing countries, the Agreement aims to strengthen the global response to climate change challenges by giving consideration to sustainable development and efforts to eradicate poverty. The COVID-19 pandemic makes this more urgent, especially in developing countries, which feel the effects acutely. For the world to emerge from this crisis, a surge in international solidarity and cooperation is needed to achieve a more sustainable, inclusive and resilient future. Energy access for all is an action area that could be leveraged to facilitate the coherent implementation of climate action and sustainable development objectives.

The *Annual Statistical Bulletin (ASB)*: This is a comprehensive publication and an excellent reference source for historical oil and natural gas data. It contains historical

time series of major oil and gas flows, based largely on official sources. It also functions as an important source of reliable information for the benefit of different stakeholders in the hydrocarbon industry. The 2020 *ASB* contains key statistical data on oil and natural gas activities in each of OPEC's 13 MCs: Algeria, Angola, Congo, Equatorial Guinea, Gabon, the Islamic Republic of Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, the UAE and Venezuela. In addition, it provides valuable data for many other countries grouped by geographical region, and covers major economic zones all over the world. In summary, the *ASB* provides a comprehensive quantitative overview of the global supply chain within the oil and natural gas industries. In regularly publishing the *ASB* and making such data publicly available, OPEC seeks to ensure greater data transparency and the increased sharing of information about the oil and gas industry and its many stakeholders. The 2020 edition of the *ASB* includes a separate interactive online version, which is freely available on the OPEC website, with historical time-series data going back to 1960. In 2020, the interface, usability and functionality of the interactive version of the *ASB* has been further improved to make it more user-friendly. There is a pocket version of the *ASB*, as well as a Smart App version that boasts many advanced features.

Assessing a regional supply/demand balance for crude oil by quality: The objective of this study was to assess the global crude oil supply/demand balance in terms of crude quality, which is defined in six distinct categories, and the evolution of this balance over the last seven years. While information on globally produced crude streams is readily available from various sources, obtaining similar data for the demand side of the equation presented a major challenge.

The study showed that global crude oil demand rose between 2010 and 2018, led by non-OECD Asia. In terms of quality, all crude type intakes rose, driven by considerable refinery capacity additions. However, within the spectrum, crude types processed in refineries towards the end of the time period became increasingly lighter, while the share of medium sour intakes declined.

World crude and condensate production increased between 2010 and 2018. Globally, light sweet and sour crude production soared during this period, while in contrast, medium sour and heavy sweet production declined.

Trade data estimates show a general across-the-board increase in crude trade flows in all crude quality categories, with the notable exception of heavy sour crude. The most prominent change is a massive rise in trade flows of light sweet grades.

Global crude oil balance by quality indicated that there is an increased surplus of light sour and light sweet crude over the observed period, mainly attributed to a surge in shale oil production. In contrast, the shortage of medium and heavy sour crudes has increased notably since 2016, which could be attributed to the voluntary production adjustments by countries participating in the DoC.

Aviation sector outlook: The objective of the study was to revisit the development of this sector with a focus on its oil demand growth potential in the medium and long term. Oil demand in the aviation sector is expected to grow by 2.3 mb/d to 8.9 mb/d in 2040. About 80% of new oil demand is expected to derive from non-OECD sources, while more than half of the incremental demand will come from Asia. By 2040, the industry is projected to grow in terms of traffic by a factor of 2.2, while fuel demand will grow by less than 40%. The reference and

sensitivity cases suggest that until 2040, the global aviation industry will remain dependent on oil-based products. For the period considered by this study, the main risk to oil demand in the aviation sector is in the area of policies, rather than aviation technologies.

Advances in battery technology and their impact on the transportation sector: The objective of the study was to review and analyze the latest developments in battery technology and assess their impact on oil demand growth in the transportation sector. Battery production is composed of cell manufacturing (energy intensive) and pack assembling (labor intensive). Lithium-ion batteries with nickel, manganese, cobalt-oxide cathode and lithium-ion batteries with a nickel-cobalt-aluminum-oxide cathode are the most prominent chemistries for automotive applications. Current technology development relies on material optimization, while solid-state and lithium-air batteries are expected beyond 2025. Material cost reduction is a major axis for large EV battery adoption. Currently, battery pack prices stand at \$156 per kilowatt hour (\$/kWh), with the objective to reach \$100/kWh by 2030. This could be met earlier, according to analysts. Major challenges exist in multiplying available charging capacity, mining raw material, battery/auto industry partnering and battery recycling. Financial incentives currently include major EV-promoting policies. As an estimate, around 1 mb/d of oil is displaced for the uptake of 100 million battery electric vehicles (BEVs).

Break-even costs for the upstream in non-OPEC regions: The objective of this study was to evaluate break-even costs for future non-OPEC crude oil supply, both conventional and non-conventional. Break-even costs increase as new high-cost field supplements are required to support naturally declining

production from legacy fields. The weighted average break-even cost for non-OPEC countries is projected to be \$30.2/b in 2020. The cost is expected to gradually rise by 37%, or \$41.3/b, by 2040. The projected global liquids supply indicates that at a price of \$55/b and lower, resources will be able to meet demand to balance the market. Supply from resources with a cost of up to \$80/b are expected to cater to a rise in projected demand in 2040.

Oil resource base – an updated assessment: The objective of this study was to update the assessment of the global resource base, as well as the reserve-to-production (R/P) ratio for oil at the global and regional levels. The study demonstrated that oil resource evaluation, estimation and reporting requires experienced and qualified reserve evaluators and auditors for proper accountability due to various uncertainties. Hence, oil resources are not calculated but estimated. Uncertainties, including the volume of oil that can be recovered technically and commercially, decrease as project maturity increases. A drop in the global R/P ratio in terms of the number of years recorded implies that more investment in exploration and production activities is required globally to boost reserves and enhance production until at least 2085. The breakeven costs of oil fields globally are high because most large reserve discoveries in recent years are in deep offshore terrains, or recovery requires advanced technology. The exception is a few reserves in the Middle East region.

Linking energy poverty and the human development index in sub-Saharan Africa: Energy poverty is more prevalent in rural than urban areas. The percentage of people with access to clean cooking fuel and technology is low in sub-Saharan Africa compared with the global average. Energy poverty is

prevalent in sub-Saharan Africa. There is a strong positive relationship between access to energy and an improved human development index in sub-Saharan Africa.

Run-up to the 52nd session of the UNFCCC Subsidiary Bodies (SB52): The report focused on the outcomes of COP25 and addressed issues related to climate change and the pandemic. In light of emerging challenges and increasing uncertainties, the report undertook a comprehensive analysis of climate negotiation processes under the UNFCCC, with a focus on unresolved issues critical for the full operationalization of the Paris Agreement – including Article 6 of the Agreement and long-term financial goals. This report also addressed the impacts of COVID-19 on global emissions and considered emerging trends, along with a focus on recovery plans geared towards the energy system transformation.

The IPCC Sixth Assessment Report (AR6): Review of the First Order Draft of Working Group III Contribution: Due to the influential role of Intergovernmental Panel on Climate Change (IPCC) reports in climate negotiations under the UNFCCC and in policymaking, a report entitled *The IPCC Sixth Assessment Report (AR6): Review of the First Order Draft of Working Group III Contribution* aimed to critically consider the first-order draft (FOD) of the AR6 WGIII contribution, focusing on energy-related matters of importance to MCs. Particular attention was paid to the carbon-neutral energy transition pathways presented in the IPCC report, which are aligned with the long-term temperature target of the Paris Agreement. A concise summary of issues of importance to the collective interest of MCs was provided, highlighting IPCC report takeaway messages.

Monitoring key findings of the IPCC AR6 Working Group III contribution on energy-related matters: The modelling study reassessed key scenarios considered in the FOD of the AR6 WGIII contribution. This empirical analysis aimed to provide a quantitative reassessment of different energy system transition pathways presented in the IPCC report, incorporating in-house modelling expertise.

The value added of this exercise was an estimation of associated adverse impacts of climate response measures on oil demand and the economies of energy-exporting developing countries. In addition, the study complemented information available in the WGIII report, given that the scenarios analyzed are aligned with the mitigation pathways of the FOD, while focusing on various technology and policy options, therefore adding insights that go beyond the basic carbon prices used in the WGIII report.

New Developments in the Context of Climate Change and Sustainable Development: In light of uncertainties and new developments regarding climate change and sustainable development due to the pandemic, a report entitled *New Developments in the Context of Climate Change and Sustainable Development* undertook a comprehensive analysis of the outcome of recent high-level meetings under the 75th UN General Assembly session. The report also addressed the outcomes of the 22nd meeting of the Standing Committee on Finance, the 3rd meeting of the Katowice Committee on the Impacts of the Implementation of Response Measures, the 107th meeting of the Executive Board of the Clean Development Mechanism and G20 meetings. The entry into force of the Kyoto Protocol Doha Amendment and its possible impacts on climate negotiation processes was discussed, and recent announcements by major economies on carbon neutrality were considered. The potential impact of the new US administration on climate policies

and action was also presented, as well as the impacts of COVID-19 on global emissions.

Brief Note on the June Momentum for Climate Change: In giving impetus to climate change discussions, the UNFCCC Secretariat held a series of virtual meetings with the participation of experts and representatives from Parties, along with other stakeholders. A report entitled *Brief Note on the June Momentum for Climate Change* covered a selection of the main issues discussed during these UNFCCC dialogues, including those related to nationally determined contribution (NDC) ambitions, finance and investment for sustainable recovery, and loss and damage. The report highlighted countries' priorities, aiming to address both the COVID-19 and climate change crises, including through implementation of policies for a 'green' recovery.

Briefing on the UNFCCC Climate Change Dialogues (23 November–4 December) and Climate Ambition Summit (12 December 2020): The report addressed discussions held in the largest-yet UNFCCC virtual conference, which aimed to showcase progress made in 2020 and exchange views and ideas on mandated work under the subsidiary and governing bodies. The report critically presented discussions and takeaway messages of meetings, focusing on a vast array of topics – including ambitious emission reductions, adapting to the effects of climate change, the provision of finance for climate actions, technology cooperation, capacity-building, climate action in the pre-2020 period, and Parties' new or updated NDCs. It also assessed the outcome of the Climate Ambition Summit convened to celebrate the 5th anniversary of the Paris Agreement.

