

OPEC bulletin

10/20



**Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah
1929–2020**



OPEC

Monthly Oil Market Report

Download
the OPEC MOMR App free of charge!



- **Essential information on the oil market**
- **100+ interactive articles and tables detailing crude price movements, oil futures, prices and much more**
- **Analysis of the world economy, world oil supply and demand**
- **Compare data interactively and maximize information extraction**



The ‘Declaration of Cooperation’ at four: mature and competent

On approaching the fourth anniversary of the ‘Declaration of Cooperation’ (DoC) on December 10, it is a good time to look back at the accomplishments that have been achieved through this visionary collaboration. An entity in its own right on the international energy scene, the DoC has matured and become ever more competent with time.

In a year when OPEC is celebrating its 60 years of existence, during the most dramatic oil market downturn in living memory, the DoC has taken on an importance and status that its initial creators likely could not have conceptualized.

Mohammed Sanusi Barkindo, OPEC Secretary General, who had just taken the reins of the Organization in the summer of 2016, came in at the depths of a market depression. The market had taken a beating for two years, investment had collapsed, layoffs in the industry were rampant. Behind the scenes in the fall of that year, Barkindo was participating in “shuttle diplomacy” that would see him travel far and wide to try and gain a consensus on how to manage the disastrous situation.

Back then, in 2015–16, the world came close to a catastrophe of epoch-defining proportions.

The situation was based on an unusual premise. The previous five oil cycles had stemmed either from a deficit of oil demand, or a surplus of oil supply. This was the first cycle which incorporated both. From 2014 to 2016, world oil supply growth outpaced oil demand, growing by 5.8 million barrels/day (m b/d), while world oil demand increased by 4.3m b/d. The OECD commercial stock overhang continued to swell so that by July 2016, it had reached a record high of about 403m b over the five-year industry average. The OPEC Reference Basket price fell by an extraordinary 80 per cent between June 2014 and January 2016.

Nearly one trillion dollars in investments were either frozen or discontinued, and a record number of companies in our industry filed for bankruptcy. According to the consulting firm Graves & Co, almost half a million jobs were lost in the global oil and gas industry.

In the face of this impending disaster, OPEC’s landmark agreement in Algiers at the 170th (Extraordinary) Meeting of the OPEC Conference on September 28, 2016, was a stepping stone to consultations between OPEC and non-OPEC nations. This culminated in 24 oil producing nations agreeing to the DoC at the historic first OPEC and non-OPEC Ministerial Meeting held on the December 10, 2016, in Vienna in a concerted effort to accelerate the stabilization of the global oil market through voluntary production adjustments of around 1.8m b/d.

The effect of this cooperation on the oil market was transformative. A long-absent element of stability was reintroduced, and this had a knock-on effect on the world economy, which after faltering for ten years experienced a long-awaited synchronized growth upswing. Accompanying this success were significant changes in industry-wide and public perceptions of OPEC.

The world had just caught its breath from this situation when the COVID-19 pandemic came out of left field. Predictions starting in February went very rapidly from bad to a worst-case-scenario situation, with oil demand dropping through

the floor by up to 30 per cent and sentiment rock bottom in ‘Black April’.

Nobody had ever seen or attempted to manage such a loss in demand, with worldwide lockdowns grinding the world economy to nearly a halt. This perfidious killer triggered the seventh and most devastating oil market cycle. Oil demand fell by over 17m b/d in 2Q20 and for the year, demand is estimated to drop by 9.5m b/d. It brought with it not only economic devastation and massive job losses, but a horrific loss of human life and over-stretched health care systems.

Extreme times call for extreme measures, and DoC participants calmly and assuredly made hasty steps to address the situation. At a milestone meeting in April, the participants agreed to the longest and deepest oil production adjustment in history – 9.7m b/d. This is nearly five times more than the breakthrough production adjustments reached in December 2016.

Predictions hold that without these profound measures, the oversupply would have added a further 1.3 billion barrels to global crude oil stocks, which would have driven available global crude oil storage capacity to top out within the month of May. This could have easily led to a market collapse of unprecedented magnitude.

Having the DoC already in place, with tried and true experience and the deep connections built over years, meant that its participants had simply to leap to action when the bottom fell out of the market. If there is a silver lining to this human tragedy, it’s that it has brought oil market participants closer together. As OPEC has reached out to every corner of the industry, it found that all were eager to share their voices and opinions, to try and battle this worst of situations together.

The recently released *2020 OPEC World Oil Outlook* points out that these actions are not only essential today, but will have a great impact upon tomorrow. The medium- and long-term outlook is inexorably linked to current production adjustments.

Currently, world oil demand is expected to grow by 6.5m b/d in 2020 and the economy should recover to a level of 4.6 per cent in 2021 from –4.1 per cent in 2020. These indicators tell us that a recovery is in the works, though it is fragile and must be carefully monitored.

Through this greatest of disasters, the Organization has once again ably demonstrated its credentials as a body committed to international cooperation, working with other producers, honouring its commitments and promoting mutual respect among all nations. Over the past four years, the participants of the DoC have shown flexibility, grounded on the core principles of equity, fairness and transparency.

Even as the world is suffering from battle fatigue after the long struggle with COVID-19, one must ask, where would the oil market – and indeed the world economy – be today without the DoC?

The future of the oil industry will remain challenging in the post-pandemic world, with new calls to speed up the energy transition to mitigate climate change in the rebuilding of economies. Who better to bring a steady and guided hand to the situation than this dedicated, experienced and committed group? 



Conference Notes	4	September JMMC focuses on market stability and full conformity
	12	October JMMC prioritizes full conformity by all DoC participants
OPEC @ 60	14	Six decades of unparalleled success
	24	Anniversary greetings by Dr Mana Saeed Al Otaiba
WOO Launch	26	Historic year, unusual launch for the World Oil Outlook
Obituary	34	Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah
Appointment	38	Sheikh Nawaf Al-Ahmad Al-Jaber Al-Sabah: New Emir of Kuwait
Focus on Member Countries	40	Kuwait City: Testament to modernity and rich history
G24 Meeting	46	OPEC attends the G24 Meeting of Ministers and Governors
MDTC	48	MDTC held via webinar for the first time
Workshops	50	Second annual legal workshop examines the law of the energy transition
	54	OPEC holds a technical workshop on climate response measures
	60	Workshop focuses on cutting-edge developments
	62	OPEC holds special workshop on forecasting global oil demand and non-OPEC supply



Cover

This month's cover shows Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, Emir of Kuwait, who passed away in September (see feature on page 34). Photograph courtesy Reuters.

Publishers

OPEC
 Organization of the Petroleum Exporting Countries
 Helferstorferstraße 17
 1010 Vienna
 Austria
 Telephone: +43 1 211 12/0
 Telefax: +43 1 216 4320
 Contact: Editor-in-Chief, OPEC Bulletin
 Fax: +43 1 211 12/5081
 E-mail: prid@opec.org
 Website: www.opec.org

Website: www.opec.org

Visit the OPEC website for the latest news and information about the Organization, and for back issues of the *OPEC Bulletin*, which are available free of charge in PDF format.

OPEC Membership and aims

OPEC is a permanent, intergovernmental Organization, established in Baghdad, on September 10–14, 1960, by IR Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. Its objective – to coordinate and unify petroleum policies among its Member Countries, in order to secure a steady income to the producing countries; an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on capital to those investing in the petroleum industry. Today, the Organization comprises 13 Members: Libya joined in 1962; United Arab Emirates (Abu Dhabi, 1967); Algeria (1969); Nigeria (1971); Angola (2007); Equatorial Guinea (2017). Ecuador joined OPEC in 1973, suspended its Membership in 1992, rejoined in 2007, and suspended its Membership again on December 31, 2019. Qatar joined in 1961 and left on December 31, 2018. Indonesia joined in 1962, suspended its Membership on December 31, 2008, reactivated it on January 1, 2016, but suspended its Membership again on December 31, 2016. Gabon joined in 1975 and left in 1995; it reactivated its Membership on July 1, 2016. The Republic of the Congo joined the Organization on June 22, 2018.



40

Shutterstock



66

Saadi Avanco



74

Anna Koszka-Kolaczekowska

Dialogue	64	OPEC hosts First OPEC-AFREC technical meeting
Award	66	Amin Nasser: 2020 Energy Intelligence Energy Executive of the Year
Spotlight	68	Big data research attracts global attention
Book Review	70	The New Map — Energy, Climate, and the Clash of Nations
Interview	74	The man who helped ‘illuminate the darkness of the night’
Newsline	80	IR Iran’s NIOC signs several deals with local universities and research centres
	80	UAE continues to expand its renewable energy portfolio
OPEC Fund News	82	Deep water development
Market Review	85	Assessment of the global economy in 2020 and 2021
	87	Winter oil market outlook
OPEC Publications	93	Reading material about OPEC



Secretariat officials

Secretary General
 Mohammad Sanusi Barkindo
Director, Research Division
 Dr Ayed S Al-Qahtani
Head, PR & Information Department
 Hasan Hafidh
Head, Finance & Human Resources Department
 Jose Luis Mora
Head, Administration & IT Services Department
 Abdullah Alakhawand
Head, Energy Studies Department
 Dr Abderrezak Benyoucef
Head, Petroleum Studies Department
 Behrooz Baikalizadeh
General Legal Counsel
 Leonardo Sempértegui Vallejo
Head, Data Services Department
 Ms Boshra Alseiri
Head, Office of the Secretary General
 Shakir Mahmoud A Alrifaiy

Contributions

The *OPEC Bulletin* welcomes original contributions on the technical, financial and environmental aspects of all stages of the energy industry, as well as research reports and project descriptions with supporting illustrations and photographs.

Editorial policy

The *OPEC Bulletin* is published by the OPEC Secretariat (Public Relations and Information Department). The contents do not necessarily reflect the official views of OPEC or its Member Countries. Names and boundaries on any maps should not be regarded as authoritative. The OPEC Secretariat shall not be held liable for any losses or damages as a result of reliance on and/or use of the information contained in the *OPEC Bulletin*. Editorial material may be freely reproduced (unless copyrighted), crediting the *OPEC Bulletin* as the source. A copy to the Editor would be appreciated.

Editorial staff

Chairman of the Editorial Board
 Mohammad Sanusi Barkindo, Secretary General
Editor-in-Chief
 Hasan Hafidh, Head, PR & Information Department
Editor
 Maureen MacNeill
Associate Editors
 James Griffin, Scott Laury,
 Mathew Quinn, Timothy Spence
Contributors
 Ayman Almusallam
Production
 Diana Lavnick
Design and layout
 Carola Bayer, Tara Starnegg
Photographs (unless otherwise credited)
 Herwig Steiner, Wolfgang Hammer
Distribution
 Mahid Al-Saigh

Indexed and abstracted in PAIS International
 Printed in Austria



September JMMC focuses on market stability and full conformity



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

Alexander Novak, Co-Chair of the meeting and Minister of Energy of the Russian Federation.



Three days after OPEC's 60th Anniversary, the 22nd Joint Ministerial Monitoring Committee took place via videoconference on September 17, 2020. The core focus was on current oil market conditions, the prospects ahead, and conformity and compensation with regards to the voluntary production adjustments, but ministers also recalled the landmark achievement of six decades of OPEC. The OPEC Bulletin reports.



Mohammad Sanusi
Barkindo, OPEC Secretary
General.



Abdelmadjid Attar (c), Algeria's Minister of Energy and President of the OPEC Conference; Eng Mohamed Hamel (l), Algeria's Governor for OPEC; and Dr Toufik Hakkar (r), CEO of Sonatrach.

The 22nd Meeting of the JMMC took place via videoconference on September 17, 2020, under the Chairmanship of HRH Prince Abdul Aziz Bin Salman Al Saud, Saudi Arabia's Minister of Energy, and Co-Chair Alexander Novak, Minister of Energy of the Russian Federation.

In his opening remarks, Prince Abdul Aziz was clear in reminding participants in the 'Declaration of Cooperation' (DoC) that full conformity to the voluntary production adjustments was "an integral part of our collective effort to maximize the interest and gains of every individual member of this group, and the broader group."

He further highlighted the importance of transparency in the DoC and the importance of the compensation mechanism, but added that not fully conforming and then compensating at a later date should not become the norm. He stressed that all countries must demonstrate that they are disciplined and fully committed to the adjustments, and that the group is proactive and pre-emptive and ready to take action when it is needed.

In his remarks to the JMMC group, Mohammad Sanusi Barkindo, OPEC Secretary General, said that the decisions taken at the Ministerial Meetings of April and June have helped the industry right the ship, in the face



of the stormy waters of the COVID-19 pandemic and the resultant global economic downturn and large oil demand decline. He stated, however, that though the turbulent days of April and May have passed, there remain bumps in the road and there is the need to be cognizant that the recovery path will be gradual.

“It is important to recognize there is no short-term fix. It is why we have to stay the course, and recognize that our actions are also a platform for recovery and future growth,” he added.

The importance of full conformity, compensation and the need to carefully monitor the market was also underscored by Abdelmadjid Attar, Algeria’s Minister of Energy, President of the OPEC Conference, and Alexander Novak, Minister of Energy of the Russian Federation and co-Chair of the JMMC.

Attar stressed the importance of all participating countries reaching 100 per cent conformity and stated that the compensation mechanism adds credibility to the group’s efforts. He added that “the year 2020 has been a trying one for all us. However, our unity and resolve will enable us to overcome the challenges of our times.” Novak underlined the importance of the DoC and saw the voluntary production adjustments being undertaken as vital to the long-term stability of the oil market and the global economy.

Outcome

The JMMC reviewed the monthly report prepared by the Joint Technical Committee (JTC), developments in the global oil market since its previous meeting on August



Hasan Hafidh (c), Head, PR & Information Department, with staff participating in the meeting. Participating delegates can be seen on the video screen.



Participants to the 22nd JMMC discuss market issues.



HRH Prince Abdul Aziz Bin Salman Al Saud (r), Saudi Arabia's Minister of Energy and Chairman of the JMMC; and Suhail Mohamed Al Mazrouei (l), Minister of Energy & Industry of the United Arab Emirates.



International media attending the press conference following the 22nd JMMC.

19, 2020, and considered market prospects for the fourth quarter of 2020 and into 2021.

The JMMC observed that the recovery has not been even across the world and an increase in COVID-19 cases has appeared in some countries. In the current environment, the JMMC emphasized the importance of being pro-active and pre-emptive and recommended that participating countries should be willing to take further necessary measures when needed.

The deliberations also saw a review of the crude oil production data for August 2020 and welcomed the positive performance in overall conformity for participating OPEC and non-OPEC countries of the DoC, which was recorded at 102 per cent in August 2020, including Mexico as per the secondary sources.

Looking ahead, the JMMC reiterated the critical importance of adhering to full conformity and compensating overproduced volumes as soon as possible. In this regard, the JMMC supported, and recommended to the OPEC and non-OPEC Ministerial Meeting, the request of

several underperforming participating countries in the DoC to extend the compensation period till the end of December 2020, after pledging that they will fully compensate for their overproduction. It stated that “this is vital for the ongoing rebalancing efforts and helping deliver long-term oil market stability.”

60th Anniversary recognition

In addressing the JMMC, Barkindo also thanked all countries participating in the DoC for their goodwill messages on the occasion of OPEC’s 60th Anniversary that took place on September 14, 2020. He said: “It has been truly humbling to read the comments, and to regale the story of how this historic Organization has evolved and shaped itself over the past 60 years.”

Further recognition was forthcoming at the JMMC, with Novak offering congratulations from the Russian Federation. He said: “During the past six decades, OPEC has managed to present itself as one of the leading

elements of international energy relations and one of the most respected international organizations, as well as strengthening the role of the balancing factor in energy markets and energy security.

“OPEC has played a key role in improving transparency, stability and predictability of the oil market, as well as helping to establish a direct dialogue between Member Countries and independent producing countries.”

He added that the Russian Federation greatly values its dialogue with OPEC and noted that support for, and development of, this relationship has been written into the country’s energy strategy that is currently looking out to 2035.

Attar noted the significance of OPEC’s 60th Anniversary and stated that the Organization remains as relevant as ever, although it faces new challenges in today’s energy landscape. These were points followed up by Tareck El Aissami, Minister of Petroleum of the Bolivarian Republic of Venezuela, who conveyed his sincere appreciation

to the OPEC Family on its 60th Anniversary. He stated: “As a Founding Member of this wonderful Organization, Venezuela will continue working towards achieving a brighter future, addressing new challenges that may allow a continuous economic growth for humanity.”