International dialogues

OPEC has long been aware of the importance of dialogues between energy stake-

holders. The interconnectedness of global markets, as well as the global impact of critical energy issues such as security of supply, security of demand, economic prospects and environmental issues, make such dialogues necessary to preserve balance in the oil and gas industry.

In this context, OPEC continuously strives to enhance its current partnerships and develop future opportunities for cooperation. The Secretariat is proactive in organizing and participating in international dialogues via many high-level meetings, technical meetings, joint studies, workshops and memberships.

As part of the OPEC Secretariat's Work Programme, OPEC's energy dialogue activities saw another successful year in 2020. Although the year was marked by COVID-19 and its repercussions for travelling, OPEC successfully achieved 100% completion of the dialogues committed to in the work programme, primarily through videoconference meetings. OPEC met with 16 energy dialogue partners at more than 20 events over the course of 2020 and continued to develop a new dialogue with the International Civil Aviation Organization (ICAO).

The EU-OPEC Energy Dialogue held its 14th High-Level Meeting on 27 October 2020, hosted by the OPEC Secretariat and held via videoconference. The 3rd Technical Meeting was also held via video conference shortly before the high-level meeting. Both meetings were highly successful, building new momentum in the dialogue after a two-year hiatus due to elections in the EU Parliament, the resulting constitution of a new EU Commission and other staff changes, in addition to challenges in light of the COVID-19 pandemic.

The 7th High-Level Meeting of the OPEC-Russia Energy Dialogue, hosted by OPEC, took place via videoconference on

3 November 2020. The meeting was co-chaired by Mohammad Sanusi Barkindo, Secretary General of OPEC and Alexander Novak, Deputy Prime Minister of the Russian Federation. OPEC presented on the impact of COVID-19 on global energy markets in the short, medium and long term, and also provided an overview of recent developments in the CoC. The Russian Federation presented on the *Energy Strategy of the Russian Federation* in the period to 2035, as well as on an industrial initiative on the standardization and certification of oil and gas equipment as a potential vector of cooperation within the CoC.

The 4th High-Level Meeting of the OPEC-China Energy Dialogue was held on 7 December 2020 via videoconference. The meeting was co-chaired by the Administrator of the National Energy Administration (NEA) Zhang Jianhua and OPEC Secretary General Mohammad Sanusi Barkindo. The Ambassador of the Permanent Mission of China to International Organizations in Vienna, Wang Qun, also participated in the meeting. The meeting was attended by delegates from OPEC and the NEA, as well as numerous delegates from Chinese national oil companies, including the China National Petroleum Corporation, the China National Offshore Oil Corporation, Sinochem, Sinopec and PipeChina. The meeting focused on short-term issues related to COVID-19 and oil market implications, as well as security of supply. Furthermore, long-term energy transition efforts in China were addressed, combined with OPEC's presentation on the CoC. It was agreed that the next meeting will be held in 2021.

The 4th High-level Meeting of the OPEC-India Energy Dialogue was hosted by OPEC on 5 November 2020 via videoconference, following the 3rd Technical Meeting on 2 November. The meeting focused on the implications of

COVID-19, discussing the repercussions of the pandemic and its significant impact on both the world economy and energy markets, including oil. Participants also deliberated on medium-term energy and oil prospects and challenges.

On 14 December 2020, the Secretariat hosted the 6th Technical Meeting on Asian Energy and Oil Outlooks via videoconference. The meeting was an invaluable opportunity to have an Asia-wide, focused discussion on the impact of COVID-19 on the global energy market as whole, as well as the implications of the pandemic on Asian energy demand outlooks, including for China, India, Korea and Japan.

OPEC-US Energy Dialogue: Numerous videoconferences were held with North American-based think tanks, financial institutions and energy companies throughout 2020. Dialogue with the US provides an opportunity to present high-level briefings on key elements of the historic DoC and also to underline OPEC's key role in market stabilization. Meanwhile, technical expert-level meetings allow for comprehensive and open discussion between OPEC analysts and their US counterparts. Moreover, the OPEC Secretariat was actively engaged with US and Canadian entities in international fora.

The 10th Anniversary IEA-IEF-OPEC Symposium on Energy Outlooks, which took place at the IEF Secretariat in Riyadh in February 2020, was part of a broader programme that was agreed upon by the IEA, IEF and OPEC and endorsed by Energy Ministers at the 12th IEF Energy Forum. As in previous years, the Symposium drew a large number of experts from a broad range of stakeholders and MCs. Two other meetings were held back-to-back with this event, the 4th IEF-EU Energy Day and the 1st IEF-International Renewable Energy

Agency Seminar on Renewable Energy and Clean Technology Outlooks.

The 2020 meeting of the IEA-IEF-OPEC Collaboration on Historical Baseline Data Comparison was the 10th meeting to be held since 2015, with most meetings taking place at the OPEC Secretariat. Baseline data was exchanged between the organizations, and several fruitful discussions took place to help understand the source and magnitude of data differences.

The 7th Joint IEA-IEF-OPEC Workshop on Interactions between Physical and Financial Energy Markets was held via videoconference on 22 October 2020. The joint IEA-IEF-OPEC meeting covers the evolving inter-linkages between physical and financial energy markets. It has developed into a unique, high-level technical event, bringing together a diverse range of market participants to discuss issues not addressed in other high-level fora. The 2020 workshop had over 120 participants and covered the following timely topics: the impact of COVID-19 on the global economy and commodity markets, global oil industry investment patterns, dynamics in light of COVID-19 and the energy transition, as well as exchange-traded funds and the futures markets, incorporating lessons learned from recent oil market volatility.

The 1st technical meeting with the GECF was held on 22 June 2020, followed by the 2nd technical meeting on 19 October 2020. Building on the technical meetings, the 1st high-level meeting of the dialogue was held on 4 November 2020. The meeting noted the successful collaboration in technical areas, including data exchange and knowledge-sharing, and saw an agreement reached on the WP for future activities of the dialogue.

The Secretariat, as one of the main Joint Organizations Data Initiative (JODI) contributors and in line with its commitment to energy data transparency, continued its active stance in promoting JODI by significantly contributing to both JODI-Oil and JODI-Gas initiatives in 2020 through data submission from OPEC MCs and various other related activities, such as meetings and international conferences. Due to the global COVID-19 pandemic, only one physical JODI Inter-Secretariat (IS) meeting took place in January 2020, while a second online IS meeting was held on 4 December 2020, in which OPEC participated.

The main activities in JODI-Oil and JODI-Gas relate to enhancing the quality of JODI oil and gas data, expanding the current data collection to cover other energy commodities, and underscoring the importance of JODI and data transparency in the international energy market scene. The initiative aims particularly at addressing specific challenges, such as resources in some countries and organizations, and the overall performance of OPEC MCs. OPEC's participation in JODI-Oil and JODI-Gas remains very active. It is also worth noting that both databases face challenges concerning the overall quality (coverage and timeliness) of data for some major OPEC and non-OPEC oil and gas producing and consuming countries, despite significant improvements in recent years.

Both bi-annual IMF/World Bank meetings – the Spring Meetings in April and the Annual Meetings in October – were held via videoconference in 2020. As per long-standing practice, OPEC participated in the virtual meetings of the International Monetary and Financial Committee (IMFC) and the G24 meetings, providing written statements on the oil market to delegates of the IMFC meetings, highlighting the Organization's work in

stabilizing the oil market and emphasizing its positive effect on the global economy. In the bi-annual meetings of the G24, OPEC was also given the opportunity to present an oral intervention by the OPEC Secretary General to finance ministers and central bank governors. These meetings also provided a valuable opportunity to discuss oil-market related developments and explain the efforts that OPEC and its partners undertook to counterbalance the negative effects of COVID-19.

OPEC participated in the 7th Annual Meeting of International Organizations, which was held on 3 September 2020 via videoconference.

The 22nd Meeting of the Vienna Energy Club (VEC) took place on 30 November 2020 via videoconference. The meeting was attended by fellow VEC members including, among others, the OPEC Fund for International Development, the Renewable Energy and Energy Efficiency Partnership, the Organization for Security and Co-operation in Europe, the International Atomic Energy Agency, the UN Industrial Development Organization, Sustainable Energy for All, as well as representatives from the Austrian federal ministries for international affairs and economy.

The OPEC Secretariat participated in the ICAO Stocktaking Seminar on aviation in-sector CO₂ emissions reductions, which took place from 8–11 September 2020 via videoconference. The Seminar provided important inputs related to the views of the aviation industry regarding technology, alternative fuels and potential efficiency improvements.

OPEC has been actively involved in the G20 energy dialogue since 2009. This year held particular importance, as the Kingdom of Saudi Arabia hosted the G20 Presidency in 2020 – the first time an OPEC MC has held the rotating Presidency. The Presidency focused on steering the work of the G20 towards, “Re-

alizing Opportunities of the 21st Century for All.” Energy issues were high on the agenda in 2020, with the G20 for the first time holding two Energy Ministerial Meetings in the same year – an extraordinary meeting in April to address the unprecedented market turbulence caused by the COVID-19 pandemic and the planned annual meeting in September to finalize the energy initiatives for 2020. During the April meeting, the G20 also established a short-term Energy Focus Group consisting of all interested G20 parties, working in collaboration with relevant international organizations (IEA, IEF and OPEC) to monitor response measures and regularly report its assessment to G20 energy ministers during the Saudi G20 Presidency.

The Presidency also organized an extensive schedule of workshops and meetings of technical experts, in which OPEC was an active participant. On energy, the Kingdom of Saudi Arabia introduced as an overarching framework for the concept of the Circular Carbon Economy (CCE), a holistic, integrated and inclusive approach based on innovation and technology encompassing all energy sources while addressing the need to economically utilize emissions. The G20 ministers concluded the year’s work by issuing a communique detailing consensus outcomes on 2020 energy priorities, including an endorsement of the CCE platform.

OPEC continued to participate actively in the IEA Greenhouse Gas Programme in 2020, attending two virtual executive committee meetings. The Programme is conducting a study entitled: *Blue hydrogen: Beyond the Plant Gate with the Element Energy*.

As part of the OPEC-AFREC Collaboration Initiative, the 1st OPEC-AFREC Technical Meeting was convened on 6 October via videoconference. The meeting sought to focus on

potential areas of cooperation between the two parties and the way forward for the OPEC-Africa Energy Dialogue, with key topics including energy efficiency and energy-related data collection in Africa, as well as knowledge exchange between the two organizations.

Collaboration between OPEC and the African Petroleum Producers Organization has taken shape in a short period of time, beginning with a request in March 2020 to explore areas of potential synergy in data sharing. The 1st technical meeting between the two parties was held on 13 November 2020 via videoconference. The meeting sought to focus on potential areas of cooperation and the way forward for the dialogue.

Cooperation with the King Abdullah Petroleum Studies and Research Centre (KAPSARC) continued in 2020. In February 2020, OPEC attended the IEF-EU Energy Day in Riyadh, Saudi Arabia, which was co-organized by KAPSARC and featured The Green New Deal and Circular Economy: New opportunities for Europe, North Africa, and the Middle East as its topic. Moreover, KAPSARC was invited to contribute to the OPEC at 60 workshop, and OPEC participated in a workshop jointly organized by KAPSARC and the IEF on an energy open data ecosystem and a transparency policy scenario model and tools.

Technical meetings and workshops

The OPEC Secretariat has long-standing ties with a number of agencies that publish forecasts on world oil demand and non-OPEC supply at regular intervals. In preparing its own forecasts, the Secretariat often benchmarks its own projections against these agencies to ascertain the level of prevailing uncertainty and to gauge market sentiment on what is expected in the near term. Sometimes forecasts by other agencies show

considerable uncertainty in the market. The sudden outbreak of the COVID-19 global pandemic with its far-reaching consequences, high levels of uncertainty and divergence in published forecasts lent additional urgency and importance to this workshop, which was held on 1–2 October 2020, via videoconference. Additionally, there were regular technical interactions with various entities and agencies to discuss and share expert insights on oil market conditions and prospects.

The Secretariat hosted the Technical Workshop on OPEC at 60: Contributions to the Global Economy and Energy Market, which convened on 23 June 2020, via videoconference. The workshop was part of OPEC's 60th anniversary celebrations and was positively received. In addition to reviewing the evolution of OPEC in the past, the workshop also looked to the future, allowing all participants involved to share their insights on how OPEC should further evolve in the face of upcoming critical challenges as an integral part of the global community. Discussions also considered the topics of energy access, energy poverty eradication, environmental protection, sustainable development and the post-COVID-19 world.

The Secretariat hosted the 3rd Technical Workshop on Climate Change under the theme of the impacts of the implementation of climate response measures on 29 September 2020. This event was held virtually with the objective to provide a conducive platform for discussion on the possible adverse impacts of climate response measures for energy-exporting developing countries and options for them to diversify their economies, including within and outside the energy sector, in order to offset these negative implications. The key issues discussed and takeaway messages are synthesized in an OPEC report.

This workshop was organized back-to-back with the 18th Coordination Meeting on Climate Change, which was held on 30 September 2020 and aimed to consider the latest developments and emerging challenges related to climate negotiations under the UNFCCC and Paris Agreement implementation, as well as the key findings of the IPCC FOD report on mitigation. An OPEC report summarizes discussions held during this meeting and conclusions derived on the way forward concerning key issues of importance for MCs.

A series of individual technical workshops were organized between some OPEC MCs and countries participating in the DoC and major secondary sources such as Argus, the US Energy Information Administration, EIG, IEA, IHS and Platts, on reporting crude oil production volumes. The workshops were individually attended by Angola, Bahrain, Brunei, Congo, Equatorial Guinea, Gabon, Iraq, Kazakhstan, Malaysia, Nigeria, South Sudan and Sudan, as well as the aforementioned secondary sources. The objective of these workshops was to exchange information among the OPEC Secretariat, invited countries and the secondary sources regarding the methodologies used by third-party data providers to estimate crude oil production figures. The workshops proved to be extremely beneficial for all involved stakeholders, providing unique, first-hand information on the subject matter.

The 2nd Workshop on Energy and Information Technology was held at the OPEC Secretariat on 21 September 2020. The workshop was structured into two sessions. The first session on blue hydrogen discussed hydrogen production from hydrocarbons and provided an overview of hydrogen within the energy transition. The second session dealt with the phenomenon of digitalization in the energy

sector, including trends and breakthroughs. This session covered trends in IT, addressing the needs of companies and organizations to develop, deploy and integrate strategic production and IT. The focus was on omnipresent challenges in cybersecurity, blockchain in energy, as well as digitalization and artificial intelligence to enable key success factors, performance management, enterprise risk management and operational excellence.

The 19th Annual Statistical Meeting (ASM) convened on 24–25 June 2020 as a webinar due to the COVID-19 pandemic. The 19th ASM aimed primarily at strengthening the flow of regular oil, gas and other energy-related statistical data submitted by MCs. Due to the COVID-19 pandemic, the meeting was almost solely devoted to interactive discussions with each MC separately on submitted OPEC 2019 Annual Questionnaires and the ASB 2020 blue print.

The meeting underlined the vital role of timely and accurate data, as well as the importance of efficient cooperation and communication between the Secretariat and MCs, in order to continuously improve the quality of data submission performance. It was agreed to further enhance data quality and data submission and continue with strong cooperation in the form of training workshops tailored for individual MCs in the near future. Thirty-seven participants from ten OPEC MCs, with Gabon, Iraq and Libya not in attendance, joined in the 19th ASM.

Training and knowledge transfer

Under the activities of the OPEC Academy (OA), participants in OA programmes both from MCs and outside continued to have the opportunity to acquire knowledge and understanding, as well as critical thinking, practical, professional and personal skills through

assessments that are challenging, rigorous, fair, transparent and appropriately aligned to the learning undertaken and the intended learning outcomes. Programme participants and involved Secretariat staff members were enabled to gauge their learning needs and achievements, to develop judgement and independence in learning and to make informed choices in planning their studies and careers.

The annual Multi-Disciplinary Training Course (MDTC) is designed to provide MC participants with a thorough overview and first-hand information about OPEC's role in assessing the energy demand and supply balance. It also informs participants about the Secretariat's wide range of activities as a service provider to MCs and its role as a representative for MCs in international relations. Due to the impact of the COVID-19 pandemic and ensuing travel restrictions, the 19th MDTC was held via videoconference from 6 to 8 October 2020, with 37 delegates from seven MCs in attendance.

Due to the outbreak of the global COVID-19 pandemic and resulting restrictions, both the Visiting Research Fellow Programme and the Summer Fellowship Programme did not take place in 2020 and only three internships were held during the year.

The OPEC Secretariat continued with its lecture series, inviting leading analysts, researchers and company officials to allow for an active and timely exchange of views. In 2020, 14 lectures were held, 12 of which were videoconferences.

Database and communications

In 2020, the Statistics, IT Development and Information Centre teams provided data services to the Organization and its MCs. Statistical databases were updated and main-

tained to extend coverage. Data quality was also improved through continued automation of data processing and validation.

New applications were deployed for the support division to improve internal operations and activities. New functionalities were introduced to improve budget monitoring and accessibility of relevant financial information.

The procurement process has been enhanced, with new features in its software applications for the management and control of supplies. The workflow has been further automated to increase speed.

Interactive websites and downloadable pages for the *WOO*, *ASB* and *MOMR* publications have been enhanced. Mobile apps for the *ASB* and *WOO* have been completely re-implemented in-house using a state-of-the-art development platform integrated with an internally developed content management system in order to increase the level of automation of content updating processes.

As a part of the Information Security Programme, information security training sessions have been offered to all users of the OPEC Intranet in order to increase awareness of omnipresent cybersecurity threats.

The OPEC Document Management System has been enhanced to support collaborative work within the Secretariat and with MCs.

The OPEC Digital Archive platform was restructured and improved through the introduction of new workflows and procedures in the course of the Archive 2.0 project.

The software and hardware infrastructure utilized to host databases and provide access to stakeholders via different delivery channels has been upgraded and maintained.

The Development Team attended training sessions in order to keep abreast of the latest developments in IT, information security management and project management.

The OPEC Big Data project has progressed in line with plans by expanding coverage of oil data through incorporating stocks and refining data and developing a module to create and display customizable personalized dashboards and reports. Importantly, the pilot version of the OPEC Big Data platform has been shared and made available to OPEC MC National Representatives and within the OPEC Secretariat following a presentation on its progress on 22–23 September 2020 during the 20th Special Meeting of the ECB.

In 2020, the Information Centre assisted OPEC staff members, delegates from OPEC MCs, as well as external users, by providing research support and reference services, access to online databases and electronic delivery of subscribed reports, as well as fulfilling reference and helpdesk requests. The Information Centre continued developing its print and digital collection during the year through the purchasing of books and reports, as well as its management of subscriptions to online databases, reports, journals and newspapers.

The digitization project started in the Information Centre in early 2020. The main goal is to provide access to OPEC's valuable library collection to external users from OPEC MCs and worldwide. Digitization refers not only to scanning or capturing of analog content, but a suite of activities that enable discovery, delivery, access and long-term preservation of the library collection. Due to restrictions caused by the COVID-19 pandemic, planned physical digitization was postponed, while it was decided to begin the implementation process for the digital interface software Visual Library.

Due to the pandemic and teleworking, the Information Centre enhanced access to online databases and enabled remote access

for all OPEC staff to the research platform EBSCO Discovery Service and online database OECD iLibrary.

Furthermore, the Information Centre started the development of an e-book collection in the research platform EBSCO Discovery Service using the Demand Driven Acquisition purchasing model in order to enhance access to online publications, along with integration and preservation of publications relevant to OPEC research.

With regard to research support services, the Information Centre provided 353 publications in response to 32 research requests in 2020.

Also during the year, the Information Centre successfully conducted two assessments of OPEC subscriptions, one in April and one in October. Following user feedback on evaluated subscriptions, some titles were cancelled due to low usage, the existence of alternative sources, or availability in other databases (e.g. EBSCO Discovery Service, OECD iLibrary), which resulted in improving cost and usage efficiency regarding OPEC subscriptions.