In bringing the value of OPEC back to the present, he also noted the extraordinary achievements under the DoC, headed by the Kingdom of Saudi Arabia and the Russian Federation as Chair and Co-Chair of the JMMC, and “our esteemed brother Mohammad Barkindo.”

While the past six decades was on everyone’s mind, given the close proximity of the Organization’s 60th Anniversary celebrations, there was also a clear focus on the DoC going forward, with unity, transparency, fairness and equity.

This was summed up aptly by Barkindo: “Looking ahead, each of us needs to be unwavering in supporting the unanimous decisions we have made, dogged in fully executing the plans in place, and unyielding in our commitment to a balanced and stable market.”

Mohammad Sanusi Barkindo, OPEC Secretary General.



Follow the OPEC Secretariat on Social Media



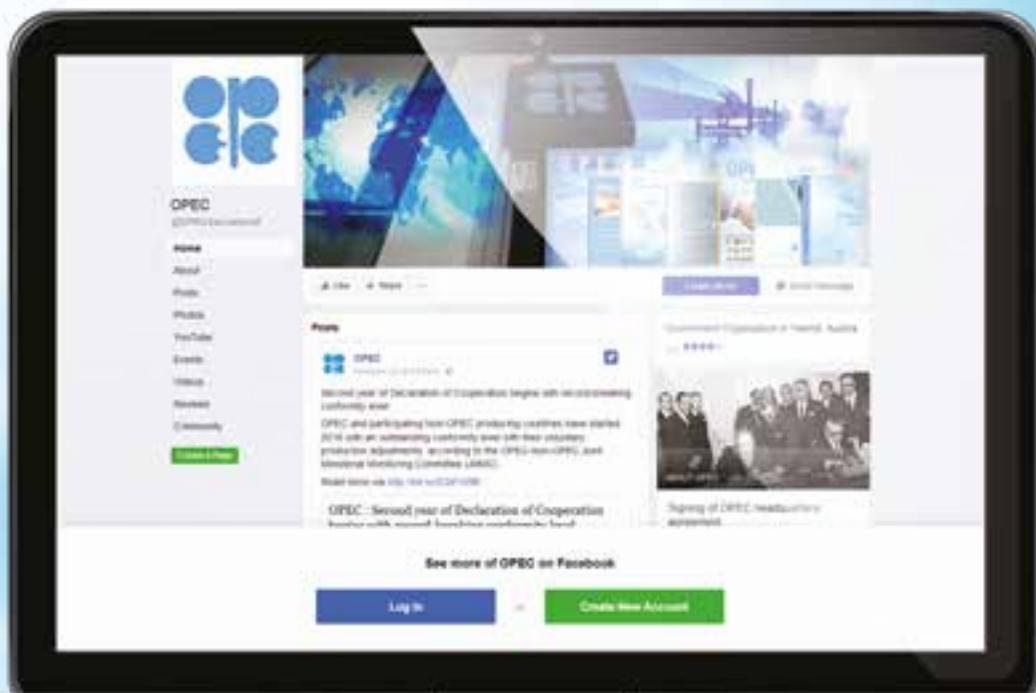
Facebook

facebook.com/OPECsecretariat



Twitter

twitter.com/opeccsecretariat



October JMMC prioritizes full conformity by all DoC participants

With the market outlook showing signs of weakening and with Saudi Arabia’s Minister of Energy and Chair of the Joint Ministerial Monitoring Committee (JMMC), Prince Abdul Aziz Bin Salman, seeing “lots of mixed messages” in the oil market over the last month, the October JMMC had lots to discuss. The OPEC Bulletin reports on its 23rd Meeting held on October 19.

The 23rd Meeting of the JMMC began with speakers offering their heartfelt condolences to the Kuwaiti delegation and tributes to the late Emir of Kuwait, His Highness Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, following his sad passing at the end of September.

Prince Abdul Aziz said he was “a true leader, a loyal champion of OPEC, and a father figure for me personally.” Alexander Novak, Energy Minister of the Russian Federation and co-Chair of the JMMC expressed his condolences and said that “he was a real friend of our country, Russia,” and OPEC President and Algeria’s Minister of Energy, Abdelmadjid Attar, followed by expressing his “condolences to our Kuwaiti family” in OPEC. Mohammad Sanusi Barkindo, OPEC Secretary General, recalled fondly his meetings with Sheikh Sabah over the last four years, and how important his high-level diplomacy was in bringing about the historic ‘Declaration of Cooperation’ (DoC) in December 2016.

Dr Khaled A Al-Fadhel, Kuwait’s Minister of Oil, Chairman of the Board — Kuwait Petroleum Corporation (KPC), thanked the speakers for their kind and comforting remarks, and extolled the legacy of Sheikh Sabah in bringing development to Kuwait and the region as a whole. He added that the late Emir is among the founding fathers of modern Kuwait, particularly through his impeccable diplomacy, which helped connect Kuwait to the world.

Market uncertainty

Prince Abdul Aziz began by saying that participants can take some satisfaction from the levels of conformity that have been achieved. The JMMC *communiqué* welcomed the positive performance in the overall conformity level for participating OPEC and non-OPEC countries — 102 per cent for September. He added, however, that “there is still some work to do before we achieve the agreed compensation targets.”

In reviewing the current situation, Prince Abdul Aziz warned of an “uncertain” outlook for demand and said that it was important for the DoC to adhere to what he called the three basic principles, or the P3. He said “we need to be predictive, preventive and proactive.”

In this regard, he said the DoC has to base its decisions on the best available data and information, and be forward-looking in decision making, hence, predictive. Preventive means “we have to be able to take measures to head off negative trends and developments, to nip them in the bud, before they become threatening.” And proactive, as the DoC has shown in 2020, with “the flexibility to adapt to changing circumstances when required.”

Novak also talked of uncertainties in the market that are preventing it from coming back to pre-crisis levels and said “we are living in a time of extreme volatility.” He added that the demand recovery “has slowed down



Timipre Sylva, Minister of State for Petroleum Resources, Nigeria, attended the meeting via videoconference.

amid the second coronavirus wave, but it has not stopped altogether.”

Attar underscored the need to continue to stay focused on the obligations and commitments made by participating countries in the DoC as stability gradually returns to the global oil market and concluded by saying that “OPEC has proven to be more relevant in driving energy dialogue now more than ever. Our ability to confront and overcome current challenges has proven remarkable.”

Focus on objectives

The importance of retaining focus and keeping all eyes fixed firmly on the objectives of the DoC was also highlighted by the OPEC Secretary General in his remarks to JMMC participants. He said it was “in all of our interests to be steadfast in keeping to the unanimous decisions we have made, unswerving in maintaining high conformity and ensuring compensation volumes are met, and proactive in our commitment to a balanced and stable market.”

He added that “we cannot let up on the path we have taken,” and stated that it was important to recognize “there is no short-term fix and that our actions are also a platform for recovery and future growth.” In summing up, Barkindo quoted the great inventor, Alexander Graham Bell, the man who started us on the road to communicating with each other over long distances: “*Concentrate all your thoughts upon the work at hand. The sun’s rays do not burn until brought to a focus.*”

Final communiqué

In its *communiqué* at the end of its 23rd meeting, the JMMC reaffirmed the commitments of all participating countries to achieve full conformity and make up for any shortfalls under compensation plans presented to the Committee for an extended period through December 2020. “In this manner, all participating countries were encouraged to increase their efforts to compensate for overproduced volumes in order to achieve the objective of market rebalancing and avoid undue delay in the process.”

The JMMC underlined that “underperformance is not only unfair to other performing countries, but it is also detrimental to oil market rebalancing.”

The *communiqué* ended with a call to all participating countries “to be vigilant and proactive, given the precarious market conditions and prospects.” In this regard, the OPEC Secretariat will continue to monitor the market on a daily basis, reporting to next month’s Joint Technical Committee and the 24th JMMC. 

OPEC turns 60

Six decades of unparalleled success

On September 14, 2020, OPEC marked its 60th Anniversary, celebrating a new milestone in its long and distinctive history. The OPEC Bulletin's Ayman Almusallam reports on the historic celebrations.



Thamir Abbas Al Ghadhban, Iraq's former Deputy Prime Minister for Energy Affairs and Minister of Oil, with Mohammad Sanusi Barkindo, OPEC Secretary General. Al Ghadhban was heavily involved in the preparations for OPEC's 60th Anniversary.

The momentous journey of OPEC began at a meeting that took place in the Al-Shaab Hall in the Bab Al-Muaadham quarter of Baghdad, Iraq. It witnessed representatives of OPEC’s Founder Members — Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela — come together for a common objective, the right to exercise sovereignty over natural resources.

In the avenue of history, the meeting is widely known as the ‘Baghdad Conference’.

The meeting saw OPEC’s Founder Members write a new chapter in the history of international cooperation and the oil sector that led to the birth of the Organization. With time, OPEC has evolved to become an influential actor in the energy landscape, shouldering important responsibilities for the benefit of oil producing and consuming countries, as well as the world economy at large.

OPEC has attached great importance to oil market stability from the very beginning; it forms a crucial part of its Statute.

Despite the instability caused by the COVID-19 pandemic, the celebratory ambiance felt throughout the year 2020 has been unique and delightful. This feeling further spiked on OPEC’s founding day, September 14, as the Organization turned 60.

In this festive spirit, as OPEC’s founding day was approaching, OPEC Secretary General, Mohammad Sanusi Barkindo, said: “The 60-year Anniversary of OPEC’s founding offers an opportunity for us to take stock of the momentous journey this Organization has been on. In learning the lessons of the past, we can look forward to the future. I have no doubt that even though we have achieved so much so far, this Organization’s best days lie ahead of it.”

He added: “When our Organization was founded, few could have foreseen the enormous, positive impact that OPEC would have on the oil market and the global economy. The vision of our Founder Members lives in the hearts of all people who seek oil market stability in the interests of producers, consumers and the global economy.”

Postponement of OPEC’s homecoming

At the gracious invitation of Founder Member Iraq, the OPEC Family had planned to return to OPEC’s birthplace — Al-Shaab Hall in Baghdad — to commemorate the last six decades of the Organization and set a bright path for the next 60 years.

However, in light of the COVID-19 pandemic and

various related risks, Iraq decided to postpone the celebrations.

Ihsan Abdul Jabbar Ismael, Iraq’s Oil Minister and Head of its Delegation to OPEC, said in a letter to the Secretary General, that it is “genuinely disappointing not to be able to host the 60th Anniversary” following months of preparations for the historic event.

“The health and safety of all are of utmost importance,” the Minister emphasized.

In return, Barkindo expressed his sincere gratitude for Iraq’s generous initiative to host OPEC’s Diamond Anniversary in the Al-Shaab Hall.

“It is very unfortunate that we are unable to mark OPEC’s Diamond Anniversary in September at the same site where the historic ‘Baghdad Conference’ was held between September 10 and 14, 1960. It was a historic meeting in all senses, that saw the common vision and wisdom of our Founder Members lead to the creation of a foresighted organization that grew

“In 60 years, OPEC has grown into a global icon and a symbol of resilience.”



— Timipre Sylva, Minister of State for Petroleum Resources, Nigeria



The Iraqi government has undertaken extensive renovations of Al-Shaab Hall for OPEC’s 60th Anniversary. The historic building is located in Baghdad’s central Bab Al-Muaatham district.



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



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

“[OPEC] has become the most important Organization established to maintain stability in the global oil market and protect the world economy.”



— Dr Khaled A Al-Fadhel, Kuwait's Minister of Oil, Chairman of the Board — Kuwait Petroleum Corporation (KPC)

in stature and influence to become a distinguished entity within the global energy community,” Barkindo said.

He added: “Yet we look forward with high anticipation to attend OPEC’s homecoming in the very near future.”

OPEC’s founding day

The 14th of September 2020 — the date the Organization turned 60 — was a very special day for OPEC.

The OPEC Secretariat, led by Secretary General Barkindo, developed an outreach initiative to mark the occasion appropriately with Member Countries and the global energy community.

The day began with the Vienna-based Secretariat issuing a press release to mark the historic day. The press release looked back at the days of OPEC’s founding between September 10 and 14, 1960, in Baghdad, and oil market conditions back then.

It also paid a glowing tribute to the founding fathers — 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 Alfonzo of Venezuela — which

gathered in the Iraqi capital of Baghdad to midwife OPEC into the world.

The press released stated: “The seminal ‘Baghdad Conference’ saw these five visionaries from the Founder Member Countries gather together around the premise of cooperation and with the need to write their own story. Pérez Alfonzo said after the meeting: ‘We are now united. We are making history.’ It would prove to be a profound statement.”

In this context, Barkindo reflected: “I often think back to that day in 1960, the mood in Baghdad, how those visionaries envisaged the future of OPEC and the oil industry. What is clear is that what was set in motion has stood the test of time; OPEC still has the same core objectives of order and stability in global oil markets, but its role has also broadened considerably in terms of deeper cooperation with other producers, dialogue with a host of industry stakeholders, and the embrace of human concerns such as sustainable development, the environment and energy poverty eradication.”

The press release noted that the 60th anniversary is a time to reflect and appreciate the efforts of all those who have worked so hard throughout our history to make OPEC the resounding success it has become. This includes generations of Heads of State and Government, Ministers, Governors, other high-level experts from outside the Secretariat and from within the Secretariat, Secretaries General, and Management and Staff of every relevant discipline. “They have all enriched the Organization, through commitment, perseverance and sacrifice, to cope with the many ups and downs experienced by OPEC and its Member Countries,” it added.

It also thanked Austria and the City of Vienna for being a warm and generous host to the Secretariat since



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

OPEC moved 55 years ago to the place it has come to call home.

Additionally, OPEC Secretary General, Mohammad Sanusi Barkindo, wrote two op-eds further contemplating and reflecting on the landmark occasion.

The articles, which were published by numerous media outlets in OPEC Member Countries and by international press agencies, saw the Secretary General recalling the early days of the Organization.

Barkindo wrote: “[OPEC’s] story encapsulates a family of nations, people and populations, of feelings and emotions of countries rich in culture and heritage, and of the struggle of a group of developing countries to exercise their inalienable right to permanent sovereignty over their natural resources in the interest of their national development.”

In reflecting on the Organization’s global leading role, he said: “The history of OPEC is also part of the history of the modern oil industry; a fuel that has been the lifeblood of industrialized nations and helped shape the modern world. Oil is omnipresent in the lives of most people on this planet, accounting for over 30 per cent of the global energy mix. The way people live, work and travel all depend on oil.”

The Secretary General also commended OPEC’s efforts during the last six decades and its ability to adapt its course in an ever-changing environment in a flexible and responsible manner, noting: “Sixty years alone is a monumental achievement for an organization, but especially so for one representing one of the most volatile commodities — oil. Since the early 1970s we have seen seven major market cycles, including the latest in the wake of the COVID-19 pandemic, each of which has

seen severe and sudden imbalances threaten the oil market and global economic development.

“Throughout the Organization’s history, there has been one recurring theme that has transcended across the decades and guided the Organization’s work to support sustainable oil market stability: cooperation,” he added.

COVID-19 fallout

The Secretary General continued to highlight the significance of cooperation when addressing the recent free-fall in the global oil market caused by the devastating COVID-19 pandemic.

He elaborated: “Back in March and April, the world faced its largest oil demand shock in living memory. On days in April, demand was 23 million barrels a day (m b/d) below that of 2019, the WTI May futures price contract went negative on April 20 and the global economy seemed to be teetering on an abyss. Every producer was impacted, no one was immune.”

Barkindo further expounded on the decisive and quick actions taken by OPEC and its non-OPEC partners participating in the ‘Declaration of Cooperation’ (DoC), “[They] help[ed] cushion the tremors and help[ed] bring

“Congratulations to the OPEC Secretariat and OPEC’s Member [Countries] for 60 years’ cooperation. Born of the same nations, OPEC and [the] OPEC Fund were conceived with distinct mandates. We are proud of our shared heritage that continues to rely on global partnership.”



— Dr Abdulhamid Alkhalifa, Director General of the OPEC Fund for International Development



“Since OPEC’s inception in 1960, its Members have played a pivotal role in the success of the Organization. Few would have believed that after 60 years, OPEC would have risen to the heights it has today in the global energy arena.”



— S M Vaidya, Chairman of the Indian Oil Corporation, India

All roads led to Cairo and the first Arab Petroleum Congress (see stamp right) in April 1959, but it was outside of the confines of the Congress, in a series of closed meetings and informal discussions, where the real talks took place. Several secret meetings were held in the Cairo suburb of Maadi at the local yacht club (above) and led to the ‘Maadi Pact’.

a semblance of stability to the market, with the largest and longest voluntary production adjustments in the history of the oil industry, which were supported far and wide, including positive comments from the White House.”

He noted that these efforts were taken in the interest of the industry’s producers and consumers, as well as the global economy at large.

Barkindo also pointed out that the landmark ‘Charter of Cooperation’ (CoC), which was endorsed in July 2019, encapsulates the various fundamental principles that the Organization, and later the DoC, have shadowed and used as a guideline to pave the way to a brighter and more successful future.

He said: “The forward-looking trajectory that underpins the CoC means that it is an important platform for participating countries, not only in helping maintain sustainable oil market stability, but also in evolving a future for oil and all energies in the energy transition.”

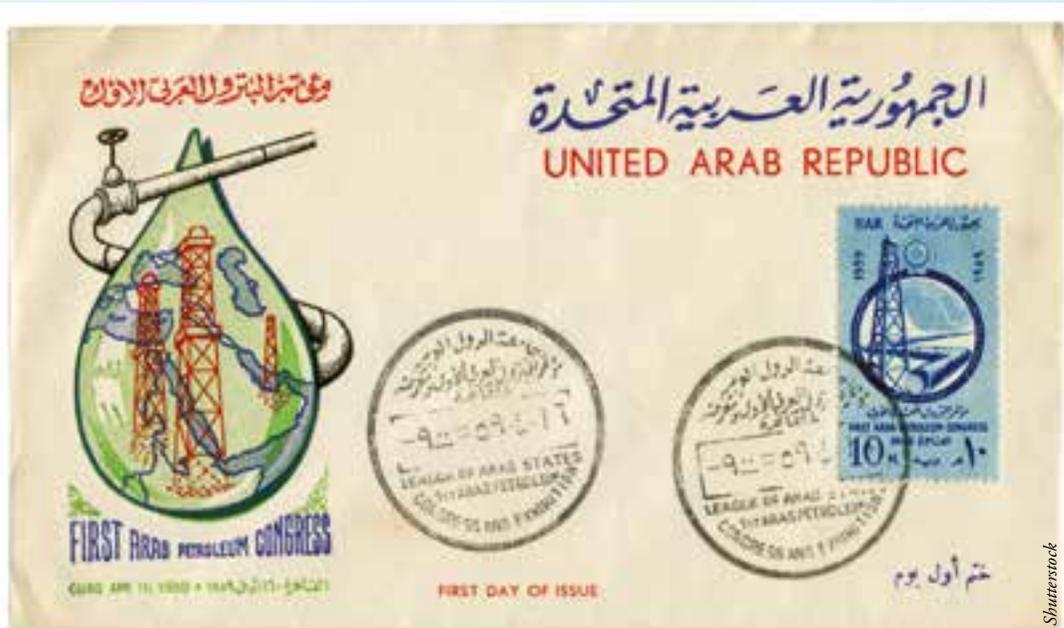
The Secretary General concluded by reaffirming OPEC’s commitment to broader and deeper dialogue and cooperation, adding, “We are open to engage with all stakeholders.”

Goodwill message by Secretary General

In commemoration of the 60th Anniversary, Secretary General Barkindo recorded a video goodwill message addressed to the global energy community, as well as the world as a whole.

The Secretary General began with underscoring the historic decision taken in September 1960 in Baghdad to establish OPEC, which he described as a “brave and pioneering act.”

He added that the decision “represented many things: first, it was a legitimate assertion of the right of peoples and nations to sovereignty over their natural resources. Second, it was an expression of a firm belief that cooperation and dialogue among nations are the most effective means of overcoming the industry’s challenges. OPEC remains committed to these guiding principles of respect among nations, equity, fairness and transparency,” Barkindo said.



“The fact that OPEC has evolved and thrived over the last six decades is a source of tremendous pride for the entire OPEC family. Throughout this time, we have faced highs and lows, trials and tribulations; yet here we are, 60 years later, a unified intergovernmental organization of 13 Member Countries, more relevant, acclaimed and necessary for the international energy industry than ever.”

The Secretary General concluded by announcing that September 14 will be recognized as a public holiday at the Secretariat this year and onwards, noting: “This offers an opportunity for all of us to reflect on our heritage and the precious principles that infuse everything our Organization does.”

The goodwill message was translated into Arabic in an effort to widen the potential recipient audience.

The Secretary General also addressed a similar message to the Secretariat’s Members of Management and Staff.

Documentary film

Among the key Anniversary projects carried out by the Secretariat’s Public Relations and Information Department is the production of a documentary film to portray the historic journey of the Organization and present its six decades of achievements.

A short version of the documentary film was presented on September 14, while the full film will be launched as part of the planned celebrations in Baghdad, Iraq.

The documentary film starts with setting the scene in Baghdad, Iraq, when OPEC was founded, highlighting that its establishment saw no fanfare and no glare from the international media.

It continues: “OPEC’s development over the past six decades has not been a straight line. But with 60 years of institutional wisdom and a brilliant history, it is a mature, dependable and essential partner in energy governance.”

The film then moves to the current affairs of OPEC, focusing on the leading position it has achieved in the energy landscape, with a backward look to key OPEC events, as well as significant moments that changed the path of history in Member Countries and for the international oil sector.

In eight minutes, the documentary film takes its viewers into a historical journey that started more than six decades ago and has made an everlasting impact.

Among the key moments is the ‘Baghdad Conference’; the first Arab Petroleum Congress; the gentlemen’s agreement that was endorsed by OPEC’s five Founder Members; the

“OPEC has established itself as one of the key links in the system of international energy relations and a prominent international organization, and has also strengthened its role as the universally recognized guarantor of global energy security.”



— Alexander Novak, Minister of Energy of the Russian Federation and Co-chair of the OPEC and non-OPEC Ministerial Meeting

“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, President of the OPEC Conference 2020 and Minister of Energy, Algeria

relocation of OPEC from Geneva to Vienna; the First, Second and Third Summits of OPEC Heads of State and Government; the growth in the Organization’s membership; the DoC; and the CoC.

Congratulatory letters and messages

Secretary General Barkindo received numerous letters from dignitaries, ministers, and officials conveying their heartfelt wishes on the Organization’s 60th Anniversary.

Prof Dr Mana Saeed Al Otaiba, Personal Adviser to the President of the UAE, former Minister of Petroleum and Mineral Resources, and President of the OPEC Conference, sent a goodwill message to the Secretary General and the OPEC family, congratulating them on OPEC turning 60.

Dr Khaled A Al-Fadhel, Kuwait’s Minister of Oil and Chairman of the Board — Kuwait Petroleum Corporation (KPC), extended his warm wishes on the establishment of OPEC 60 years ago, commending the pivotal role that the Organization has played, as well as its respected status in the global energy landscape.

Nigeria’s Minister of State for Petroleum Resources and Head of Delegation to OPEC, Timipre Sylva, conveyed in a video message his congratulations to OPEC’s Secretary General and the OPEC Family.

Alexander Novak, Minister of Energy of the Russian Federation and Co-chair of the OPEC and non-OPEC Ministerial Meeting extended his warm wishes to OPEC and its Secretary General Barkindo.

The Director General of the OPEC Fund for International Development, Dr Abdulhamid Alkhalifa, congratulated the OPEC Secretariat and its Member Countries for the 60 years of cooperation. He added: “Born of the same nations, OPEC and the OPEC Fund were conceived with distinct mandates. We are

proud of our shared heritage that continues to rely on global partnerships.”

President of the World Petroleum Council, Tor Fjaeran, congratulated the Secretary General on the historic moment and the role that the Organization has played over the last six decades.

The Gas Exporting Countries Forum (GECF), led by its Secretary General Yury Sentyurin, extended its congratulations to the OPEC Secretariat and the Organization’s Secretary General, leadership, experts and staff members.

Among other dignitaries who extended felicitations were Dr Luay al-Khateeb, former Minister of Electricity of Iraq and S M Vaidya, Chairman of the Indian Oil Corporation.

Special OPEC Bulletin and website section

The Organization also launched a dedicated section on its official website for its Diamond Anniversary on OPEC’s founding day.

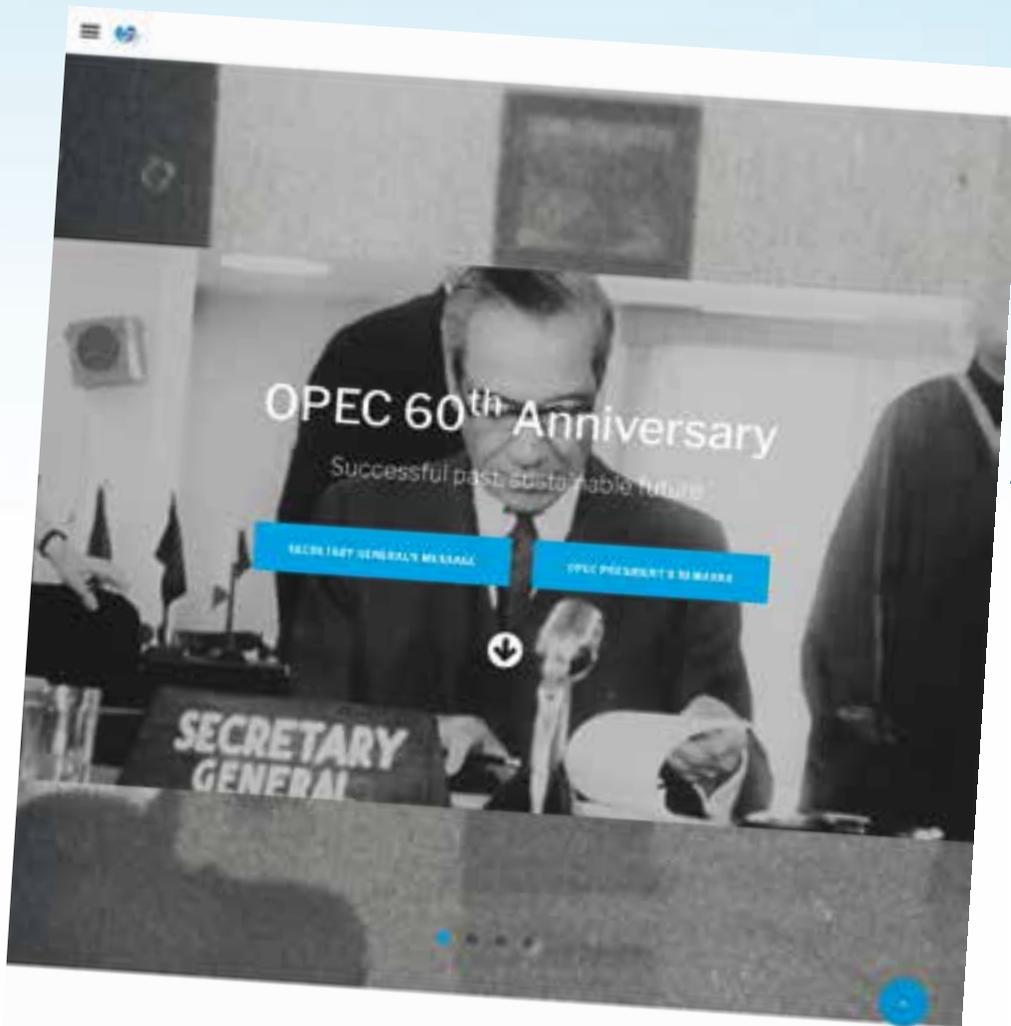
The new trendy microsite gives its visitors a wide range of information on the Anniversary, as well as on the Organization, its achievements and history. It features the reflections of Abdelmadjid Attar, President of the OPEC Conference 2020 and Algeria’s Minister of Energy, and the Organization’s Secretary General, in addition to numerous goodwill messages from OPEC Heads of Delegation, former and current Ministers, dignitaries, former OPEC Secretaries General, and other senior officials.

In a special message published on the website, Barkindo extended his congratulations and gratitude to the Member Countries for their continuous support; the Heads of Delegation for their distinctive leadership, particularly during challenging times; the Members of the Governing Boards for their wise guidance; and the Secretariat’s Members of Management and staff for their tireless efforts.

He added that the solid foundation built by the Organization’s foresighted Founder Members created guiding values required during periods of both prosperity and challenge, lighting its path to recognition within the global energy community.

“As OPEC continues to grow, the Organization remains committed to these great traditions by maintaining its current channels of dialogue with producing and consuming countries, as well as identifying new partners to further expand it. Dialogue and cooperation have

The Organization also launched a dedicated section on its official website for its Diamond Anniversary on OPEC's founding day which can be visited here: <https://anniversary.opec.org/site/index.html>



OPEC: 60 years and beyond

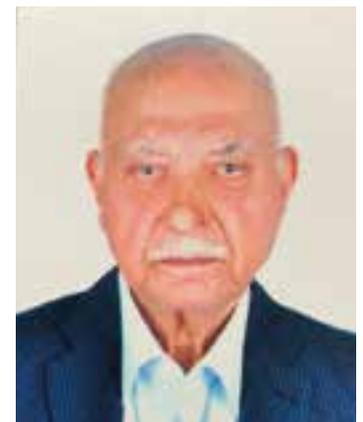
The Organization of the Petroleum Exporting Countries (OPEC) will mark its 60th Anniversary in September 2020, celebrating a new milestone in the distinguished history of the Organization.

Founded in September 1960, OPEC's historic journey began in a meeting that took place in the Al-Shaikh Hotel in Bab Al-Munadham in Baghdad, Iraq. Representatives of OPEC's Founder Members – Iran, Iraq, Kuwait, Saudi Arabia and Venezuela – attended the meeting, which is widely known as the "Highland Conference".

At the meeting, OPEC's Founder Members together wrote a new chapter in the history of international cooperation and the oil sector, leading to the birth of the Organization.

Sixty years later, OPEC continues to play a pivotal role in the oil industry in pursuit of its noble objective – supporting stability in the world's oil market in the interests of producers, consumers and the global economy.

“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, former Deputy Minister of Oil, Iraq

been key instruments in OPEC's efforts to ensure market stability; this is best exemplified through the DoC,” the Secretary General said.

Building on OPEC's remarkable last six decades, he highlighted: “As we turn a new chapter in our great history, we continue to gain experience, wisdom and global respect as we carry out our duty to act in the interests of all stakeholders in a complex global oil market.”

The OPEC Secretariat also issued a special edition of the *OPEC Bulletin*, one of the Organization's flagship publications that includes news from Member Countries, coverage of key events related to OPEC and the energy sector, insightful articles, reviews of oil market developments and other topical issues.



Mohammad Sanusi Barkindo (r), OPEC Secretary General, during an interview with CNN's John Deferios (on screen), CNN Business Emerging Markets Editor.

“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, Azerbaijan

At around 130 pages, the special issue takes its readers on a historical journey to learn about the Organization’s founding, as well as the circumstances surrounding this pivotal moment. The magazine also features many reflections and messages from dignitaries, ministers, and senior officials from OPEC Member Countries, non-OPEC oil producing countries participating in the DoC, institutions and international organizations, among others.

In a message from OPEC President Attar, he said: “Holding the Presidency of the OPEC Conference represents a great honour for Algeria, especially as it coincides with the 60th Anniversary of OPEC. The year 2020 has been beset with unprecedented challenges resulting from the COVID-19 pandemic and

its adverse consequences on people, economies, and livelihoods.”

On the impact of the pandemic on the global oil market, he highlighted the leading role that the Members of OPEC and the DoC have played, adding, “The reaction of OPEC, in cooperation with non-OPEC countries, to massive COVID-19-related demand destruction — on a scale never seen before or even imagined — which crippled the market, demonstrates that OPEC continues to have a decisive impact on oil markets today, on its 60th birthday.”

The Minister said that the dominant message throughout this crisis has been acknowledging the power and importance of international cooperation in ensuring the resilience of energy systems. This timeless belief of OPEC’s holds even more true today.