The effects of the digital transformation process via changing the format of selected publications from print to online will result in new cost savings for the upcoming year.

PR and Information Department

In 2020, the onset of COVID-19 created new and difficult conditions for the entire Secretariat, including staff of the Public Relations and Information Department (PRID). Lockdowns were underway for much of the year, with PRID staff working primarily in home office, attending in person only as deemed necessary. In order to stabilize the oil market, the Secretariat reached out to even more

parties than usual to discuss market conditions. Thus, in addition to regular meetings and dialogues, discussions specifically dealing with the impact of COVID-19 were scheduled and required support from PRID in the form of speechwriting, *Bulletin* articles, media relations, news items, press releases, social media posts, reports and audio-visual (AV) coverage. This included a great number of bilateral meetings with MCs and global consultancies, as well as secondary source technical meetings that were held via webinar in the February to April timeframe, for which PRID wrote many additional speeches.

PRID staff continued to attend to duties related to the historical DoC, which was signed on 10 December 2016. Regular meetings associated with the DoC were ongoing throughout the year, including seven regular meetings of the JMMC and ten JTC meetings, along with two technical meetings. Due to COVID-19, more Ministerial Meetings were held than usual over 2020. This included one Extraordinary Meeting of the Conference (178th), two ordinary Meetings of the Conference (179th, 180th), two Extraordinary OPEC and ONOMM (9th and 10th), along with the three regular ONOMM (8th, 11th, 12th), all of which required extensive support from PRID staff.

PRID focused on the public image of OPEC and its enhancement throughout the year. This was even more significant during 2020, as OPEC came strongly into the spotlight with its work to stabilize the oil market, which was struck by an unprecedented drop in demand in the early days of the pandemic. These efforts were widely recognized on the broader world scale and closely followed by the industry, world leaders, academics, the media and the public at large.

OPEC's most recent LTS identified the importance of improving and enriching the im-

age of the Organization, thus PRID activities have focused on this. The Department carried out manifold tasks – from editorial writing and speechwriting, to public and media relations and outreach programmes, to the design, editing and production of materials and publications, to AV activities and the distribution of key publications. PRID made certain that the Organization was presented to the public in a positive and desirable manner at all times.

Fine-tuning the message of the Secretariat is also a part of PRID's contribution throughout the year, while working towards the achievement of departmental priorities and generating high-quality output. The Organization's essential messaging through its various outreach channels remained strong in 2020, including 'openness and transparency', 'dialogue and cooperation' and 'stability and security'. These themes were enhanced as the oil market battled to overcome the effects of the pandemic.

Although PRID was primarily responsible for editing, designing, producing, printing and distributing materials, the content of this output varied greatly, depending on publication type.

As in previous years, there was especially close cooperation between PRID and the Secretariat's RD in the area of publications throughout the year. The work of PRID also required close cooperation with other Departments and Units, including the SGO, the LO, the DSD, the PSD, the ESD and the EMU, as well as MCs themselves. All departments within the Secretariat benefited from the expertise of PRID's three subsections – editorial, public relations (including AV), and design and production (D&P).

In 2019, PRID sent out a media questionnaire as part of a consultation process to

assess the condition of media access to the opening sessions of ministerial meetings. The target audience was more than 200 journalists and analysts from various local and global organisations interested in OPEC and the DoC meetings. The results were analyzed and reviewed in 2020 to better tailor arrangements, taking on board the opinions and interests of all those involved.

OPEC turned 60th in September 2020. To celebrate, two sets of activities were prepared: one to mark the Organization's birthday (14 September) and the other to recognize OPEC's birthplace – Al-Shaab Hall in Baghdad, Iraq – with the entire OPEC family, including MCs and special guests.

The Secretariat's 60th Anniversary Organizing Committee, chaired by the Head of PRID, organized a comprehensive outreach initiative to mark the 14 September occasion. The programme aimed to interact with a broad range of OPEC's audience scattered across the globe, including the citizens and media of MCs. OPEC's Heads of Delegation were encouraged to hold press interviews to discuss the role of the Organization and its historic journey.

A goodwill video message by the Secretary General, a short documentary film and a press release were produced and shared with OPEC MCs, DoC participating countries and the media. The goodwill message was also translated into Arabic to extend its outreach. A dedicated special section on the Organization's website was developed to mark the historic milestone. The initiative additionally included strong engagement by OPEC Secretary General, Mohammad Sanusi Barkindo, as he drafted two op-eds, which were published in many international and regional newspapers and press agencies, and held many interviews, including with CNN, ORF,

MEES, Platts, Kyodo and the Iraq Energy Institute. The initiative saw remarkable success due to firm support by OPEC MCs and non-OPEC DoC participants. In addition, there was extensive coverage by press outlets in OPEC MCs and the Organization's host country Austria, along with international media agencies. Some PRID staff members were also part of the committee.

Furthermore, special gifts were produced for the occasion, including personalized items for Secretariat staff members, such as cups, smartphone chargers and speakers.

For the celebration in Baghdad, the Secretariat's committee collaborated closely with Iraq's Anniversary Organizing Committee on preparations, including issues related to communication and PR, protocol, invitations and AV coverage. Iraq's committee was chaired by Alaa K Alyasri, Iraq's Governor for OPEC.

PRID also undertook extensive research, wrote, designed and produced a 460-page history book entitled *OPEC 60 years and beyond: A story of courage, cooperation and commitment* to portray the successful journey of the Organization. The research and writing process was wide-ranging, involving the utilization of a diverse assortment of primary and secondary sources. *OPEC 60 years and beyond: A story of courage, cooperation and commitment* consists of two main parts. Part I chronicles the history of the Organization, starting with the build-up to OPEC's creation on 14 September 1960 up to the present day and its 60th Anniversary. Part II looks more deeply into specific cross-cutting issues to further explore what the Organization stands for and where it is heading, including chapters on dialogues, OPEC Seminars and development, with a focus on the OPEC Fund for International Development, OPEC and its host country Austria, as well as environmental matters. A

special publication of the *OPEC Bulletin (OB)*, covering a variety of issues related to the anniversary, was also put together for the event.

An extensive 20-minute documentary film that explores OPEC's history, founding and other key milestones was additionally produced. The research, collaboration, writing and script production of this large-scale project took place over a number of months and involved many PRID colleagues. Research drew on various historical literature and video productions. Regrettably, the event in Baghdad had to be postponed due to the COVID-19 pandemic and related restrictions.

Editorial Unit

The Editorial Unit directly supported the OPEC Secretary General and other Members of Management in carrying out their duties in 2020 through the provision of speeches, press releases, news items, video scripts, talking points, media messaging, background information for interviews and commentaries, as well as liaising with the press. Articles were written for various magazines, as well as for the Organization's own magazine, the *OB*. Additionally, a great deal of time and effort was spent editing, revising and proofreading research documents, presentations and reports, and offering support at various meetings.

Speeches and statements

In 2020, nearly 150 speeches were written for the Secretary General, the Director of the Research Division and other OPEC officials, compared with over 120 speeches in 2019 and just over 100 in 2018, reflecting the growing number of meetings.

The Secretary General attended a great number of major industry events throughout the year and delivered keynote speeches,

statements and interventions. These were held in person until COVID-related lockdowns began in late February, after which they were held via webinar. They included *inter alia*: the 10th Gulf Intelligence UAE Energy Forum (Abu Dhabi, UAE); International Petroleum Technology Conference (Dhahran, Saudi Arabia); WEC (Davos, Switzerland); International Carbon Capture, Utilization and Storage Conference (Riyadh, Saudi Arabia); CERAWeek 2020 (Houston, Texas); Global Science Summit (Al Ain, UAE); Columbia University Energy Roundtable; Centre of Analysis of International Relations (hosted by Azerbaijan); ADIPEC Energy Dialogues; CERAWeek Leadership Dialogue; Africa Ministerial Roundtable; Energy Webinar hosted by the Canada-UAE Business Council; 36th Asia-Pacific Petroleum Conference; G20 Energy Ministerial Virtual Meeting; G24 Ministerial Meeting – IMF/World Bank meetings; Energy Intelligence Forum; IMF Plenary Session; CERAWeek India Virtual Conference; JP Morgan Global Energy Conference; ADIPEC Virtual Strategic Conference; GECF Ministerial Roundtable on Natural Gas; Virtual Nigeria Oil and Gas Conference; and the 31st Meeting of the Energy Charter Conference and Ministerial Meeting.

PRID worked closely with RD to produce speeches for various conferences, seminars, workshops and meetings. These messages were delivered by the Secretary General, senior OPEC officials, as well as high-level members of MC delegations to representatives from all sectors of the energy industry, as well as government, academia and the media.

OPEC's activities and messages were of particularly high interest in 2020, as can be seen by the reporting and analysis of speeches, statements and interventions delivered at various events. The subsequent publication of many of these on the OPEC website contin-

ues to be useful in generating traffic, attracting positive coverage and disseminating the Secretariat's message.

In 2020, guest editorials, articles and Q&As were provided for several publications. These included – Articles: G7 publication (US); G20 publication (Saudi Arabia); Atlantic Council – The Global Energy Agenda; Op-Ed for OPEC's 60th Anniversary – various publications; IP Week; 'Diplomatic Service and Practice' (Russian Ministry of Foreign Affairs). Q&As: Iraq Energy Institute; MEES; Energy Intelligence Group; Achaab magazine; CERAWEEK Leadership Dialogue with IHS; Oil and Money Conference; ADIPEC. Podcasts: IEF Secretary General's inaugural podcast guest contribution (with the new IEF Secretary General interviewing OPEC's Secretary General).

JMMC and JTC

There were ten JTC and seven JMMC meetings in 2020, each of which required editorial and speechwriting support. The editorial team prepared speeches for the Secretary General, the Chairman of the JMMC and the President of the Conference for these occasions; drafted press releases for each meeting; and provided editorial assistance for the finalization of committee reports. The JMMC meetings were extensively covered in the *OB* throughout the year.

Videos

In addition to the editorial section's regular activities, it began in recent years to produce a large number of scripts and voice-overs for videos. This activity increased significantly over 2018 and 2019 and was ongoing in 2020, with about a dozen scripts written. Additionally, videos were made each month on the *MOMR* for the OPEC website.