“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,” he added.



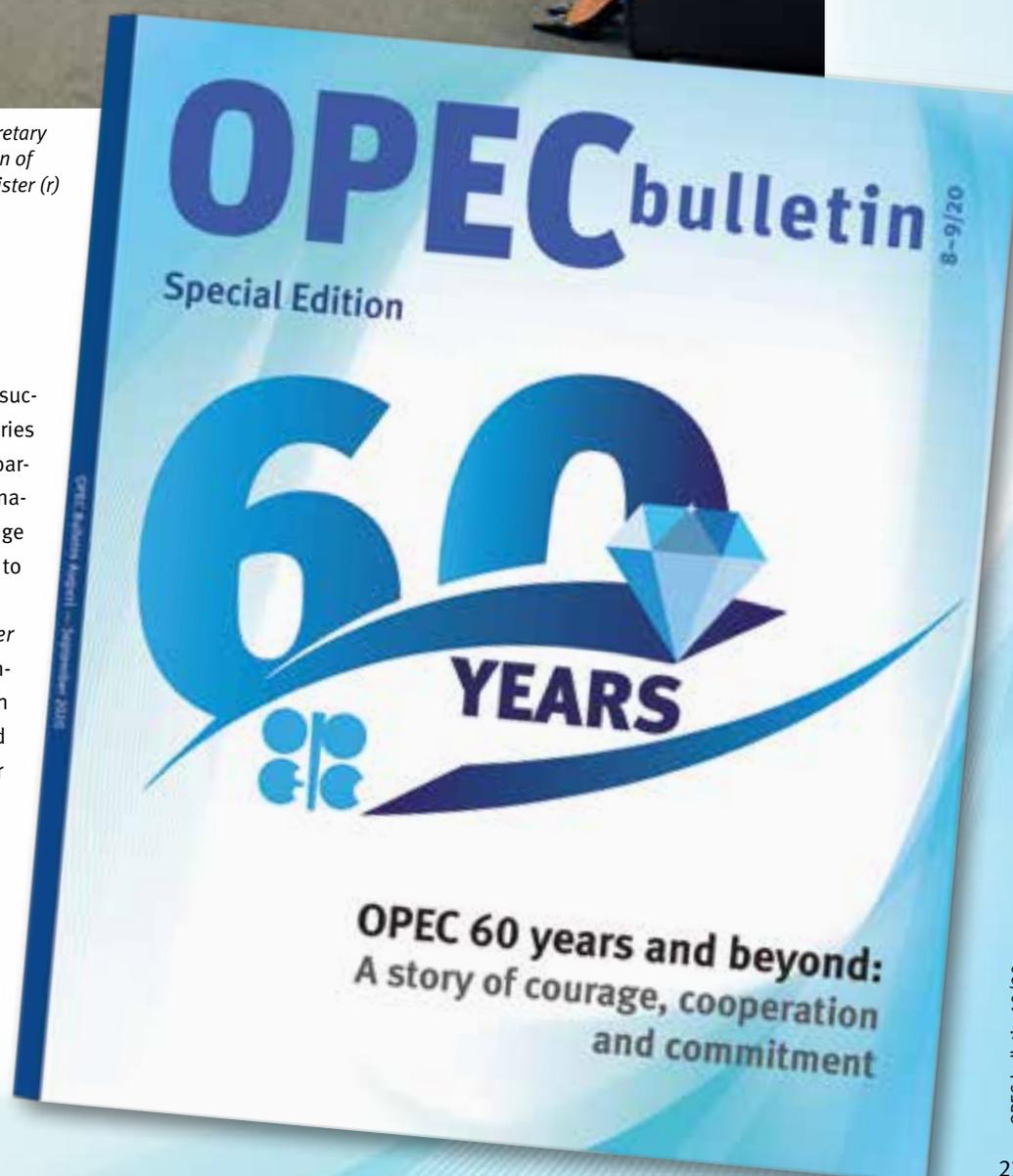
Mohammad Sanusi Barkindo (c), OPEC Secretary General, during an interview on the occasion of OPEC's 60th Anniversary, with Sonja Sagmeister (r) of Austria's public broadcaster, ORF.

Broad and wide coverage

The outreach initiative was a tremendous success, as press agencies in Member Countries and non-OPEC oil producing countries participating in the DoC, along with international media outlets, carried a wide range of reports, broadcasts and news stories to mark the milestone.

On social media, particularly *Twitter* and *Facebook*, Member Countries, non-OPEC oil producers of the DoC, along with industry journalists and analysts, marked the historical occasion, expressing their wishes and thoughts in this regard.

The Secretary General also held several press interviews with local and international media, including CNN, Nigerian Television Authority (NTR), ORF (Austria's official TV channel), MEES and Kyodo. 





60
YEARS



Successful past, sustainable future

THE SIXTIETH (1)

Dr. Mana Saeed Al Otaiba

*Sixty years have passed since OPEC was established,
Although it is still a child, and we will never wean it.
It suffered from terror acts,
But it did not surrender and its insistence did not give up.
It kept the crude oil price at its maximum,
And it was an antidote for the wound of oil nations.
It rejected the collapse of its price,
And its right talked eloquently.
It stood strongly facing those who are greedy,
After its weakness was mute.
Sixty years of struggle in pursuing,
The wellbeing of nations, as its whole concern was to be safe.
Oh OPEC the Zahra'a you are a castle of justice,
As justice has smiled to you.
All the resolutions that you issued,
Were an inspiration for the Masters of politics.*



*You have reduced the production so that you will not go down,
With the price and the reduction was well organized.
You have set a marvelous plan for your members,
Which was a profitable gain for your members.
Sixty years of continuous storms which did not stop,
For a day, and that was a motivation for me to learn.
I accompanied all events by poetry,
And I composed a collection of poems that resembles a mine.
Today I return back after a lover's absentia,
To say that the feeling was not boring,
But he used to talk always by wisdom,
And his mind was controlling him all the time.
All greetings for you from all my heart,
As it is still charged with beautiful memories.*



Mohammad Sanusi Barkindo, Secretary General of OPEC, holding the opening remarks.



Dr Rainer Seele, CEO of OMV, delivered remarks at the WOO 2020 launch.

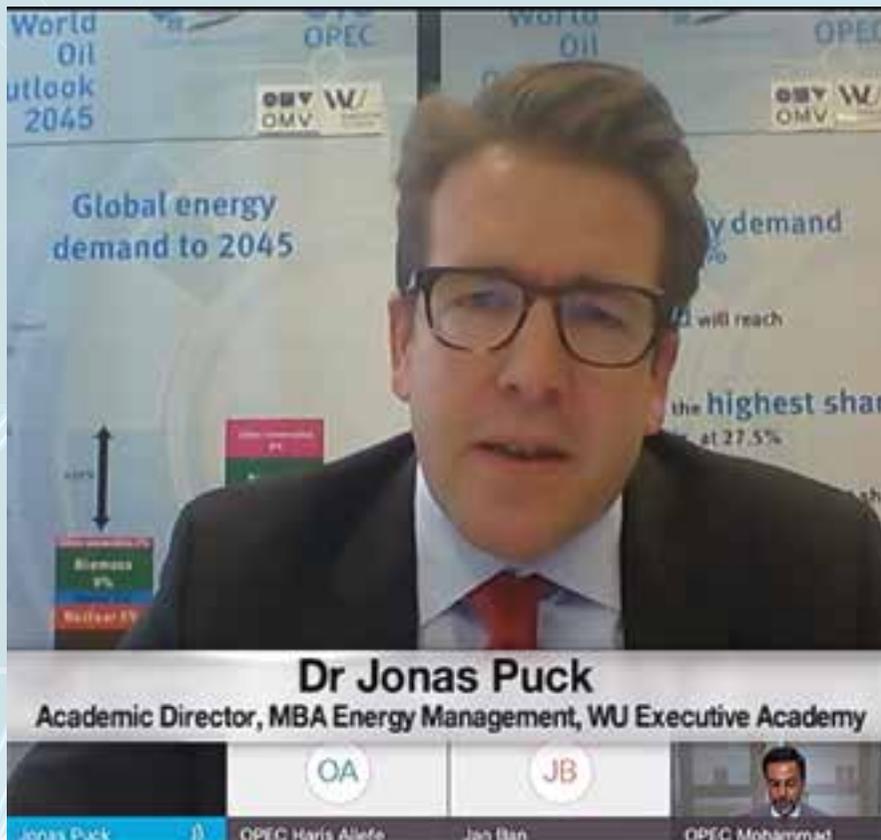
Historic year, unusual launch for the *World Oil Outlook*

“We are very proud to bring you this exceptional edition of the WOO with the hope that it enriches the global energy dialogue and inspires closer cooperation,” Mohammad Sanusi Barkindo, OPEC Secretary General, said in unveiling the Organization’s flagship annual publication on October 8, 2020.

Each year, the launch of the *World Oil Outlook (WOO)* is a much-anticipated and well-attended event, whether it is held at the OPEC Secretariat or in outside venues.

Last year, the *WOO 2019* was launched in the festival hall of the Börsensäle, the historic neo-Renaissance stock exchange building across the street from the OPEC Secretariat.

Two years ago, the release of the *WOO 2018* took place in Algiers alongside the 10th Meeting of the Joint Ministerial Monitoring Committee (JMMC). The launch was part of the celebrations of the 2nd Anniversary of the seminal 170th (Extraordinary) Meeting of the OPEC Conference that took place on September 28, 2016, and helped pave the way for the ‘Declaration of Cooperation’ (DoC).



Dr Jonas Puck, Academic Director, MBA Energy Management, Vienna University of Economics and Business Executive Academy.



Mohammad Sanusi Barkindo unveiled and presented the World Oil Outlook 2020.

The Algiers event was the second time the publication was released outside of Vienna, following the launch of the 2016 edition at the Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC) in the United Arab Emirates in November 2016.

14th edition of the *WOO*

Yet the release of the *WOO 2020*, the 14th edition of OPEC's flagship annual publication, was unlike any of its predecessors. It was the first time the publication was unveiled at a videoconference, a reflection of how the COVID-19 pandemic has disrupted global movement.

In the foreword, Mohammad Sanusi Barkindo, OPEC Secretary General, highlighted that the publication was published at a defining moment in the history of OPEC, a year marked by the COVID-19 crisis and the Organization's 60th anniversary.

"In a year without precedent, we are very proud to bring you this exceptional edition of the *WOO* with the hope that it enriches the global energy dialogue and inspires closer cooperation," the Secretary General said. "As we turn an important page in our history, OPEC's commitment to securing an efficient, economic and steady

supply of oil to consuming countries, and providing essential support to the global economy, is as unshakable today as it was when the Organization was founded 60 years ago."

The newest edition of the *WOO* provides the OPEC Secretariat's in-depth look at the unprecedented scale and impact of the COVID-19 pandemic, an assessment of medium- and long-term prospects, as well as analysis of various alternative scenarios and sensitivities that have the potential to impact the petroleum industry in the years ahead.

The *WOO* for the first time extends its outlook to 2045, providing an additional five-year window to examine developments in energy and oil demand, oil supply and refining, the global economy, policy and technology developments, demographic trends, environmental issues and sustainable development.

'Defining year' for OPEC

In his opening remarks, Barkindo pointed to the exceptional circumstances in 2020.

"Years that test us, like this one, ultimately demonstrate our strength. This year, 2020, has been a defining



A panel discussion focusing on the key findings of the WOO 2020 was led by Dr Ayed S Al-Qahtani, Director, Research Division.



Dr Abderrezak Benyoucef, Head, Energy Studies Department during the panel discussion.

one for OPEC. OPEC was founded 60 years ago with the specific aim of securing an efficient and economic supply of oil to consuming nations, enabling steady investment in the petroleum industry, and in turn providing essential support to the global economy. It is a mark of the Organization's success that the principles forged by OPEC's Founders in Baghdad, Iraq, on September 14, 1960, remain relevant — and indeed vital — in the contemporary world.

“The *World Oil Outlook* is a manifestation of these founding principles,” he said. “Each edition provides a timely and essential reference for all energy stakeholders. Its continuity is a symbol of stability when we need it the most.”

Praise for OPEC's role

The videoconference launch also featured remarks by Dr Rainer Seele, CEO of the 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.

Seele, in taped remarks, congratulated OPEC on its 60th anniversary, and the Secretariat's 55th year in Vienna,

and referred to the Organization's role in promoting cooperation and stability.

“Over the last 60 years, OPEC has proven its tremendous relevance for oil market stability,” the OMV CEO said. “Only security of supply allows the industry to conduct its business and plan ahead.”

He also cited OPEC's contribution to supporting cooperation between international oil companies (IOCs) and national oil companies (NOCs).

In his remarks, Puck referred to OPEC's support for the development and growth of the Vienna University's energy management MBA. The *WOO* provides an important resource for students and researchers, he told the audience, noting that the Executive Academy is “working to support the future leaders in the energy transition.”

Role of the DoC

This year's edition of the *WOO* also examines the bold and decisive actions taken in April by 23 OPEC and non-OPEC countries in the DoC in response to unprecedented market challenges resulting from the pandemic-related economic slump. The DoC committed to the largest and longest-ever oil production adjustments, which have



Dr Erfan Vafaiefard, Chief Alternative Sources of Energy Analyst, Energy Studies Department.



Dr Mohammad Abdulhameed Alkazimi, Senior Upstream Oil Industry Analyst, Energy Studies Department.

helped to restore market stability since the second quarter of 2020 and provide a platform for recovery.

“The actions taken by OPEC Member Countries, together with non-OPEC countries in the ‘Declaration of Cooperation’, have helped reduce volatility in the oil markets, provided stability, and laid the foundation for recovery,” the Secretary General said in his remarks.

“We have not acted alone. Never in OPEC’s 60-year history have we seen such a high degree of cooperation at the highest levels of government and involving energy stakeholders in producer as well as consumer countries,” Barkindo said.

“We must also bear in mind that these efforts require time and patience. The recovery will always be slower than the shock. There is no better time than now to work together, to build a more secure, sustainable and resilient energy future,” he said.

The *WOO 2020* launch represents the culmination of months of work under unusual circumstances. The writing, review and production of the publication was in large part carried out remotely, reflecting the global impact of COVID-19 on work environments and travel.

Like its predecessors, the *WOO 2020* should be viewed as a helpful and insightful reference tool,

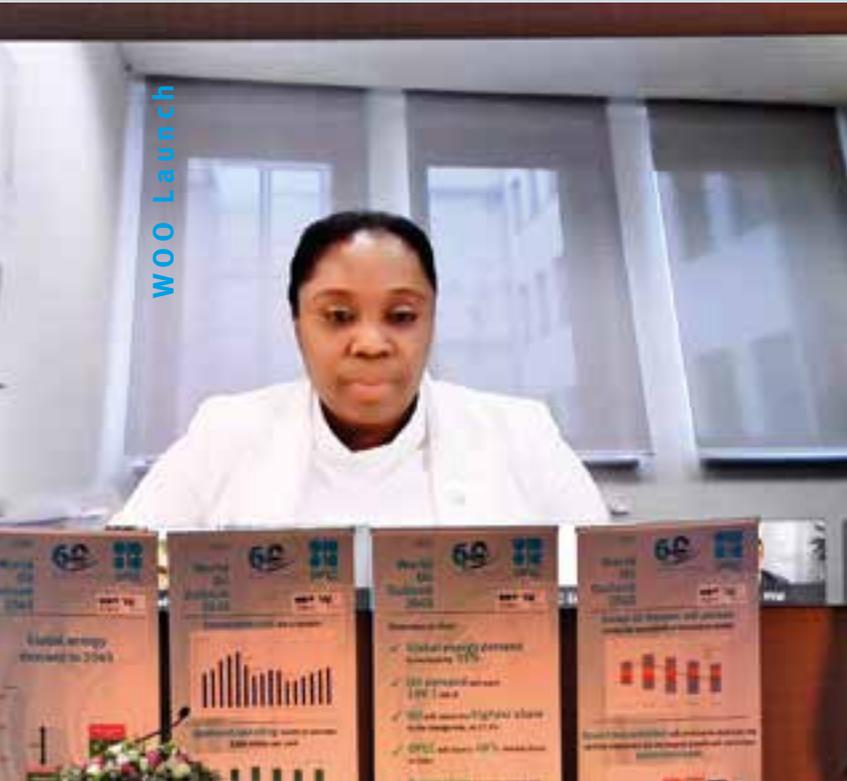
Barkindo said in his remarks, one that underscores OPEC’s commitment to knowledge-sharing and data transparency. “It also is intended to enrich the global energy dialogue and inspire closer cooperation — the hallmarks of OPEC’s 60-year record of success,” he said.

Panellists shed light on the *WOO*’s outlook

Following the opening remarks from Barkindo, Seele and Puck, Dr Ayed S Al-Qahtani, Director of OPEC’s Research Division, and Dr Abderrezak Benyoucef, Head of the Energy Studies Department, led an engaging discussion that included the Secretary General and some of the OPEC analysts involved in the *WOO*.

The analysts were Dr Haris Aliefendic, Dr Mohammad Alkazimi, Dr Jan Ban, Irene Etiobhio, Dr Erfan Vafaiefard and Julius Walker. They answered numerous questions from leading journalists, other participants and the event’s moderator, Eithne Treanor.

Although many questions focused on the impact of COVID-19, there was a great deal of interest in the *WOO*’s assessment of the long-term outlook for oil demand and supply.



Irene Nkem Etiobhio, Petroleum Industry Analyst, Energy Studies Department.



Dr Jan Ban, Senior Research Analyst, Energy Studies Department.



Eithne Treanor moderated the event.

In concluding the video launch, Barkindo outlined several key messages that emerged from the presentations and exchanges.

First, he said it was clear that all energy sources would be needed in the future and that oil would play a leading role in the energy transition. To sustain this role in the coming decades, the industry requires adequate and timely investment, he said.

“A second point is that our world requires a combination of efforts to reduce greenhouse gas emissions, and technology is key. The circular carbon economy, which is discussed in greater detail in the *World Oil Outlook*, is one concept that could support a transformational leap towards a more sustainable society,” he said.

The Secretary General also stressed the importance of the bold and decisive action taken by the DoC participating countries to help arrest the market’s freefall this year, support the draw-down of unsustainable inventory, and provide a platform to support a global economic recovery.

“As we look to the future, we also must recognize visionary actions undertaken by these same countries in their endorsement of the ‘Charter of Cooperation’ (CoC) in July of 2019. The CoC provides an important framework to extend voluntary collaboration to other issues of common concern, such as climate change and the oil industry’s continued importance in the world’s evolving energy mix.

“Furthermore, the CoC offers a unique platform for cooperation on advanced technologies and innovative applications that can help reduce the industry’s environmental footprint,” he said.





Dr Haris Aliefendic, Senior Research Analyst, Energy Studies Department.



Julius John Walker, Senior Research Analyst, Energy Studies Department.

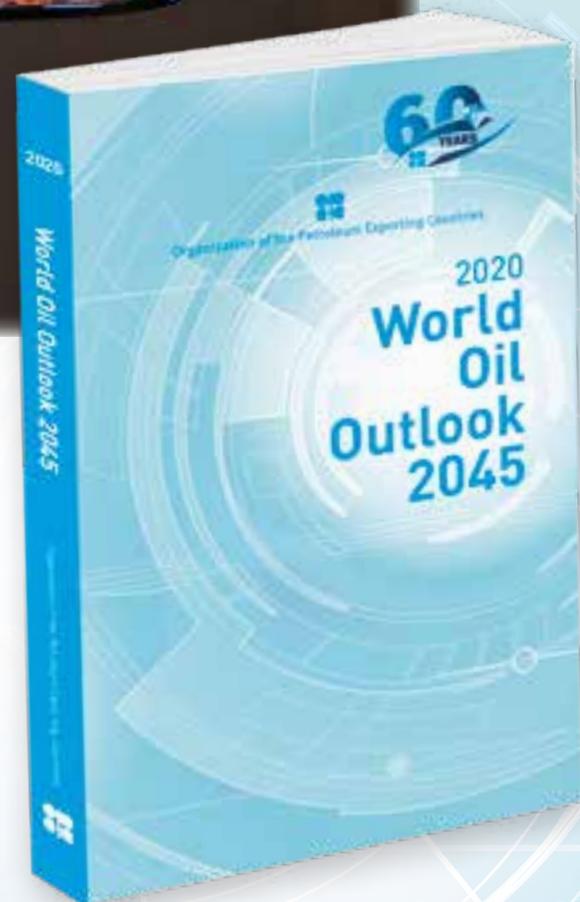


Secretariat participants of the WOO launch take time out for a group photograph.



Highlights from the WOO 2020

- The outbreak of the COVID-19 pandemic resulted in the sharpest downturn in energy and oil demand in living memory.
- Despite the large drop in 2020, global primary energy demand is forecast to continue growing in the medium- and long-term, increasing by a significant 25 per cent in the period to 2045.
- All forms of energy will be needed to support the post-pandemic recovery and to address future energy needs.
- Oil is expected to retain the largest share of the energy mix throughout the outlook period, accounting for a 27 per cent share in 2045.
- Natural gas will be the fastest-growing fossil fuel between 2019 and 2045 and, after oil, will remain the second-largest contributor to the energy mix in 2045 at 25 per cent.
- 'Other renewables' — combining mainly solar, wind and geothermal energy — will grow by 6.6 per cent pa on average, significantly faster than any other source of energy.
- Assuming that the COVID-19 pandemic is largely contained by next year, oil demand is expected to partly recover in 2021 and healthy demand growth rates are foreseen over the medium-term horizon.
- Globally, oil demand is projected to increase from nearly 100m b/d in 2019 to around 109m b/d in 2045.
- In OECD countries, oil demand is expected to plateau at around 47m b/d during the period 2022–25 before starting a longer-term decline towards 35m b/d by 2045.
- In contrast, demand in non-OECD countries is projected to rise by 22.5m b/d over the forecast period, from nearly 52m b/d in 2019 to 74m b/d in 2045.
- India is expected to be the largest contributor to incremental demand, adding around 6.3m b/d between 2019 and 2045.
- Oil demand in road transportation will continue to dominate the sectoral breakdown, but the largest growth will come from petrochemicals.
- Oil demand in the aviation sector was most affected by COVID-19 restrictions in relative terms, but is projected to partly recover in 2021 and will continue growing thereafter.
- US tight oil is expected to recover quickly as market conditions improve, but is not likely to reach heights projected in previous Outlooks.
- Looking further ahead, non-OPEC supply will decline after US tight oil peaks around 2030, while OPEC liquids will fill the gap, rising by around 10m b/d to 44m b/d by 2045.
- The downstream has come under enormous pressure due to declining demand. This will likely force a wave of refinery closures, especially as new capacity comes online in the Asia-Pacific and Middle East & Africa regions.
- The global oil sector will need cumulative investment of \$12.6 trillion in the upstream, midstream and downstream through to 2045.
- Traded volumes of oil are expected to grow only modestly in the long-term, in line with supply patterns. However, the Middle East's share of global crude and condensate trade will rise robustly during the second part of the forecast period.
- Crude and condensate flows between the Middle East and Asia-Pacific remain the most important oil trade link, with volumes increasing from around 15m b/d in 2019 to nearly 20m b/d in 2045.
- The Asia-Pacific region is forecast to remain the most important crude oil importing region throughout the forecast period, with imports rising by more than 6m b/d.
- Technological advancements are set to shape the global energy landscape, while public policies relating to energy demand and supply are expected to become more stringent over the forecast period.
- Enhanced global collaboration is vital to address the challenge of climate change.
- International cooperation could allow a more coherent, balanced and integrated approach for realizing the Paris Agreement goals and interlinked sustainable development aspirations.



**Available
online now:**



woo.opec.org

**Download
the app:**



Android/iOS

In memoriam:

Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah

HH Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah dedicated his life to the State of Kuwait for many decades as Foreign Minister, Prime Minister and since January 2006, as the Emir. He was a skilled bridge builder and mediator in helping solve many regional and international disputes, a humanitarian, and a strong supporter of OPEC, including most recently through the ‘Declaration of Cooperation’ (DoC) and the ‘Charter of Cooperation’ (CoC).

“With great sadness and sorrow, we mourn ... the death of Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, Emir of the State of Kuwait,” said Sheikh Ali Jarrah Al-Sabah, the Minister in charge of Royal Affairs, in a Kuwaiti television broadcast, on September 29. A voice of wisdom and sagacity, a leader that valued discretion and moderation, a wise counsel, a giant of Arab diplomacy, were just some of the many respectful comments that flooded in as the world learnt that Sheikh Sabah had sadly passed away, aged 91.

Mohammad Sanusi Barkindo, OPEC Secretary General, said this was a very personal loss, and recalled fondly his meetings with Sheikh Sabah over the last four years since his assumption of the office as OPEC Secretary General. “He was always generous with his time, and allowed me to drink from his fountain of wisdom and rich reservoir of knowledge. He was the epitome of humility and a strong defender of OPEC.”

In a letter of condolence to Dr Khaled A Al-Fadhel, Kuwait’s Minister of Oil, Chairman of the Board — Kuwait Petroleum Corporation (KPC), Barkindo also recalled Sheikh Sabah’s sage advice to him at the height of the

oil market crisis in 2016 that “oil as an energy resource must be depoliticized and OPEC must be insulated from geopolitics.” He added that it is a line that still resonates.

Barkindo said Sheikh Sabah’s high-level support for bringing nations together, along with his unwavering dedication to the goals of the Organization, its Member Countries and the industry as a whole were instrumental in achieving the essential consensus required for the Vienna Agreement on November 30, 2016, that paved the way for the historic DoC signed on December 10, 2016.

The OPEC Secretariat also held a gathering at its headquarters to offer condolences, which was attended by the Secretary General, as well as Kuwaiti officers and other staff from the Secretariat.

A distinguished life; a much-respected leader

Sheikh Sabah’s life bridged two very different Kuwaits. Born on June 16, 1929, Kuwait had for many decades thrived on the back of the country’s pearl diving industry,

Right: HH Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, the Emir of the State of Kuwait.



Reuters



HH Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah (c), the Emir of the State of Kuwait met with Mohammad Sanusi Barkindo (fourth l), OPEC Secretary General, in 2016 and 2017.



Her Majesty Britain's Queen Elizabeth II (l), talks to the Emir of Kuwait, Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, after he arrived at Windsor Castle at the start of a state visit, in Windsor, southern England, in November 2012.



The Custodian of the two Holy Mosques, Saudi Arabia's King Salman Bin Abdulaziz Al-Saud, stands with the Emir of Kuwait, Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, during a group photo with Arab leaders in 2019.



Kuwait's delegation at the 178th Meeting of the OPEC Conference in Vienna, Austria, in March 2020: Dr Khaled A Al-Fadhel (c), Kuwait's Minister of Oil, Chairman of the Board — Kuwait Petroleum Corporation (KPC); Sadiq Marafi (r), Kuwait's Ambassador to Austria; and Haitham Al-Ghais (l), Kuwait's Governor for OPEC.



HH Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah (r), the Emir of the State of Kuwait, with Mohammad Sanusi Barkindo (l), OPEC Secretary General, during a visit to Kuwait in 2018.

but in the 1930s the industry would be devastated and collapse following the invention of cultured pearls by the Japanese. Within a decade, however, Kuwait would strike oil and become a country with one of the world's largest known oil reserves.

Sheikh Sabah became Kuwait's Foreign Minister in 1963 and would remain in that position for four decades, before becoming the country's Prime Minister in 2003 and then the Emir in 2006. He is oft regarded as the figure most associated with modern Kuwait, which gained independence from Great Britain in 1961.

He channeled great energies into developing the State of Kuwait, supporting and encouraging its people, and his decades of experience imbued him with a great sense of understanding and balance. This was particularly true in international affairs. Known as the 'Wise Man of the Region', Sheikh Sabah cultivated an aura of neutrality to position Kuwait as a reliable intermediary in some of the region's and the world's most intractable

disputes. He was a bridge builder and a mediator; a person other people looked to when challenges arose.

This included Kuwait's reconciliation with Iraq, after the latter invaded Kuwait in 1990. He visited Iraq on a number of occasions and hosted a summit in 2018 that saw billions pledged to help rebuild Iraq after the war against the Islamic State.

Sheikh Sabah was also renowned for his humanitarian work, which received recognition from such global leaders as former US President Jimmy Carter, former United Nations (UN) Secretary-General, Ban Ki-moon, and current UN Secretary-General, Antonio Guterres. Carter once said of HH Sheikh Sabah: "His support of disaster relief, peace efforts and advancing public health are an inspiration. Other world leaders can learn from the wise example set by my friend, His Highness the Emir."

Global recollections

The high regard Sheikh Sabah was held in was reflected in the respects paid by world leaders. These included:

A statement from the Saudi Royal Court, which said the leader passed away leaving behind "a procession full of achievements and endeavours exerted to best serve his country, the Arab, as well as the Islamic nations and the entire humanity.

"His historical policies in the service of his country and his nation and humanity will remain eternal in the memory of generations," said Sheikh Mohammed bin Zayed, the Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces.

Queen Elizabeth II said: "He will be long remembered by all who work for regional stability, understanding between nations and between faiths, and for the humanitarian cause."

The Arab and Muslim world and the international community lost a great leader; a true giant. ❁



Anas Khaled Al-Saleh, Deputy Prime Minister and Minister of Interior, and former Minister of Finance and Minister of Oil, Kuwait.



Sheikh Nawaf Al-Ahmad Al-Jaber Al-Sabah: New Emir of Kuwait

Following the unfortunate passing of Kuwait's Emir and pillar of wisdom, Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah in September 2020, the OPEC Founder Member elected Sheikh Nawaf Al-Ahmad Al-Jaber Al-Sabah to become the country's new Emir and continue Kuwait's remarkable march to prosperity that his able predecessor led. The OPEC Bulletin's Ayman Almusallam investigates the life of an established, wise leader and the new Emir of Kuwait.

Sheikh Nawaf Al-Ahmad Al-Jaber Al-Sabah, whose distinguished career spans over many decades of public service and dedication to his home country, was born on June 25, 1937, in the Al-Shoyoukh District of Kuwait City, the capital of the State of Kuwait.

He is the sixth son of Kuwait's 10th ruler, the late Sheikh Ahmed Al-Jaber Al-Mubarak Al-Sabah.

Kuwait's new Emir, Sheikh Nawaf Al-Ahmad Al-Jaber Al-Sabah, gestures as he takes the oath of office at the parliament in Kuwait City, Kuwait, on September 30, 2020.

Successful career

Sheikh Nawaf started his career in politics on February 12, 1962, when he became the Governor of Hawalli region.

During his reign, the governorate transformed from a small village into an urban and metropolitan centre, featuring residential and commercial activities. The impact of the successful urbanization plans gradually became apparent, as more modern buildings were constructed across the area. Sheikh Nawaf also recognized the significance of security and safety to achieve stability and prosperity.

In March 1978, he was appointed Kuwait's Minister of Interior. In this position, Sheikh Nawaf spared no effort to preserve security and maintain stability of the Kuwaiti nation. He also endeavoured to safeguard freedom and security of all citizens.

After the Ministry of Interior achieved unprecedented success, he became the country's Minister of Defense in January 1988.

During this period, Sheikh Nawaf focused on further developing the Ministry's forces at both the military and civil levels. He also invested in improving camps, equipment, and weaponry to enable them to perform any national duty to the best of their ability, in order to protect the nation.

He recognized the positive effect of international scholarships in helping the Kuwaiti Army and the Ministry's personnel to acquire additional, valuable training and skills.

In April 1991, Sheikh Nawaf was tasked to head the Ministry of Social Affairs and Labour after a period of turmoil and instability. Through numerous resolutions, this period saw remarkable improvements in the condition of Kuwaiti society and labour, along with the circumstances of widows, orphans and the elderly.

Upon his election, he stated: "I am a soldier who accepts work in any location assigned to me by His Highness the Emir."

Sheikh Nawaf was then appointed as the Deputy Chief of the National Guard in October 1994.

During his nine-year tenure, he left a distinctive mark on the development of the National Guard's organizational affairs, with the aim of transforming the military body to reach the highest global standards. He invested extensively in expanding its military system.