Publications

PRID made significant contributions to all major publications, including editorial and design support, input, promotion and production. These contributions help ensure the consistency of editorial quality, style, messaging and design. OPEC publications in 2020 included the regularly produced, flagship *MOMR*, which is closely followed by the oil industry, as well as many other external and internal documents. Editorial staff also attended various meetings (either via videoconference or in person) and assisted in drafting internal write-ups and reports. They produced articles, as needed, based on these meetings for OPEC's monthly magazine, the *OB*. In addition, staff produced content for the OPEC website, including press releases and news items, which have dramatically increased in number over the past year, and assisted in providing editorial advice and input of various kinds for departments within the Secretariat upon request throughout the year.

Another regular feature of PRID's Annual WP is the annual *OPEC Diary*. The editorial content for this publication is generated and edited by PRID, and then approved by the Secretariat. In addition, the *ASB* continues to be published annually, providing accurate, reliable and timely historical data on various aspects of the global oil and gas industry. The 14th edition of the *WOO*, launched at the beginning of October, provides the Secretariat's in-depth look at the unprecedented scale and impact of the COVID-19 pandemic on the global energy and oil markets. It also provides a thorough review and assessment of the medium- and long-term prospects for the global oil industry, for the first time to 2045, as well as analysis of various sensitivities that have the potential to impact the petroleum industry in the years ahead. This publication has become a useful reference tool for people

in the industry, and interactive versions of the *WOO* have been available for a few years.

Large parts of the *Annual Report (AR)* – which provides a detailed description of the market for the year, as well as activities of all sections of the Secretariat – are produced by the editorial section, and its editing and production are undertaken in-house.

The monthly *OB* continued to highlight the activities of the Secretariat and the Organization's MCs. Its coverage is comprised of articles of interest on various topical issues, as well as informative analytical features. In 2020, editorial staff and contributors wrote a total of 172 articles and features for the *OB*.

Of note in 2020 were articles on the following topics: in January, coverage of the 177th Meeting of the OPEC Conference and 7th OPEC and non-OPEC Ministerial Meeting, including ministerial interviews and impressions; the countdown to 60 (OPEC's birthday); International Petroleum Technology Conference, Dhahran; OPEC-Asia dialogue; Austria-Russia Friendship Society; COP25; a conversation with Peter Kütemann; and an obituary for Dr Fadhil J Chalabi. The February-March *OB* covered the 178th Extraordinary Meeting of the OPEC Conference, plus impressions; COVID watch; obituaries on Sultan Qaboos bin Said of Oman, Dr Herman Franssen and Dr Deyaa Alkhateeb; CCUS; Davos 2020; Chinese update on the pandemic; African Petroleum Producers Organization; Saudi Aramco; Algeria; along with features on OMV and Webster University. The April-May edition featured the 9th and 10th OPEC and non-OPEC Ministerial Meetings; G20 emergency energy meeting; Saudi Arabia's G20 presidency; strategic briefings; obituary for Hossein Kazempour Ardebili; OPEC Fund DGs; 60th anniversary book; Pink Petro; World Expo 2020; OPEC home office during COVID-19; and a

study on the impact of COVID on Africa's oil-producing countries. The June-July edition covered the 179th Meeting of the Conference and the 11th OPEC and non-OPEC Ministerial Meeting; an obituary on Belaïd Abdesselam; OPEC at 60 Technical Workshop; strategic briefings; Sheikh Ahmed Zaki Yamani's 90th birthday; and the effects of COVID on the air transport sector. The August-September edition of the *Bulletin* was a Special Edition focusing on OPEC's 60th anniversary and included statements and tributes by numerous people worldwide involved in the organization's past and present, its history, its connection to Vienna and its historic beginnings. The edition also covered the *ASB* launch. The October edition saw coverage of the September and October JMMC meetings; more coverage of OPEC's 60th birthday; the *WOO* launch; an obituary on Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah; a focus on Kuwait City; G24 meeting; 1st OPEC-AFREC technical meeting; Energy Executive of the Year Amin Nasser; along with features on Daniel Yergin's book *The New Map* and Ignacy Łukasiewicz's book *A Prometheus on a Human Scale*. The November *Bulletin* covered a JMMC meeting; a story on the terror attacks in Vienna; OPEC-Russia relationship; dialogues between OPEC-India, EU-OPEC and OPEC-GECF; G20 Riyadh Summit; Saudi Arabian Artificial Intelligence Summit; inaugural podcast of OPEC Secretary General Barkindo with the head of IEF; and an obituary on Prince Khalifa bin Salman Al Khalifa.

Meetings of the Conference, OPEC and non-OPEC Ministerial meetings and JMMC meetings were always heavily covered from many angles.

Media relations and news monitoring

Another tool used to help improve and enhance the image of the Organization was

media relations, which includes the coordination of media coverage through one-on-one interviews with the Secretary General, press conferences and briefings, speeches and statements, as well as the pro-active seeking of further networking opportunities among media outlets and journalists. This has helped to ensure that journalists have better and more timely information about – as well as a better understanding of – the Organization’s activities, serving to improve overall coverage of OPEC.

The Organization’s media exposure continued to be strong globally through the Secretary General’s many interventions, as well as through the Secretariat’s ongoing research and public relations activities.

Despite the challenges and restrictions related to the global pandemic, PRID was able to arrange, facilitate and organize many press interviews for the Secretary General, including with broadcast and print media.

Staff provided background information upon request to journalists from various media outlets, as well as contextual information for the Secretary General for various interviews and meetings.

The editorial section continued throughout the year to produce the Daily News Summary, which has become part of a restructured, broader daily package of information, coordinated by RD. This mailing/publication is distributed by e-mail and serves to provide a quick overview every weekday morning of the latest energy-related news.

Public Relations Unit

As part of achieving OPEC’s strategy, aims and objectives, and as part of PRID’s overall work programme, the PR unit has conducted

many activities to reach a wider and more varied audience, raising awareness about OPEC, enhancing its image and perspectives, and addressing any misconceptions about the Organization.

The PR Unit also continued to frequently monitor the media and analyze reports published about the Organization, as well as advise on suitable responses and appropriate strategies. Around 40 reports were produced on OPEC press coverage, the Secretary General’s activities and engagements, meetings and conferences, as well as other events and occasions. The reports featured international media, Arabic media and social media coverage.

Conference preparations

The pandemic prevented most meetings from taking place in person in 2020. The 178th Meeting of the OPEC Conference was the final ministerial meeting to take place at the Secretariat for the year, with the remainder taking place via webinar. Regular requirements were in place for press accreditation regarding the 178th Meeting, although OPEC took the precaution of not allowing the press into the building and the regular press conference was cancelled. Instead, a special press centre was set up in a nearby hotel.

The PR Unit was responsible for facilitating many virtual press conferences in light of the COVID-19 outbreak. These events were widely followed by international media and industry analysts from all over the world, in addition to a solid following of OPEC’s livestream services on the Organization’s website and YouTube accounts.

Outreach programme

The outreach programme focused on the local community and host country Austria in 2020, although interactions were limited

after February due to the pandemic. The main purpose of the outreach programme is to have two-way communication with the public, as well as the local community in order to achieve overall organizational objectives, mainly related to raising awareness about the Organization's mission, enhancing perception and creating support within the host country, Austria.

The programme has, in the past, focused on education, international community events, the City of Vienna and cultural events.

The PR Unit received many enquiries and requests from the general public, as well as from MCs, regarding the provision of AV material and publications, and answered many questions related to OPEC activities and background information.

The main activities conducted in 2020 are summarized as follows:

Briefing programme

Briefings are important in establishing two-way communication with the public, receiving opportunities to uncover how the public perceives OPEC and how to better address such perceptions, while raising awareness about the objectives and goals of the Organization and promoting the Organization's publications. They also provide an opportunity to disseminate the Organization's key messages and create a better understanding of the Organization's decisions and actions.

In 2020, the Secretariat received 28 requests between January and the beginning of March from around the world. However, due to the outbreak of the COVID-19 pandemic and following lockdown and restriction measures aiming to slow the spread of the virus, only eight briefings were conducted, while 20 were cancelled.

Visits

Due to the outbreak of the COVID-19 pandemic, all scheduled visits were cancelled.

Workshops, seminars and exhibitions

In 2020, PRID only participated in one key industry event – EGYPS 2020 in Cairo – due to the outbreak of the COVID-19 pandemic.

Launching the WOO

The 2020 edition of the WOO was launched in hybrid format and featured key industry figures, including the OPEC Secretary General; Dr Rainer Seele, CEO of Austrian oil and gas company OMV; and Dr Jonas Puck, Academic Director of the MBA in Energy Management programme at the Executive Academy of the Vienna University of Economics and Business. The event was livestreamed via the Organization's website and YouTube channel. The PR Unit was involved in many of the aspects of the high-profile event, including managing the media, launching on the website and conducting full AV coverage.

Launching the ASB

The 55th edition of OPEC's ASB was launched in July 2020 via videoconference. The event was attended by the OPEC Secretary General; Professor Jonas Puck; MC representatives; the Secretariat's Members of Management; along with journalists and analysts. The launch was also livestreamed via the Organization's website and YouTube channel. The PR Unit was involved in many of the event's activities, including managing the media, the website launch and complete AV coverage.

OPEC Diary

The *OPEC Diary* is an annual publication that the PR team produces to reach the public, targeting between 3,000–4,000 recipients

from producing countries (including OPEC MCs), consuming countries, embassies, research institutes, academia, national oil companies, international oil companies, international organizations (including OFID and OPEC employees) and others. The *Diary* includes useful information about OPEC and its MCs.

News monitoring

What the Papers Say (WTPS) continues to be produced daily. It is prepared on the basis of two reports received morning and afternoon from trusted news providers. WTPS includes news about energy in general, as well as petroleum, OPEC and its MCs, and constitutes a selection of the most important and informative articles from the international media. The WTPS is now part of a larger daily news package that is distributed to OPEC officials (Ministers, Governors and National Representatives) in addition to the Secretary General, Secretariat staff and some outside members of the industry.