Sheikh Nawaf additionally fashioned a thorough development plan for the critical military body, based



Anas Khaled Al-Saleh (above), Deputy Prime Minister and Minister of Interior, Kuwait; and Dr Khaled Al-Fadhel (above l), Kuwait's Minister of Oil, Chairman of the Board — Kuwait Petroleum Corporation (KPC).

on several pillars: human development, training and scientific education in the military and technical spheres, and the improvement of individual conditions, including health and morale. He sustained his initiative to send Kuwaitis abroad to obtain advanced education.

Distinguished leader and statesman

Sheikh Nawaf continued to serve his home country with utmost commitment and dedication throughout his distinguished career. He was next appointed Kuwait's First Deputy Prime Minister and Minister of Interior in July 2003.

His efforts to further develop and modernize the Ministry of Interior continued, for which many refer to him as its true founder. His second term in the Ministry lasted until February 2006, when he became Kuwait's Crown Prince, after receiving full popular, parliamentary and political consensus.

In 2020, Sheikh Nawaf became the Emir of the State of Kuwait during a period of turbulence in the world economy and the oil sector caused by the devastating effects of the COVID-19 pandemic, following the tragic death of his predecessor Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah.

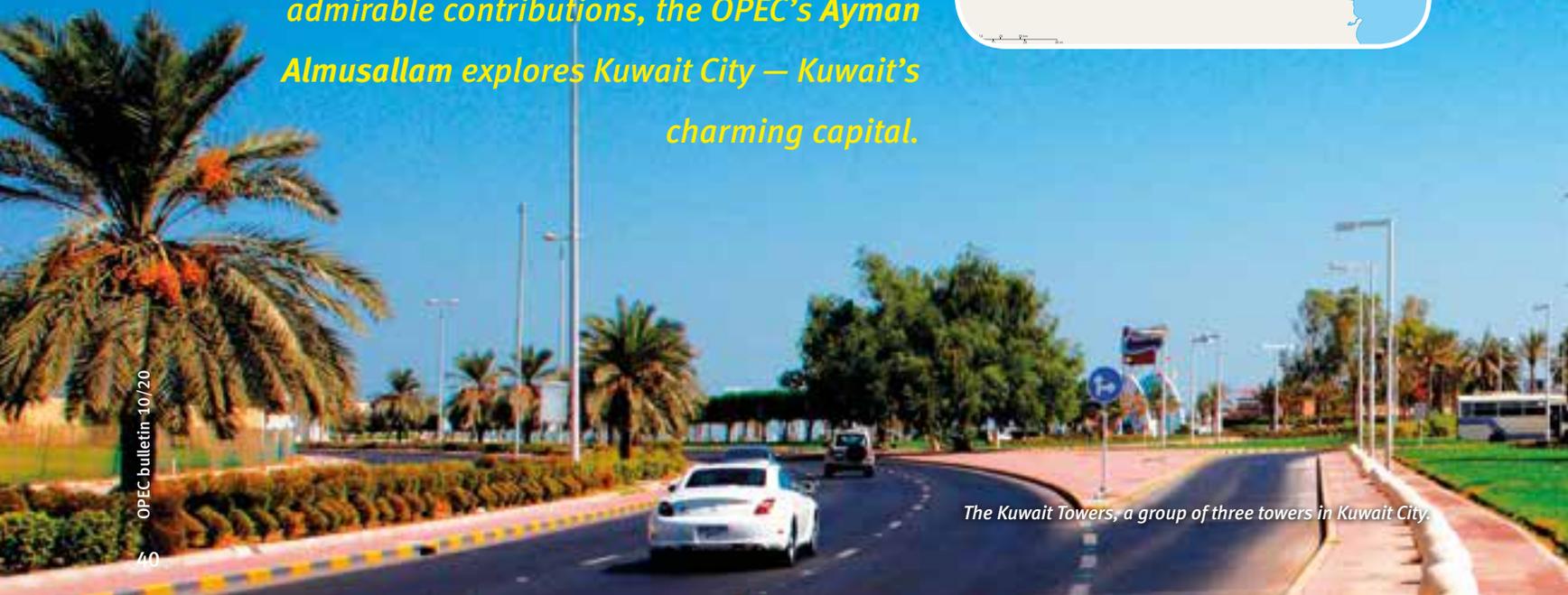
His many decades of remarkable service in various domains helped OPEC Founder Member Kuwait thrive and propel forward to excellence, and have with no doubt equipped the new Emir with a unique set of skills and leadership style that will help him in overcoming this difficult time and continue Kuwait's march to prosperity.



Kuwait City:

Testament to modernity
and rich history

With sorrow, OPEC bid farewell to an exemplary leader, distinguished diplomat, and iconic member of its family. Throughout his distinctive life, Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, Emir of Kuwait, bigheartedly contributed to the greater good of his home country and the Organization. In appreciation of the Emir's valuable and admirable contributions, the OPEC's Ayman Almusallam explores Kuwait City — Kuwait's charming capital.



The Kuwait Towers, a group of three towers in Kuwait City.



All images in this feature courtesy Shutterstock.



HH Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, Emir of the State of Kuwait, who passed away in September.

Overlooking the sparkling, blue waters of the Gulf, Kuwait City is the country's exquisite capital and largest city. The city is the seat of government and headquarters of the Emirate. It also hosts the Residence and Office of the Emir of Kuwait, the headquarters of the National Assembly and the Kuwait Stock Exchange, in addition to a large number of state offices, private companies and bank headquarters. Without any doubt, it is the country's key political and economic centre.

The history of Kuwait City dates back to 1613, when the foundations of a modern city were laid. A century later, specifically in 1716, the small town began to attract new inhabitants, fishermen in particular. This soon led to rapid development of the fishing industry, turning the city into a fishing hub.

In the 18th century, Kuwait City witnessed notable growth in trade, as it became a key commercial centre for transporting goods between major trading posts, such as Iraq, India and Oman. The development of the trading industry had a transformative impact, bringing new-found prosperity to Kuwait.

The country's strategic location allowed it to further expand its regional economy and importance, as it developed into a producer of ships and vessels. Kuwait City soon became renowned in the region for the quality of its shipbuilding. The country also enjoyed a strong pearl diving and trading tradition — another source of economic growth.

Following the discovery of oil, Kuwait underwent a unique period of development in the 1900s. This prosperous era brought with it significant enhancement to the quality of life for Kuwaitis, and attracted regional and international expats, who staffed the rapidly expanding fossil fuel sector.

In 1961, Kuwait gained its independence and became a sovereign state. Ever since, Kuwait City has enjoyed a steady path to prosperity and advancement under the guidance of its capable leaders.

Since its earliest days, the State of Kuwait has played a key role in regional and international fora, and actively contributed to the affairs of many international organizations, including the United Nations, the Arab League, the OPEC Fund for International Development



Kuwait City soon became renowned in the region for the quality of its shipbuilding.



Anas Khaled Al Saleh, Kuwait's Deputy Prime Minister and Minister of Oil from 2015–16.



Issam Abdulmohsen Almarzooq, Kuwait's Minister of Oil from 2016–17.



Bakheet S Al-Rashidi, Kuwait's Minister of Oil from 2017–18.



Dr Khaled A Al-Fadhel, Kuwait's Minister of Oil from 2019–date.

(OPEC Fund) and the Cooperation Council for the Arab States of the Gulf.

Kuwait is also a Founding Member of the Organization of the Petroleum Exporting Countries (OPEC), attending its first Conference in 1960 in the Iraqi capital of Baghdad. Since then, Kuwait has continued to play an active and influential role in the Organization, providing distinctive and competent leadership and contributing extensive technical knowledge and industry expertise.

Geography and climate

The pristine capital city of Kuwait is located on Kuwait Bay, with a maximum altitude of 306 metres above sea level.

The country has nine islands, the largest of which is Bubiyan, an uninhabited body that can only be reached by bridge. The only populated island is Failaka, which is 20 kilometres away from the capital.

The subtropical desert climate is hot and arid, with temperatures often exceeding 45°C in summer and dropping to around 30°C at night. Winters are generally mild, but temperatures can drop to as low as 8°C.

Sand storms occasionally occur during the summer season.

Economy and the oil industry

Considering its geographical location, fishing, pearling and vessel building played critical roles in the development of Kuwait's economy during its early days. However, the discovery of oil in 1937 transformed the country's economy, propelling it to new heights of prosperity and expansion that it continues to enjoy today.

The currency of Kuwait is the Kuwaiti dinar, the world's highest-valued currency. The country is also home to a prominent stock exchange in the Arab World — the Kuwait Stock Exchange.

In addition to oil, which is a major contributor to Kuwait's economy, tourism, fertilizer production and trading are some of the most dynamic industries in Kuwait.

According to OPEC's *Annual Statistical Bulletin*, Kuwait possesses an impressive 101.50 billion barrels of proven crude oil reserves. It produces 2.68 million barrels/day (mb/d).

The OPEC Member also produces natural gas (marketed production of natural gas) at a rate of 13.95bn standard cu m, while its proven reserves reach 1,780bn standard cu m.

Kuwait's national oil company — Kuwait Petroleum Corporation (KPC) — is headquartered in Kuwait City. It oversees all activities related to the petroleum sector, including exploration, extraction,





The Seif Palace, located opposite of the city's Grand Mosque, is one of the capital's most unique and historically relevant landmarks.

refining, production, marketing and transportation. Its current CEO is Hashem Hashem, who also serves as Deputy Chairman of its Board of Directors.

Key attractions

Visiting Kuwait City provides local, national and international tourists with a taste of what the city has accomplished over the years. Below are two exceptional landmarks that serve as a testament to these achievements.

Kuwait Towers

The well-known towers of Kuwait are a set of three slender towers that collectively form a crucial part of Kuwait's water system — they are solely used to store water and water-related equipment.

The water system consists of 34 active towers. The latest addition was inaugurated in 1979. They are considered to be a key attraction and an icon of prosperity.

In 2016, the towers were re-opened with great fanfare at a ceremony featuring massive fireworks. The event celebrated the completion of maintenance work that lasted four years.

The height of the main tower is estimated at 187 metres, and it

accommodates two spheres, the lower of which is a water tank with a storage capacity of 4,500 cubic metres, while the second hosts a restaurant that can accommodate a maximum of 90 guests, a café, a lounge and a reception hall.

The main tower served as a venue for TEDx gatherings held in Kuwait City in 2018 and 2019.

Seif Palace

Located opposite the city's Grand Mosque, the magnificent Seif Palace is one of the capital's most unique and historically relevant landmarks. The royal family occasionally holds special events or celebrations in this classical edifice.

Built in 1896 by Sheikh Mubarak, the massive palace, spread out over an area of 450,000 square metres, is a fine example of Islamic architecture and features exquisite mosaic tile works, an ornate tower covered in blue tile and a roof plated with pure gold.

Sheikh Mubarak hosted a variety of esteemed guests in the palace during his reign.

The palace was damaged during the war between 1990 and 1991. However, after its end the government of Kuwait reacted quickly to initiate reconstruction to maintain the iconic landmark.





Kuwait Stock Exchange in Kuwait City.

Kuwait: land of exemplary leaders and bridge builders

The Organization of the Petroleum Exporting Countries commemorates its 60th Anniversary this year, a key milestone in the Organization’s history. Throughout its six decades of existence, the Organization has managed to overcome difficulties and political differences in the interest of maintaining stability in the global oil market.

Kuwait, an OPEC Founder Member and strong advocate of the Organization, has consistently demonstrated its commitment to the mission and key principles of OPEC, particularly dialogue and cooperation.

The leaders of this Gulf nation continue to lead by example, using their wisdom to build bridges among stakeholders. This pivotal role has prevailed during difficult times in the history of OPEC and the oil sector.

The late Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah encapsulated these noble principles. He helped with his boundless sagacity to break an impasse in 2016 that led to

the birth of the historic ‘Declaration of Cooperation’ (DoC), signed on December 10, 2016, for example.

The Gulf state may be small in size, but its actions leave their mark and carry significant weight. It is thus no surprise that the 24 signatories of the DOC unanimously entrusted Kuwait with the responsibility of presiding over the Joint Ministerial Monitoring Committee in its first year.

In April 2018, OPEC Secretary General, Mohammad Sanusi Barkindo, delivered a keynote address at the 5th Kuwait Oil and Gas Show, where he recognized the leadership and wisdom of the late Emir of Kuwait, saying: “I would like to thank the esteemed Emir, His Highness Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah for his personal and active engagement in the DoC, not only in reaching out to other Heads of State during the initial consultations, but in the implementation process too. His exemplary leadership and unparalleled wise guidance have been a key part of the success we have achieved.”





The OPEC Secretariat, led by Mohammad Sanusi Barkindo, OPEC Secretary General, participated in the 104th Meeting of Ministers and Governors of the G24.

OPEC attends the G24 Meeting of Ministers and Governors

Amid the global COVID-19 pandemic and rising rate of daily infections, the G24 held its 104th Meeting of Ministers and Governors virtually on October 13, 2020. The OPEC Secretariat attended the meeting as an observer. The OPEC Bulletin's Ayman Almusallam reports on the meeting.

Since the outbreak of the devastating coronavirus at the beginning of this year, OPEC has boundlessly endeavoured to extend its outreach activities far and wide. Cooperation and dialogue, the main instruments in achieving the Organization's objectives, have been more than ever at the very forefront of OPEC's agenda.

In this spirit, the OPEC Secretariat, led by OPEC Secretary General, Mohammad Sanusi Barkindo, participated in the 104th Meeting of Ministers and Governors of the Group of Twenty Four (G24) held on October 13, 2020, via videoconference.

The meeting, which focused on COVID-19 and its associated human and economic tragedy, saw OPEC provide a thorough update on current oil market conditions and developments to distinguished delegates and dignitaries from the International Monetary and Finance Committee (IMFC).

Cooperation is key

In his remarks, the Secretary General highlighted the impact of the COVID-19 pandemic and the associated devastating ramifications on the global economy and

the oil sector, noting that emerging and developing countries alike have faced these unfortunate consequences.

“Crude oil exporters, in particular, are facing a dual crisis of the pandemic itself and the implications of a historic demand shock in the oil market, which has led to extreme volatility,” he added.

The virus’s worldwide outbreak led to domestic and international travel restrictions, social-distancing measures, and entire country lockdowns. These measures, which were recommended to contain the spread of the pandemic, have caused a severe contraction in economic growth and oil demand.

Global oil market

On the global oil market, the Secretary General emphasized that fundamentals reached an unprecedented state of imbalance in the first half of the year as a result of the pandemic, particularly during ‘Black April’. Concerns over a possible increase in global oil stocks emerged, as demand witnessed an unprecedented freefall.

The Secretary General commended the various measures undertaken to ease the effect of the pandemic, noting: “After a sharp contraction of the global economy in the first half of the year, unprecedented monetary and fiscal measures across the globe have helped to support a recovery in the second half that is forecast to carry over into 2021.”

In this context, Barkindo lauded the decisive and timely decisions taken by OPEC Member Countries and ‘Declaration of Cooperation’ (DoC) participants, who have provided an indispensable and stable platform for cooperation.

“OPEC and non-OPEC partners have worked through the DoC to support the global economy at our April and June Ministerial Meetings, by agreeing on the largest and longest voluntary adjustments in recent oil production history. The fact that these

adjustments are scheduled until well into April 2022 is a sign of the commitment, motivation and dedication of OPEC and our partners, not only in attending to the short term, but in focusing on the medium and long term, too,” he added.

Global oil market conditions are expected to recover further in the fourth quarter of this year and into 2021. Nevertheless, uncertainty remains high, as the global number of infections continues to rise.

Stability for the benefit of all

The Secretary General continued to highlight the vital benefits yielded through the historic DoC, noting that it provides a platform for stable and sustainable growth in the future, along with numerous constructive implications for the global economy.

He added that these noble efforts were recognized at the highest levels, including by the G20 countries.

Barkindo said that global economic growth is forecast to decline by 4.1 per cent in 2020, according to the OPEC Secretariat’s calculation, noting that it is expected to grow by 4.6 per cent in 2021.

World oil demand is projected to contract by a very significant 9.5 million barrels/day in 2020, the bulk of which has already taken place in the first half of the year, he added. Oil demand growth is expected to recover by 6.5m b/d in 2021.

The Secretary General reiterated the prevailing risks and uncertainties caused by the pandemic, noting that forecasts are sensitive to developments related to COVID-19.