Distribution of publications

The distribution of printed materials plays a very important role in disseminating information about the Organization's activities. To this end, PRID continued to review and update mailing lists and distribution networks for key publications, with additional input and more rigorous review recommended, in order to expand and strengthen these. Mailing lists include the media, press analysts, news agencies, banks, investment companies, universities, government institutions and more. Along with the timely dispatch of publications, email alerts are sent out.

Distribution of publications is undertaken in coordination with related departments. PRID facilitates distribution of the *ASB* and the *WOO*, in addition to the *OB* and the *AR*,

according to an updated mailing list supplied by the PR Unit.

Corporate gifts

Gifts facilitate the promotion of hospitality and help maintain a good image of the Organization. Although there were no visitors after early March due to the pandemic, the PR Unit organized the creation of many special gifts for OPEC's 60th anniversary. Gifts are generally provided by the PR Unit, which selects, negotiates and arranges with PRID's D&P, as well as local vendors, addressing logo design, quality control, invoice approval and gift handling.

Website and electronic mailing lists

In 2020, PRID continued to maintain and update the content of the Organization's website in a timely and accurate manner with press releases, news items, speeches, statements, publications, booklets and reports, data and graphs, videos, information about its MCs and employment opportunities.

Over the year, 40 press releases were published, more than the double the previous year, and the number of news releases rose to 58 over 14 in 2019. A huge number of photographs accompanied much of the website content. Live streaming of OPEC and DoC Ministerial Meetings, as well as other events, was provided through the OPEC website.

New modules and applications were also introduced to enhance the usability, functionality, look and feel of the website. These were incorporated in order to make website browsing more user-friendly overall. PRID continued to monitor the number of views to the OPEC website's various pages and prepared monthly reports on this data. These reports are critical to website operations, as the Department continues to

ensure that visitors find the information they require in an easy and practical manner, and works on enhancements as needed. In general, the website attracted more than 5.5 million views in 2020.

PRID continued to maintain and update its email lists, which consist mainly of institutional representatives, journalists, news agencies, analysts and banks. The lists include almost 1,000 recipients and were used to communicate decisions and announcements related to OPEC and the DoC, among others, including the forwarding of press releases and publications, website update alerts, daily and weekly basket price data, details on meetings and important events, and general press information. They proved to be a timely and effective tool in informing the public about OPEC and its activities. Positive feedback was also received by the Department regarding this service.

Regular monitoring was undertaken of messages received through the website's email and contact forms as well as through various other means. These generally provided positive feedback to PRID on various issues and were attended to by the Secretariat.

Social media (Facebook, Twitter and YouTube)

Social media plays a critical role in the daily routine of most organizations. It is also considered one of the main cornerstones of today's communication technologies.

In a concrete attempt by OPEC to expand its reach and improve its information dissemination practices, the Organization inaugurated its official Facebook Page in 2017. Facebook followers rose to over 46,400 from the launch until the beginning of 2021. Impressions (total number of views and visits) exceeded 4.5 million, while the reach (total number of visitors) was at 2.32 million.

In line with plans to expand its social media outreach, OPEC officially launched a Twitter account in March 2018. The number of followers reached 45,800 by the start of 2021, while the number of impressions (total number of views, including repeated visits) was at 22.23 million. Twitter has become the preferred social media platform for stakeholders in the energy and other related fields to exchange data and share ideas and views about the industry.

Highlights of press releases, speeches, news items, interviews with the President of the Conference, the Secretary General, Heads of Delegations and Ministers of participating non-OPEC countries to the historic DoC, press conferences, meeting highlights and OPEC publications were posted in a consistent and continuous fashion on Facebook and Twitter for the effective dissemination of information. Various campaigns for the *MOMR*, *ASB* and *WOO* (books and apps) were launched to promote and widen the distribution of vital information and data in these essential publications on Facebook and Twitter. Content was specifically tailored and designed for social media messaging in collaboration with respective departments within the Secretariat.

In furthering the promotion of OPEC and widening the Organization's presence on social media platforms, PRID, through the social media team, collaborated with organizers of many high-level industry gatherings to better coordinate and promote content during events. This has further improved confidence among stakeholders in the various tools the Organization is incorporating in its public relations strategy.

Additional Facebook and Twitter features were used to boost OPEC's presence on social media platforms. Events for Meetings of the OPEC Conference, as well as OPEC and non-OPEC Ministerial Meetings were created to

highlight these key gatherings and promote them to the wider public. Paid promotion services provided by social media platforms were used to further strengthen the presence of the Organization's accounts and reach a broader audience.

Noting the importance of YouTube as a leading video-based social media platform, PRID livestreamed many events, including Meetings of the OPEC Conference, OPEC and non-OPEC Ministerial Meetings, Meetings of the JMMC and the launches of the *ASB* 2020 and the *WOO* 2020, in order to reach a wider public and boost the number of meeting followers worldwide. PRID also published many videos on YouTube, such as a short documentary film on OPEC's founding and history, opening sessions of ministerial meetings, press conferences, publication launches and highlights of the memorial for the late Emir of Kuwait, His Highness Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah.

PRID also continued its efforts to raise awareness and educate its audience on the importance and uses of petroleum and its products through developing a special campaign for social media tailored for this purpose.

Audio-visual/multimedia services

The unprecedented number of webinars and videoconferences held in 2020 significantly elevated the demand for AV services. This went above and beyond regular services, which included production of the 'Year-in-Review', highlights and wrap-ups of Ministerial Meetings, and updating of official OPEC films on a regular basis. OPEC videos to accompany events have become common over the past few years and were regularly requested and created for OPEC's social media activities.

One highlight of 2020 was a film production in honour of OPEC's 60th Anniversary, retell-

ing and detailing OPEC's history with new visual material. This included taking old films from the archive, scanning them to HD and digitalizing them. The early days of OPEC can, thus, today be observed in never-before-detailed quality.

The AV team started video-recording Conferences and all major meetings in 2020. The team aided the headquarters in implementing VC equipment, together with the IT department.

Opening sessions of the OPEC Conference and OPEC-non-OPEC Ministerial Meetings were broadcast live, and parts of these meetings were made available as on-demand videos on OPEC's official website.

A virtual *WOO* launch was undertaken that was a hybrid between a podium discussion in the main conference room and a teleconference, and saw many virtual attendees. A special four-minute 3D animation promo key message video was produced to accompany OPEC's flagship release.

Intensive efforts were spent on media productions, including videos, interviews, photos and post-production for many events over the year, including seven JMMC and ten JTC meetings.

Photo and video coverage was undertaken for archival purposes of visitors prior to the pandemic, and later of virtual meetings of the BoG and the ECB, the MDTC, workshops and roundtables. The AV team distributed photographs and videos to international media and editors for publication purposes.

Design and Production

The year 2020 marked the 60th anniversary of OPEC. A special logo was designed by the D&P team, which was used throughout all publications, online and in hard copy.

An outstanding production was undertaken in celebration of this event in the

form of an anniversary book that was designed and produced by D&P. The publication refers to the history of the Organization and includes a selection of pictures, as well as comprehensive text produced by the editorial team. The editor-in-chief was the Head of PRID.

An adapted *WOO* design focused on a layout that best supports its messages in the most convenient way and grants readers consistency. Although the *WOO* launch was digital in 2020, it was flanked by materials which could visually communicate, at a glance, the most important facts in the book and transfer the look and feel of the document to the audience. Supporting materials, such as rollups, were designed in collaboration with ESD to highlight key takeaways. D&P was responsible for designing, typesetting, producing and overseeing the entire printing process of various publications and additional materials.

The design, layout and finishing of the *ASB* was undertaken by D&P. In addition to the 'full' version, a smaller pocket version was designed that displayed the most important tables and graphs in a consolidated form. D&P was responsible for designing, typesetting, producing and overseeing the printing of this publication. The *ASB* and *WOO* were brought closer together in terms of visual appearance.

The *AR* was put together in cooperation with other departments of the Secretariat. D&P was responsible for designing, typesetting, producing and overseeing the printing of this publication.

The *OB* continued to be laid out, typeset and produced by the team, which coordinates and oversees its printing at an outside printing service. Throughout the year, the layout of the *Bulletin* is adapted to fit state-of-the art corporate publication trends in an international and multicul-

tural environment in coordination with the Editorial Unit.

Numerous logo designs were also prepared throughout the year for in-house OPEC meetings and events, including logos for the CoC and OPEC's 60th Anniversary. Nameplates, programmes, badges, notepads, giveaways and corporate gifts were also designed and produced by the team.

Additionally, D&P provided visuals for various meetings to disseminate the Secretariat's key messages. Posters and roll-ups for internal and external use were designed to display information on MCs and highlight the Organization's key messages.

In order to set up a corporate design for all JMMC meetings, as well as other high-level meetings, D&P collaborated with host countries to streamline and prepare designs.

Many visuals published on social media were created by D&P, which ensured consistent visual messaging throughout the media mix. The designers also provided designs for and produced various gift items and photo albums.

Training

Missions and training programmes were suspended for most of the year due to COVID-19. PRID staff participated in different organizational task forces and committees and worked closely on projects with other departments, including the 60th Anniversary Organizing Committee, the Seminar Organizing Committee, the OPEC History Book Taskforce, the OPEC Academy and the Task Force on Confidentiality.

Administration & IT Services Department

In the context of the COVID-19 pandemic, the conventional working environment changed,

with teleworking/home office becoming a dominant factor. Despite the fact that the Administration and IT Services Department (AITSD) is facing a critical shortage of manpower, it continued to provide IT services, along with administrative and logistical support, to the highest standards of efficiency and professionalism, ensuring the smooth operation of the entire OPEC Secretariat.

Administration

The primary objective of Administration staff work is to ensure the provision of all necessary services in order to facilitate the smooth running of the Secretariat's day-to-day affairs and to allow various specialized areas of activity to meet their targets. These services include, but are not limited to: procurement and disposal; travel and transportation; arrangements for all meetings and entertainment functions in Vienna; implementation of the Headquarters Agreement regarding visas, legitimation/diplomatic ID cards, import declarations and diplomatic license plates; office stationary supply; upkeep of the OPEC Secretariat, as well as the Secretary General's residence; security and safety.