The Secretary General concluded his remarks by reaffirming OPEC’s long-standing commitment to support sustainable stability in the global oil market in the interest of oil producers and consumers, as well as the global economy at large, adding that, amidst the unprecedented crisis, OPEC Member Countries and DoC participants have once again demonstrated their unwavering commitment to oil market stability.

Group of Twenty-Four

The G24 is an intergovernmental group that coordinates the position of developing countries on monetary and developmental issues. The organization was established in 1971 by the Group of Seventy-Seven (G77).

The organization works closely with the International Monetary and Financial Committee (IMFC) and the Development Committee (DC), as well as in other relevant international fora.

According to its website, the G24 focuses on the following objectives: reviewing the course of the international monetary situation; evaluating events in the monetary field, as well as

any decisions that might be taken by a single country or group of countries within the framework of the International Monetary Fund (IMF); and making recommendations within the field of its competence to the governments of G77 coordinated positions.

The Third Ministerial Meeting of the G77, which was held in 1976, recommended further expanding the G24 to include issues related to development.

The G24 Secretariat is a permanent body that provides administrative support to the organization. It is located at the IMF Headquarters in Washington DC, USA.





The closing remarks of the 20th MDTC, were held by Mohammad Sanusi Barkindo, OPEC Secretary General.

MDTC held via webinar for the first time

This year OPEC's Multi-Disciplinary Training Course celebrated its 20th anniversary with an unusual arrangement this year. First meant to be held earlier in 2020, the meeting — a much-anticipated event in OPEC Member Country energy calendars — was shifted due to the COVID-19 pandemic to October 6–8.

Normally five days long, this year an abridged event was held over two days via Webex, ending for the first time with the launch of a premiere OPEC document, the *World Oil Outlook 2020*.

The participants were welcomed to this year's MDTC by Dr Ayed Al-Qahtani, Director of the Research Division.

He stated in his opening remarks: "We are especially pleased to be able to hold the course this year, in light of the COVID-19 pandemic."

While recognizing that personal interaction would be somewhat limited due to the circumstances, he expressed his hope that participants

would be able to take away more than just information and knowledge.

"Even from a distance, we hope to provide the opportunity to meet professionals in your field from other Member Countries and OPEC, expand your networks and open doors. Many past and present staff at OPEC attended the MDTC at one time or another."

Qahtani added that this is a special anniversary for the MDTC, being its 20th edition, adding that since 1999 "the child has grown into a competent adult."

"The MDTC began 20 years ago with the aim of informing Member Country professionals about OPEC and its role in keeping the oil market stable and well-supplied, in an inter-disciplinary setting. We'd like to believe that these objectives are being achieved and that the diverse mix of culture, knowledge and experience that participants bring to the table has been beneficial to all, as we hope it will also be to you."



Speakers at the 20th MDTC (l-r): Shakir A Alrifaiy, Head, Secretary General's Office; Jose Luis Mora, Head, Finance & Human Resources Department; Dr Ayed Al-Qahtani, Director, Research Division; and Leonardo Sempértgui, General Legal Counsel.

He added that indeed, this year marks another celebration for OPEC — it's 60th anniversary, a remarkable milestone. Qahtani said it is amazing to look back and see how much has been accomplished over this time in OPEC Member Countries.

Feasts and famines

“We have seen an industry that went from being controlled by the ‘Seven Sisters’ from whom oil producers got a pittance for their black gold, to the world today, where national oil companies are as sophisticated and powerful as international oil companies. There have been feasts and famines. OPEC has survived — and even thrived — through six dramatic oil cycles. We are now working through the seventh and most challenging, due to the dramatic effects of COVID-19 on oil demand.”

He stated that the dedication and cooperation built up over the years, most recently in the form of the ‘Declaration of Cooperation’ (DoC) in 2016 and the ‘Charter of Cooperation’ in 2019, has brought much more than stability to the international oil market.

“It has created friendships between producing countries and a platform for quick action when needed. We have seen this kick into action in spectacular fashion since the coronavirus struck our industry and the world at

the end of the first quarter of this year. Through our dedicated and determined partners, we managed to spare the oil industry a total breakdown. Now, many months later, we are continuing our hard work and meeting often to ensure our progress endures until this scourge confronting humanity finally abates.”

The DoC has become a fixed element on the international energy scene and has led to an overall more positive future outlook for both the industry and the world economy, he continued.

It is not possible to go it alone anymore, given the complexity of the market and increasing interdependence. OPEC has been instrumental in spearheading cooperative efforts through various dialogues with many partners. This has grown significantly over the past few decades.

“Some of the biggest themes facing the industry today, including climate change and the energy transition, will be challenging, but may also provide great opportunities,” he added.

Oil will continue to play a major role in meeting future energy demand, and energy demand will continue to rise up until 2040. “I want to confirm to you that oil is not going anywhere,” stated Qahtani.

He closed by wishing all of the participants a successful MDTC. 

Second annual legal workshop examines the law of the energy transition

The OPEC Secretariat held the second annual OPEC–Energy Charter Secretariat (ECS)–OPEC Fund for International Development legal workshop on October 13 under the theme ‘The law of the energy transition’, via videoconference. By Maureen MacNeill.



Mohammad Sanusi Barkindo, OPEC Secretary General, opening the workshop.

The workshop is the outcome of constructive cooperation between OPEC, the Energy Charter Secretariat, and the OPEC Fund. In its second instalment, the workshop served as a platform to discuss and exchange information on important and timely issues, building on the success of last year’s inaugural meeting. The sessions discussed the laws around the energy transition, in order to try and provide guidance at this crucial time.

The line-up of high-level speakers stemmed from multiple stakeholders, including oil companies, service companies, international lawyers and project advisors, international organizations and officers from oil producing countries. The audience consisted of esteemed policymakers and lawyers from ‘Declaration of Cooperation’ (DoC) member countries, from the industry and from government institutions.

Issues wide-ranging and variable

In his remarks, OPEC Secretary General, Mohammad Sanusi Barkindo, highlighted the importance of organizing this workshop in today’s times, noting: “The legal issues surrounding the energy world are wide-ranging and variable, particularly in the midst of the ‘energy transition’.”

The Secretary General added: “The legal landscape can present significant challenges. We are building a new edifice, and the foundation must be solid before the walls are put up. A successful transition requires clear regulatory frameworks, as well as ambitious efforts by all stakeholders.

“For no one to be left behind in the energy transition, we will need as an entire global society to create fair laws and regulations, which ensure access to energy and modern development for all. As a cross-cutting goal supporting all the other Sustainable Development Goals, SDG 7 on energy should be carefully and entirely considered in this regard,” Barkindo said.

OPEC Member Countries have been supportive of climate change talks from their very inception and continue to take part in ongoing discussions. Oil-producing, developing countries face a double whammy, not only often being severely affected by climate change itself, but also by policies undertaken to mitigate its effects that target the oil industry, he added.

“The energy transition is characterized by uncertainty and rapid change, thus it is essential to shed some light on the regulatory framework and its potential evolution, in order to provide guidance in these times of transformation.”

In underlining the risk facing future energy security,



The second annual OPEC–Energy Charter Secretariat (ECS)–OPEC Fund for International Development legal workshop in progress.



Workshop participants attending the videoconference.

the Secretary General said: “Research shows that oil has an essential role to play in the energy landscape for decades to come. However, a lack of investment in our industry may pose a threat to future energy security.”

Partners play key role

The Secretary General thanked Dr Urban Rusnák, Secretary General of the Energy Charter Secretariat, and Dr Abdulhamid Alkhalifa, Director-General of the OPEC Fund for International Development for their key role in setting up the second instalment of this profound and educational workshop.

The goal of the forum was to provide legal professionals with the much-needed opportunity to connect and communicate on the challenges and opportunities at hand. Legal professionals can gain insight from sharing experience and expert input, he stated. Barkindo said the relationships formed at such meetings will become vital in the coming years, as mankind navigates itself through the myriad regulations, laws and public policy that will accompany the energy transition. It is additionally important that discussions begin to address how law can be an instrument for positive transformation in the oil and energy sector, he added.



Conclusion

Barkindo concluded his remarks by quoting famous lawyer Henry Miller, who said: “The legal system is often a mystery, and we, its priests, preside over rituals baffling to everyday citizens.”

The General Legal Counsel of OPEC stated: “Building on the spirit of collaboration that OPEC has had since its foundation 60 years ago, and which has been in full display since December 2016 with the signature of the DoC, the Legal Office is striving to provide information, analysis, knowledge, and capacity-building for our Member Countries. Thanks to the Organization’s reputation worldwide, world-class professionals are always willing to cooperate in these endeavors.”

He stated that two approaches provide the common denominator for the panels: first, issues are being analyzed from a regulatory and legal perspective, and second, given their unique position, the problems are discussed from the standpoint of resource-rich countries, whenever possible.

Based on these premises, the panels dealt with:

- The past of the energy transition: what has happened until today, discussing challenges and opportunities that resource-rich countries and oil and energy corporations have identified so far;
- The future of the energy transition. Panelists highlighted issues that they see as the most relevant in the coming years and decades, and;

- A discussion on how international organizations can better support countries in the energy transition process.

“The rule of law is a requirement for long-term, stable development of natural resources,” said the General Legal Counsel.

“That is why lawyers should not and cannot be foreign to the multiple political, economic, technological, environmental, and social challenges that are and will directly influence the evolution of the energy and oil industries.

“The knowledge of law brings great power, and, therefore, even greater responsibility. Information and advice are our currency, which in turn influence decision-making. This is our legacy. We should use this capacity wisely and effectively.”

Continuous dialogue

OPEC has been hosting myriad meetings via webinar since the outbreak of COVID-19. Exchanges have included intensified meetings between DoC partners, as well as with various outside institutions and dialogue allies. Through these interchanges, the basic ability of the Organization to react to these and other difficult situations can be strengthened.

The First OPEC-ECS-OPEC Fund Annual Legal Workshop was held in October 2019, with a goal to continue hosting the workshop on regular basis.

Mohammad Sanusi Barkindo (c), OPEC Secretary General, opening the workshop; with Leonardo Sempertegui (l), OPEC’s General Legal Counsel; and Dr Ayed S Al-Qahtani (r), Director, Research Division.

OPEC holds a technical workshop on climate response measures

The OPEC Secretariat held the ‘3rd Technical Workshop on Climate Change: the impacts of the implementation of climate response measures’ on September 29, as a key issue related to mitigation action with far-reaching effects. The following day the 18th Coordination Meeting on Climate Change was held to discuss issues facing oil-producing, developing countries and recent developments in UN climate processes. Maureen MacNeill covered the meeting.

The workshop — the third in a series on climate-related issues — was held via videoconference and attracted a number of speakers and participants from OPEC Member Countries, non-OPEC oil producing countries participating in the ‘Declaration of Cooperation’ (DoC), and international industry experts.

The objective of the Technical Workshop was to provide a conducive platform for discussion on 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.

Parties to the Paris Agreement recognise that they may be affected not only by climate change, but also by the impacts of the measures taken in response to it. The intrinsic relationship that climate change actions and response measures have with equitable access to

sustainable development and the eradication of poverty means that the concerns of Parties with economies most affected by the impacts of response measures, particularly developing countries, should receive special consideration.

In this context, the progression of Parties’ nationally determined contributions (NDCs) towards the ultimate temperature target of the Paris Agreement is likely to lead to increasingly enhanced mitigation actions that could have important implications for the economies of developing countries and their sustainable development, particularly in the post-pandemic era.

Opening remarks

OPEC Secretary General, Mohammad Sanusi Barkindo, opened the virtual meeting by highlighting the importance and timeliness of holding a workshop of this focus,



adding, “the world is facing two global crises: COVID-19 and climate change.”

The Secretary General added that OPEC saw the need for this meeting, as countries that are determined to recover from the impact of the pandemic aim to attain sustainable and resilient economies, while addressing climate change issues.

“OPEC has been involved in the crucial discussion around response measures for many years, including in the UNFCCC and the Paris Agreement,” Barkindo said, noting that climate change actions will impact future energy demand and the energy mix, which will in turn affect energy-exporting developing countries.

He underscored that OPEC Member Countries are advocates of environmental and climate change issues, adding that they continuously attempt to identify ways to mitigate climate change and its impact, including through economic diversification.

Barkindo next reiterated OPEC’s involvement in the UN climate change talks on matters related to response measures and how the Organization’s concerns have been reflected. This includes establishment of the Forum on the Impact of the Implementation of Response Measures, and the Katowice Committee of Experts, or KCI, which supports the Forum’s work. He said he is honoured that many of today’s speakers are present or former members of the KCI Committee.

He added the year 2020 also has special significance, as it marks the fifth anniversary of the Paris Agreement, which was adopted in December 2015 at COP21. Although a lot of progress has been made since then, many critical issues remain unresolved, which must be cleared up in order for the Agreement to become fully operational.

Barkindo said that climate-change actions and COVID-19 recovery plans will affect future energy demand and the energy mix. They are thus expected to have adverse impacts on developing countries with natural-resource based economies. He added that as developing, energy-exporting countries, OPEC Member Countries and DoC participants should consider the issue of adverse impacts of response measures to be of high importance. The chairperson added it is evident that all need to work together to reach a fair and equitable sustainable environment in which no one is left behind. He also stressed that the importance of response measures is illustrated even more evidently now than ever before. Developing countries have committed to mitigating and adapting to climate change, while reaching the overall objectives of the sustainable development goals (SDGs). In order to ensure sustainable development, it was stated that response measures have been recognised in the Convention, the Kyoto Protocol and the Paris Agreement as a key priority for all developing countries.

The 3rd Technical Workshop on Climate Change: the impacts of the implementation of climate response measures, was opened by Mohammad Sanusi Barkindo (c), OPEC Secretary General. In attendance are Dr Ayed S Al-Qahtani (l), Director, Research Division; and Mohammad Ali Zarie Zare (r), Environmental Coordinator of the Environmental Matters Unit.



Participants of the 3rd Technical Workshop on Climate Change.

A speaker discussed the existing mechanisms under the Convention on issues related to climate response measures, referring to the established Forum and the KCI. The six-year work plan of the Forum and its KCI was presented. It aims to identify approaches to address climate change, while minimizing the adverse impacts of response measures and maximizing positive impacts. The development of methodologies to assess these impacts, as well as the enhancement of developing countries' capacity for them to take action and request the support needed to address climate change are also core activities of the KCI. It was stressed that more information is needed on the methodologies and tools used to assess these impacts, given the lack of an internationally established methodology.

The key findings of a case study were briefly presented, followed by the role of international support in order to minimize the adverse impacts of response measures. Support programmes that could lead to energy access and energy efficiency improvements were given as examples, along with programmes that support affordable energy sources. Finally, it was highlighted that trade policies could lead to avoidance of any distortion in international trade flows and support economic diversification.

Just transition of the workforce

The need to ensure a just transition for future work and contribute to sustainable development were some of the critical issues discussed during the meeting.

One speaker stated that unabated climate change could pose a risk to jobs, such as severe job losses, damage to business assets, productivity problems, occupational health and safety issues, conflict over resources, as well as unwanted and irregular migration. On the other

hand, climate action could offer opportunities to create jobs, new enterprises, innovative 'green' products, and climate-resilient infrastructure.

It was further highlighted that zero-carbon economies could have an impact on jobs, with many sectors being affected (eg manufacturing, energy, and transport). Changes in specific sectors could vary from country to country, many new jobs could be created, and some could be lost. Recent estimations show that new jobs could be created in Asia and the Pacific, but job losses could be experienced in the Middle East.

To enable a just transition for all, a simplified model with three steps was presented, which includes an assessment of the impacts of climate response measures on the economy and society, the identification of affected sectors, and the pursuit of social dialogue engaging communities and local actors. These would be essential to identifying policies that maximize opportunities for new job creation and minimize the unavoidable loss of employment in certain sectors.

Another expert stressed that the global economy has seen a 100-fold increase since the industrial revolution, while energy consumption has increased by 50-fold and CO₂ emissions by 30-fold, which clearly indicates that energy systems have become more efficient over time. However, a major challenge — which still needs to be addressed — relates to increasing emissions, which have led to a global average temperature increase of over 1°C. The 2030 Agenda and its 17 SDGs provide a holistic and integrated approach to tackling global challenges and creating co-benefits. SDG7 (on energy access) and SDG13 (on climate action) have interlinkages with all other SDGs, said the speaker.