Highlights

Due to the outbreak of the COVID-19 pandemic, Administration developed, in close collaboration with other departments, a three-phase implementation plan for the gradual return of staff to the Secretariat, including a home office policy in line with local governmental COVID-19 safety measures and recommendations. Furthermore, staff were regularly updated about important developments, rules and regulations related to the pandemic. Several interdepartmental meetings with OPEC's medical advisors were

set up to ensure maximum safety at the Organization's premises and the best medical services for the entire staff. A special safety and cleaning programme was developed for the Secretariat and carried out to respond both safely and efficiently to the new realities and challenges brought on by the COVID-19 outbreak. This included the installation of additional safety measures at the entrance, the development of in-house meeting guidelines, the regular provision of face masks and disinfectant for staff members, the installation of additional disinfectant dispensers in the building and the acquisition of special cleaning devices to provide a safe environment for all staff.

In a joint effort with DSD colleagues, Administration designed a new store management system for the Secretariat. This software update was later integrated into the Organization's e-procurement system to further increase the smooth running of its logistical and operational procedures.

The Administration Section provided support in form and content for the internal audit, which was conducted during a large part of the year. In addition, the Section substantially contributed to ensuring the efficient implementation of auditor recommendations, an activity regularly monitored by the Audit Committee.

Preparations for the next OPEC International Seminar commenced, including active participation in the Seminar Organizing Committee, as well as the securing of Hofburg Palace and City Hall as main venues. The outbreak of COVID-19 at the beginning of the year, however, led to a complete reorganization and ultimate rescheduling of the 8th OPEC International Seminar to 2022.

The Administration Section was involved in preparations for the 60th OPEC Anniversary,

which was eventually postponed to the following year due to the COVID-19 outbreak.

IT Services Section

The IT Services Section is responsible for providing the Secretariat with secure and reliable IT services. It constantly explores and keeps abreast of new technological developments in order to provide the Secretariat with the most effective and up-to-date IT infrastructure.

It also provides professional printing/photocopying, telecommunications and mail/courier services to the Secretariat.

In 2020, the COVID-19 pandemic sharpened the focus on the critical role of the IT Section. Secretariat operations would have come to a standstill without a strong IT Services Section, which rapidly and effectively facilitated a continuous workflow under imposed lockdowns through:

- Provision of the possibility for most staff to work remotely. Secure remote access capability to OPEC IT systems via VPN, and a three-fold expansion in the number of laptops provided to OPEC staff.
- Provision of the technical possibility to securely run virtual OPEC meetings (Conferences, Ministerial Meetings, BoG meetings, workshops, etc.). In order to achieve this, an additional highly secure videoconferencing system (Cisco Meeting Server – used when utmost confidentiality is required) and the Cisco Webex cloud system (for public events like press conferences) were acquired and installed. State-of-the-art audio and video equipment was also installed in the main conferencing rooms.
- In spite of pandemic restrictions, two

staff were on-site daily to develop and keep the infrastructure up and running, in addition to providing support to more than 150 videoconferences (sometimes three videoconferences a day).

- Although operating with reduced personnel and under immense pressure due to the pandemic situation, IT Services completed, in addition to the projects detailed above, the following projects in 2020:
 - Review of disaster recovery and business continuity plans – including the introduction of new storage systems, expansion of virtual server capacity and a fibre optics link capacity (this is a very complex technical project, addressing core infrastructure supporting data processing in OPEC).
 - Upgrade of the Cisco Voice infrastructure (so that it stays integrated with the Cisco Video infrastructure).
 - Execution of IT security projects as tasked by the ISL Committee.
- Completion of the following “already started” projects, which were part of the original Work Plan for 2020, have been postponed to 2021 or later:
 - Enhancement of end-point security, web browsing and email infrastructure (the FireEye three-year support expired in 2020.)
 - Enhancement of Data Centre infrastructure (new power distribution for racks, enhancement of overall monitoring infrastructure at both the OPEC and OPEC Fund for International Development Data Centres).
 - Upgrade of CISCO routers.

Finance & Human Resources Department

The Finance & Human Resources Department (FHRD) continued to focus on delivering innovative human resources and financial strategies by ensuring the efficiency of each business process and the quality of its services, as well as providing world-class management of the Organization's human and financial assets in 2020.

The Finance Section coordinated 2021 budget preparation and presented the completed document to the BoG; monitored budget execution through regular budget performance meetings with both the Support Services Division (SSD) and the RD; submitted a bid request to procure a new accounting system; monitored the flow of funds to meet the Secretariat's requirements; submitted reports to all stakeholders on the Secretariat's financial position in compliance with relevant regulations or *ad hoc*; provided support to the internal auditor to strengthen internal controls and ensure compliance with current regulations; worked with the external auditor on the enhancement of financial reporting and relevant financial regulations; and assisted the external auditor during the statutory audit of 2020 financial statements.

In addition to providing personnel-related services to the Secretariat, the Human Resources Section continued to monitor all human resources processes with a view to improving the efficiency of each process, as well as the quality of services and accuracy

of data provided by the section, by applying modern technology wherever possible. The Section also continued its efforts to utilize the Secretariat's available manpower to the maximum extent possible to ensure efficiency and proficiency.

In January 2020, FHRD successfully implemented the new family and housing allowances, as well as the education grant, following a three-year salary and allowances review, which was approved by the 154th Meeting of the BoG in 2019.

The year 2020 was extremely challenging due to the global outbreak of the COVID-19 pandemic and resulting repeated lockdowns and travel restrictions. The Department, nevertheless, managed to ensure the smooth running of its day-to-day operations, strictly abiding by safety and hygiene measures and thus protecting the health of its staff members. The Department was committed to ensuring the well-being of the whole Secretariat through good coordination and cooperation with the Secretariat's medical advisors, as well as the AITSD. The Department made every effort to ensure business continuity in all its activities by fully supporting the efficient implementation of teleworking, along with implementing classroom training and on-line job interviews wherever possible. The Department believes that the unique experience and knowledge gained in this extraordinary year will help it grow further to become even more efficient and effective in the years to come.

Heads of Delegation

Algeria



Abdelmajid Attar
President of the Conference in 2020

Angola



Dr Diamantino Pedro Azevedo

Republic of the Congo



Jean-Marc Thystere Tchicaya

Equatorial Guinea



Gabriel Mbaga Obiang Lima

Gabon



Vincent de Paul Massassa

IR Iran



Eng Bijan Namdar Zanganeh

Iraq



Ihsan Abdul Jabbar Ismaael

Kuwait



Dr Mohammad Abdullatif Alfares

Libya



Mustafa Sanalla

Nigeria



Timipre Sylva

Saudi Arabia



**HRH Prince Abdul Aziz
Bin Salman**

United Arab Emirates



Suhail Mohamed Al Mazrouei

Venezuela



Tareck El Aissami

Outgoing Heads of Delegation by country

Algeria



***Mohamed Arkab
(to 22 June 2020)***

Iraq



***Thamir A Al-Ghadhban
(to 3 June 2020)***

Iraq



***Ali Allawi
(to 6 June 2020)***

Kuwait



***Dr Khaled A Al-Fadhel
(to 20 December 2020)***

Venezuela



***Manuel Salvador Quevedo Fernandez
(to 27 April 2020)***

Board of Governors



Leonardo Sempértegui, General Legal Counsel (r-l), Mohammad Sanusi Barkindo, Secretary General, Dr Ayed S Al-Qahtani, Director, Research Division and Jose Luis Mora, Head, Human Resources and Finance Department during the 157th Meeting of the Board of Governors held in October 2020 via videoconference.

Algeria

Eng Mohamed Hamel

Iraq

Alaa K Alyasri

Angola

Estêvão Pedro

Kuwait

Haitham Al-Ghais

Republic of the Congo

Térésa Goma

(Governor and Legal Representative)

Libya

Imad A Salem

Equatorial Guinea

Agustin Mba Okomo *(from 10 January)*

(Chairman of the Board in 2020)

Nigeria

Dr Adedapo Odulaja *(from 18 March)*

Dr Omar Farouk Ibrahim

Gabon

Magloire Menie Akoue

(Chairman of the Board in 2020)

Kingdom of Saudi Arabia

Eng Adeeb Al-Aama

United Arab Emirates

Eng Ahmed Mohamed Alkaabi

IR Iran

Dr Amir Hossein Zamaninia *(from 11 May)*

Hossein Kazempour Ardebili

Venezuela

Eng Ángel González Saltrón

Economic Commission Board



Mohammad Sanusi Barkindo, Secretary General (l) and other OPEC officials during the 134th ECB Meeting held in November 2020 via videoconference.

Algeria

Dr Achraf Benhassine

Iraq

Mohammed Saadoon Mohsin *(from 1 January)*

Angola

Ntika Mbiya Ricardo *(from 7 August)*

Kuwait

Mohammad Khuder Al-Shatti

Republic of the Congo

No appointment has been made

Libya

Dr Taher Massoud Najah *(from June)*

Equatorial Guinea

Florencio Oyono Eneme Obono

Nigeria

Mele Kyari

Gabon

Fernand Epigat *(from 28 April)*

André-Brice Boumbendje

Kingdom of Saudi Arabia

Esam Al-Khalifa

IR Iran

Dr Afshin Javan *(from 11 September)*

Dr Mohamed Taeb

United Arab Emirates

Salem Hareb Al Mehairi

Venezuela

Eng Ronny Romero Rodriguez

Officials of the Secretariat



Members of the Management Meeting in June 2020.

Secretary General

Mohammad Sanusi Barkindo

Environmental Matters Unit

Mohammad Ali Zarie Zare

Office of the Secretary General

Shakir M A Alrifaiy

Legal Office

Leonardo Sempértegui
Dr Taiwo Adebola Ogunleye

Research Division

Dr Ayed S Al Qahtani

Finance & Human Resources Department

Jose Luis Mora
Patrick Bongotha

Data Services Department

Boshra AlSeiari *(joined on 27 January)*
Mohamed Mekerba
Dr Hossein Hassani

Administration & IT Services Department

Abdullah Alakhawand

Energy Studies Department

Dr Abderrezak Benyoucef
Dr Erfan Vafaie Fard
Moufid Benmerabet
Dr Mohammad A. Alkazimi
Irene Etiobhio
Dr Mustapha Sugungun

Public Relations & Information Department

Hasan Hafidh
Tofol Al-Nasr

Petroleum Studies Department

Behrooz Baikalizadeh
Afshin Javan *(left on 11 January)*
Imad Alam Al-Khayyat
Hassan Balfakeih
Mohammad Ali Danesh
Hector Hurtado
Tona Ndamba
Yacine Sariahmed
Dr Asmaa Yaseen

The Secretary General's diary

8 January	10 th Gulf Intelligence Energy Forum, Abu Dhabi, United Arab Emirates
12–14 January	International Petroleum Technology Conference, Dhahran, Kingdom of Saudi Arabia
16–19 January	Mission to New York, United States
21–24 January	World Economic Forum, Davos, Switzerland
25–26 January	International Carbon Capture, Utilization and Storage Conference, Riyadh, Kingdom of Saudi Arabia
10 April	Extraordinary G20 Energy Ministers' Virtual Meeting
21 April	Online Briefing Session with RBC International Team
22 April	Online Briefing Session with IHS Analysts on Current Oil Market Volatility and Immediate Prospects
23 April	Online Briefing with Atlantic Council Members on Current Oil Market Volatility and Immediate Prospects
29 April	Online Briefing with CGES, Columbia University on the Current Assessment of the Global Oil Market and Prospects
30 April	Online Briefing with CITI Chief Economist and Experts on the Current Assessment of the Global Oil Market and Prospects
5 May	Online Briefing with CSIS, COVID-19 Pandemic Shock: Impacts on the Global Oil Market and Near-term Recovery Prospects
6 May	Online Briefing with Indian Oil, COVID-19 Pandemic Impacts on the Economy and Oil Market – Regional Perspectives with Indian Oil
7 May	Bilateral discussion with Kadri Simson, EU Commissioner for Energy on the COVID-19 Pandemic Impacts on the Economy and Oil Market and OPEC-EU Energy Dialogue Perspectives

14 May	Online briefing with the National Energy Administration of China on COVID-19 Pandemic Impacts on the Economy and Oil Market, including Special Coverage on China and Regional Perspectives
15 May	Online briefing with McKinsey on Perspectives related to the Post-COVID-19 Recovery and Path to the Next Normal
18 May	Keynote speech at Columbia University Energy roundtable on COVID-19 Pandemic Impacts on the Economy and Oil Market
27 May	Video call with Mr Tareck El Aissami, People's Minister of Petroleum, Venezuela, on the Current Oil Market Situation
3 June	Video conference with Mr Dharmendra Pradhan, Minister of Petroleum and Natural Gas and Steel, India
10 June	Bilateral meeting with Canada on the outcome of the ministerial meetings and on recent oil market developments
11 June	SG participated as panelist in a Webinar hosted by Azerbaijan and organized through the Centre of Analysis of International Relations on Energy Issues in Post-COVID-19 World
15 June	Online bilateral meeting with Ms Tina Bru, Minister of Energy, Norway, on the outcome of ministerial meetings and on recent oil market developments
15 June	Online bilateral meeting with Ms María Fernanda Suárez Londoño, Minister of Mines and Energy, Colombia, on the outcome of ministerial meetings and on recent oil market developments
16 June	ADIPEC Energy Dialogues with Eithne Treanor
17 June	Online bilateral meeting with the Iraqi Oil Minister, Mr Ihsan Abdul Jabbar Ismaeel
22 June	Technical Workshop of OPEC-Gas Exporting Countries Forum (GECF) Dialogue
22 June	Online bilateral meeting with Mr Matias Sebastian Kulfas, Minister of Productive Development (in charge of Energy Affairs), Republic of Argentina
22 June	Online bilateral meeting with Mr Bento Albuquerque, Minister of Energy, Brazil
29 June	CERAWEEK Leadership Dialogue with IHS

29 June	Energy Webinar hosted by Canada-UAE Business Council
30 June	Africa Ministerial Roundtable on the Impact of COVID-19 on Africa's Energy Sector
6 July	Online bilateral meeting with Mr Abdelmadjid Attar, Oil Minister, Algeria
16 July	CERAWEEK Leadership Dialogue with IHS
20 July	Technical Workshop on Secondary Sources for Crude Oil Production with Angola
22 July	Technical Workshop on Secondary Sources for Crude Oil Production with Nigeria
24 July	Technical Workshop on Secondary Sources for Crude Oil Production with Gabon
24 August	Technical Workshop on Secondary Sources for Crude Oil Production with Kazakhstan
26 August	Technical Workshop on Secondary Sources for Crude Oil Production with Iraq
27 August	Technical Workshop on Secondary Sources for Crude Oil Production with South Sudan
31 August	Technical Workshop on Secondary Sources for Crude Oil Production with Brunei Darussalam
1 September	Technical Workshop on Secondary Sources for Crude Oil Production with Sudan
2 September	Technical Workshop on Secondary Sources for Crude Oil Production with Malaysia
25 September	Videoconference with Peter Launsky-Tieffenthal, Director-General of Development Cooperation, Humanitarian Affairs, Federal Ministry for Europe, Integration and Foreign Affairs, Austria on COVID-19

27 September	G20 Energy Ministerial Virtual Meeting
13 October	G24 Ministerial Meeting – IMF/World Bank Meetings
15 October	Energy Intelligence Forum
15 October	IMF Plenary Session
22 October	CERAWEEK India Virtual Conference
26 October	Interaction of Honourable Prime Minister of India with Global Oil and Gas CEOs/Experts
2 November	JP Morgan Global Energy Conference
2 November	Podcast with Mr Joseph McMonigle, Secretary General, International Energy Forum (IEF)
9 November	ADIPEC Virtual Strategic Conference
11 November	GECF Ministerial Roundtable on Natural Gas: Natural Gas in a Post-COVID-19 World
12 November	22 nd Ministerial Meeting of the GECF
23 November	Crescent Petroleum Session with Dr Fatih Birol, Executive Director, International Energy Agency (IEA)
8 December	Virtual Nigeria Oil and Gas Conference
14 December	6 th Technical Meeting on Asian Energy and Oil Outlook
17 December	31 st Meeting of the Energy Charter Conference and Ministerial Meeting

10th Gulf Intelligence UAE Energy Forum.



International Petroleum Technology Conference.



World Economic Forum.



International Carbon Capture, Utilization and Storage Conference.



Extraordinary G20 Energy Ministers' Virtual Meeting.



Online Briefing with Indian Oil.



Energy Roundtable on COVID-19 Pandemic Impacts on the Economy and Oil Market.



Africa Ministerial Roundtable.



Technical Workshop on Secondary Sources for Crude Oil Production.



G24 Ministerial Meeting – IMF-World Bank Meeting.



ADIPEC Virtual Strategic Conference.



Nigeria Oil and Gas Conference.



Calendar 2020

20 January	37 th Meeting of the Joint Technical Committee (JTC)
4–6 February	38 th Special Meeting of the JTC
3 March	39 th Meeting of the JTC
4 March	18 th Meeting of the Joint Ministerial Monitoring Committee (JMMC)
5 March	178 th Extraordinary Meeting of the Conference
6 March	8 th OPEC and non-OPEC Ministerial Meeting
18 March	40 th Meeting of the JTC
9 April	9 th Extraordinary OPEC and non-OPEC Ministerial Meeting
12 April	10 th Extraordinary OPEC and non-OPEC Ministerial Meeting
13 May	5 th Meeting of the Audit Committee
28 May	156 th Meeting of the Board of Governors (BoG)
3 June	133 rd Meeting of the Economic Commission Board (ECB)
4 June	7 th OPEC and non-OPEC Technical Meeting
6 June	179 th Meeting of the Conference
6 June	11 th Meeting of the OPEC and non-OPEC Ministerial Meeting
17 June	41 st JTC Meeting
18 June	19 th Meeting of the JMMC
23 June	Technical Workshop on OPEC at 60
24–25 June	19 th OPEC Annual Statistical Meeting

9 July	Workshop with Secondary Sources
13 July	Launch of the <i>Annual Statistical Bulletin (ASB) 2020</i>
14 July	42 nd JTC Meeting
15 July	20 th Meeting of the JMMC
17 August	43 rd JTC Meeting
19 August	21 st Meeting of the JMMC
16 September	44 th JTC Meeting
17 September	22 nd Meeting of the JMMC
21 September	2 nd Workshop on Energy and Information Technology
22–23 September	20 th Special Meeting of the ECB
29 September	3 rd Technical Workshop on Climate Change
30 September	18 th Coordination Meeting on Climate Change
1–2 October	Technical Workshop with Agencies Forecasting on Global Oil Demand and non-OPEC Supply Forecasts
6 October	1 st OPEC-African Energy Commission Technical Meeting
6–8 October	20 th Multi-Disciplinary Training Course
8 October	Press Conference to Launch the 2020 <i>World Oil Outlook</i> and the <i>ASB</i>
13 October	Annual Legal Workshop
14 October	6 th Audit Committee Meeting
15 October	45 th JTC Meeting
19 October	23 rd Meeting of the JMMC
20–21 October	157 th Meeting of the BoG

22 October	7 th Joint IEA-IEF-OPEC Workshop on the Interactions between Physical and Financial Energy Markets
27 October	14 th High-level Meeting of OPEC-EU Energy Dialogue
3 November	7 th OPEC-Russia Energy Dialogue
4 November	1 st OPEC-GEFCF High-level Energy Dialogue
5 November	4 th OPEC-India Energy Dialogue
16 November	46 th JTC Meeting
17 November	24 th Meeting of the JMMC
25–26 November	134 th Meeting of the ECB
27 November	8 th Technical Meeting of the Declaration of Cooperation
30 November	180 th Meeting of the Conference
3 December	12 th OPEC and non-OPEC Ministerial Meeting
7 December	4 th OPEC-China High-level Dialogue

12th OPEC-non-OPEC Ministerial Meeting.



HRH Prince Abdul Aziz Bin Salman,
Saudi Arabia's Minister of Energy and Chairman of the JMMC.



4th OPEC-China High-level Dialogue.



7th OPEC-Russia Energy Dialogue.



14th High-level Meeting of the OPEC-EU Energy Dialogue.



4th OPEC-India Energy Dialogue.



1st OPEC-AFREC Technical Meeting.



6th Technical Meeting on Asian Energy and Oil Outlook.





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