In light of the above, it was stressed that the 2030 Agenda should be implemented with the objective of providing basic services and decent lives for all, preventing

overconsumption. This could also assist in achievement of the global climate goals. Therefore, new values and norms should be promoted in the post-pandemic era to assist in achievement of the SDGs. The speaker added enormous opportunities exist to leapfrog regarding technological advancement.

It was further highlighted that the world is at a crossroads and the achievement of the SDGs is possible, but there is a need for holistic and integrated approaches, as well as for coordinated efforts, to realize the goals of the 2030 Agenda and achieve sustainable development. The COVID-19 pandemic is a great threat to humanity, but it could also provide opportunities for change and innovation towards the realization of sustainable development for all, while addressing climate change.

Another presentation focused on the key findings of two case studies implemented with the use of an E3 modelling tool regarding potential adverse impacts of climate response measures on energy-exporting developing countries, and the option of economic diversification to minimize these impacts.

The key findings of these quantitative analyses indicate that such impacts could be rather disruptive at the regional level, with energy-exporting developing countries expected to be disproportionately affected by climate response measures, while options such as economic diversification cannot fully offset associated losses, said the guest.

It was stressed that international support in the form of foreign investment and workforce training could lead to reduced adverse impacts of response measures on the economies of energy-exporting developing countries.

Modelling tools and methodologies for assessment

A tool that could help UNFCCC Parties assess the impacts of implementation of response measures was presented, namely the ICF 2050 Calculator. This is an interactive energy model that could be used to consider different factors, technologies and sectors of the economy in order to explore varying scenarios up to 2050 for evaluating the impacts of response measures.

Another expert stressed that most of the world's focus has been on economic diversification as an adaptation strategy for climate change and that for many this means a

smaller and less strategic role for the oil and gas sectors. However, this approach may not be realistic, as it does not consider the fact that during this transition, countries need to build on their core strengths and competitive advantages.

It was highlighted that as the energy transition could lead to structural changes in the energy market and energy mix, oil-exporting countries could face serious challenges. The most important challenge is the loss of export revenue, which could disrupt the socio-economic well-being of exporting countries, given the fact that spending by these governments relies heavily on oil income. In this uncertain environment, it is critical that oil exporting countries enhance their long-term adaptability.

So far, there have been many attempts by oil exporting countries to diversify their economies but the results have been mixed, said the speaker. Given that various factors hinder economic diversification, distancing from the oil sector is not realistic, nor an optimal solution for a number of developing oil exporting countries. It was argued that the oil sector remains very profitable compared with other industries and sectors that governments are trying to establish. Therefore, oil exporting countries

SDG 13 targets

- 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- 13.2 Integrate climate change measures into national policies, strategies and planning
- 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- 13.A Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of jointly mobilizing \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
- 13.B Promote mechanisms for raising capacity for effective climate change-related planning and management in least-developed countries and small-island developing States, including focusing on women, youth and local and marginalized communities





Participants of the 18th Coordination Meeting on Climate Change.

should pursue a conservative bet hedging strategy in addition to economic diversification. The essence is to retain the competitiveness of the energy sector and enhance its resilience against disruptions.

It was emphasised that under certain conditions, making the oil sector more resilient could be a better approach than economic diversification, which requires many resources and may not create the expected outcomes. Moreover, a country could pursue both strategies, given the need for a well-developed energy sector along with deep economic reforms.

The last presentation stressed that there is no one-size-fits-all policy or solution to addressing the impacts of response measures. This has been noted during climate change discussions and negotiations. It was stressed that in order to fully assess the impacts of response measures, there is a need to enhance the development of national tools which fully consider various economic, environmental and social structures and arrangements put in place at a national level. To have a better understanding of the impacts of response measures, it is also critical to develop international tools to assess the impacts of international policies on individual countries.

In the question and answer session which followed, emphasis was placed on the need to transfer knowledge and know-how. Participants agreed that appropriate and timely training programmes could enhance the capacity-building of developing countries on matters related to response measures. It was raised that methodologies and tools required to assess the impacts of response measures on developing countries should be made available

well before the first mandatory reporting requirements under the Paris Agreement in 2024.

Furthermore, it was stressed that the modelling tools used to assess the socio-economic impacts of response measures should be based on realistic systems with sensible parameters, and provide insight on critical elements, such as job losses.

It was also emphasised that measuring the socio-economic impacts of response measures is essential. However, different adaptation strategies should additionally be examined. Economic diversification is often considered to be a low-cost and high-benefit approach. However, evidence shows that costs associated with economic diversification are rather high and benefits may be limited, depending on national circumstances.

Concluding remarks

In his concluding remarks, the Secretary General highlighted the importance of adopting a holistic approach ensuring a fair, equitable and just transition and remaining vigilant when addressing climate change.

Barkindo stated one should not overlook the drastic impact COVID-19 has had on the acceleration of calls to introduce quicker and deeper climate change policies on a country basis. “The reality we face today is that the ‘clean energy transition’ and push for ‘green growth’ are likely going to take place at a quicker pace. This means we too have to double up on our analysis and action plans and exert even more caution.”

The industry must make clear that oil is a dependable



Dr Eleni Kaditi, Senior Research Analyst in OPEC's Environmental Matters Unit (EMU), holding a presentation at the workshop.

source of energy, said Barkindo, which can have a minimal impact on climate change given the right technology environment and policy impulses. As developing countries are dually impacted by policy measures to mitigate or manage climate change and climate change itself, countries should not forget to invoke the principles and provisions of the Convention and the Paris Agreement which relate to the special needs and circumstances of developing countries and economies affected by adverse impacts of response measures. These principles should also be emphasised as the year-end deadline approaches for the submission of new or updated nationally determined contributions (NDCs), said the Secretary General.

Additionally, he said, emissions should not be reduced in a way that will hinder energy-exporting developing countries' economic growth and sustainable development.

18th Coordination Meeting on Climate Change

The following day, the 18th Coordination Meeting on Climate Change took place. In his remarks, the OPEC Secretary General reiterated the importance of multilateral discussions and international cooperation in addressing current climate change challenges in the midst of the COVID-19 pandemic.

The Secretary General noted that with the unprecedented challenges facing us today, multilateralism could assist in identifying amicable sustainable solutions.

Barkindo said that OPEC has been facing the current challenges head-on, though the battle is far from over. He added that the success achieved through the 'Declaration of Cooperation' and the 'Charter of Cooperation' further demonstrates that multilateralism and international cooperation are imperative and do work.

Barkindo made participants aware of postponements of negotiation sessions by the COP Bureau and UNFCCC

Secretariat in light of the pandemic, adding this may present an opportunity to resolve long-lasting and outstanding issues. He added that nonetheless the UNFCCC Secretariat has received clear instructions to go ahead with mandated events, reports and other UNFCCC-related actions, thus OPEC recommends that OPEC and DoC countries remain involved throughout the year.

The Secretary General concluded with quoting the great leader Martin Luther King, Jr, who said: "The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy."

Meeting sessions covered: UN climate processes and the impacts of the COVID-19 pandemic; climate negotiation issues towards COP26; key findings of the Working Group III contribution to the Sixth Assessment Report (AR6) of the IPCC on energy-related matters; and quantitative assessment of climate-neutral energy transition pathways and the impacts on OPEC economies; among others.

In ensuing discussions, participants congratulated G20 countries for the endorsement of the circular carbon economy (CCE) approach under the Presidency of the Kingdom of Saudi Arabia, noting that it is a holistic, integrated, inclusive and pragmatic approach to reducing emissions. The need for solidarity and the critical role of multilateralism was also reiterated, considering the urgent need to address the global crisis due to the COVID-19 pandemic.

In his closing remarks, Barkindo stated that the scope of the challenge facing energy-producing developing countries in light of the pandemic and climate change is just starting to become clear.

"What is already abundantly certain ... is that climate change will continue to be one of the major challenges of our time. Climate-related policies and actions could have a profound and deep effect on the energy transition, the global energy mix, the oil industry and OPEC Member Countries," he said.

He stated that there is no single 'best' solution to reach a carbon-neutral energy system and that no source should be discriminated against. The oil industry, with its long history of alleviating poverty and supporting sustainable development, has a crucial role to play in the energy transition. Strong technological efforts must be pursued to reduce the CO₂ footprint from the production and use of oil, said Barkindo.

He added that OPEC will continue to monitor climate change matters and include them as a high priority in activities within the Long-Term Strategy, as well as the CoC's Work Programme. The Secretary General pledged his personal commitment to attending high-level meetings to put forward OPEC's views on critical matters.



Workshop focuses on cutting-edge developments

The OPEC Secretariat held its second Workshop on Energy and Information Technology on September 21, 2020. It involved lively discussions on the latest developments in areas including blue hydrogen, robotics and cyber security.



Mohammad Sanusi Barkindo (above), OPEC Secretary General; and moderator of the first panel on blue hydrogen, Dr Adnan A Shihab-Eldin (above r), Director General of the Kuwait Foundation for the Advancement of Sciences.

More than 140 participants representing industry, government and research institutions participated in the virtual workshop. The videoconference also included topical issues such as digitalization, artificial intelligence and blockchain technology and how they can contribute to innovations in the oil and energy sectors.

The event, a follow-up to highly successful workshops held over two days in September 2019, provided a platform to examine timely developments in energy technology and innovation in greater detail with the participation of leading experts.

In opening the event, OPEC Secretary General, Mohammad Sanusi Barkindo, quoted Bill Gates, who once commented that: “Innovation is the reason our lives have improved over the last century.”

The Secretary General said, “I would like to expand upon these words of wisdom by noting that the oil industry, from its earliest days in the 19th century, has been a

leader in developing and utilizing technologies to the benefit of global development and human progress. In the 21st century, technological innovation, coupled with an experienced and highly-skilled work force, are driving advances in the industry’s operations across the value chain and contribute to its ever-improving environmental performance.”

Moderating the first panel on blue hydrogen was Dr Adnan A Shihab-Eldin, Director General of the Kuwait Foundation for the Advancement of Sciences and former Acting Secretary General and Director of Research of OPEC. Patrick von Pattay, Vice-President for Digital Portfolio and Transformation at Wintershall Dea, a German natural gas and oil firm, moderated the second session on IT.

Turning emissions into energy

Blue hydrogen, which is derived from hydrocarbons,

offers the potential to add significant value to the petroleum industry by turning emissions into energy. Coupled with carbon capture and storage or utilization (CCUS), blue hydrogen could provide an abundant, reliable and clean fuel in the future.

Blue hydrogen has the additional benefit of supporting the economic diversification goals of energy-exporting countries while strengthening their capacity to meet their own and the world's growing energy needs.

In their interventions, participating experts noted that blue hydrogen has tremendous potential in supplying energy to industries, transport, and heating plants. It could also be used as a supplemental source of energy when renewables like wind and solar cannot meet demand peaks because of prevailing weather conditions.

Japan and Australia are both supporting coal-to-hydrogen projects with the goal of developing cleaner-burning fuels. They provide a potential model for other countries seeking to expand their energy portfolios.

IT, robotics and cyber security

In the second half of the workshop, participants also discussed the transformative role that innovation and technology can play in meeting the rapid growth in energy demand in the future. Robotics and other innovations, for example, can help improve productivity, maximize efficiency and safety, and drive efficiencies across the value chain.

In his remarks, the OPEC Secretary General noted that the COVID-19 crisis ushered in a digital era that has brought tremendous changes to the way the world works. "Without IT, none of us would be participating in this workshop. Despite social distancing and other measures to contain the pandemic, we have been conducting business as usual thanks to innovations in remote communications and operations," he said.

"The miracles of technology," Barkindo continued, "allow us to carry on with decades of OPEC tradition in supporting dialogue, cooperation and the exchange of information to the benefit of producers, consumers and the global economy at large."

Barkindo added that the OPEC Secretariat is constantly reviewing and analyzing the latest technologies emerging in the industry with the support of OPEC Member Countries.

He noted that OPEC is continually strengthening the Organization's means and commitment to facilitate the flow of information through technology, and improving direct communication with Member Countries and key energy stakeholders.

Furthermore, he said, "we recognize the pivotal importance of



The OPEC Secretariat team attending the workshop, with Peter Kutemann (r), President & CEO of Dietsmann.

technology and innovation in addressing the pressing global challenges of energy poverty and climate change."

Investing in the future

He noted that the technologies and innovations represent game-changing possibilities for the oil industry and energy sector in general. "However," he said, "we must be cognizant that sustained investment is essential. Our industry needs access to capital to support the development and deployment of technologies that can help us achieve a stable, inclusive and sustainable energy future."

The Secretary General pointed out that innovation and technology will play an important role in meeting the rapid growth in energy demand in the future. "As we heard, robotics and other innovations can help improve productivity, efficiency, logistics and drive efficiencies across the value chain.

"I would also add that these developments can help address the pressing global challenges of energy poverty and climate change. Given the close link between the two, and the need for urgent action on both, potential responses to one cannot neglect the other."

COVID-19 is a stark reminder of the need to find inclusive and collaborative solutions to these global challenges and to create a more resilient future for humankind, he added.

Participants also discussed the unbreakable link between cyber security and technology, with some speakers noting that energy stakeholders must be prepared to expand cooperation to address the clear and present risks to the industry from cyberattacks.

The Workshop on Energy and Information Technology was part of the OPEC Secretariat's ongoing research programme, which holds workshops and technical meetings that act as a forum for discussion and the exchange of ideas on some of the energy industry's most important issues.



OPEC holds special workshop on forecasting global oil demand and non-OPEC supply



On October 1–2, the OPEC Secretariat hosted a technical workshop via videoconference to discuss global oil demand and non-OPEC supply forecasting. The workshop was attended by Mohammad Sanusi Barkindo, OPEC Secretary General, experts from the OPEC Secretariat and delegates from OPEC Member Countries, along with non-OPEC oil producing countries participating in the ‘Declaration of Cooperation’ (DoC) and representatives from forecasting agencies. The OPEC Bulletin’s Scott Laury reports.

In his welcoming remarks, the Secretary General emphasized the importance of improving industry forecasting standards, noting that production surveys, methodologies and sources are key elements in this endeavour.

He said that the workshop was the latest in a series of meetings held with secondary sources to help enhance market forecasting among industry stakeholders.

“It is indeed part of an ongoing effort for transparency and to further strengthen the Secretariat’s comprehensive analysis and analytical depth in research,” he stated. “An earlier initiative with secondary sources was a part of that drive, with an inaugural meeting held on July 9, from which at least 13 bilateral meetings with DoC participating countries emerged. Today’s focus will be on short-term oil demand and non-OPEC supply forecasting.”

Supply and demand forecasting during COVID-19

Given the prevailing market challenges in the midst of the ongoing pandemic, Barkindo added that the two-day meeting would have a keen focus on current developments and prospects for recovery.

“This meeting continues the series as an extension of this topic, with a focus on how forecasting agencies address uncertainties and factor in the changing dynamics of the time as the world continues to grapple with an invisible opponent, COVID-19, and its knock-on effects,” he said. “We will especially emphasize market developments and prospects.”

In this regard, the Secretary General struck a predominantly optimistic tone when speaking about the road ahead.

“We remain cautiously optimistic about the oil market’s recuperation, even as the world continues to battle COVID-19 resurgences and clusters,” he said, adding, “large uncertainties and risks will continue to destabilize the oil market and affect the pace of economic recovery until an effective vaccine is found.”

Facilitating stakeholder dialogue

Barkindo acknowledged the productive role that the OPEC Secretariat has played as a facilitator in bringing together a wide range of industry stakeholders through meetings such as this one to promote accurate and transparent data, in-depth analysis and comprehensive reporting.

An impressive line-up of forecasting agencies were present at the meeting to share their collective expertise and knowledge, while

also discussing challenges and lessons learned with attending delegates.

Many of these experts are no strangers to OPEC, as they have participated previously in similar events and programmes over the years. They included Amrita Sen from Energy Aspects; Paola Rodriguez-Masiu from Rystad Energy; John van Schaik from Energy Intelligence; Anne-Louise Hittle from Wood Mackenzie; Neil Atkinson from the International Energy Agency; Francis Osborne from Argus; Jim Burkhard from IHS Markit; Chris Midgley from Platts and Linda Giesecke from ESAI.

The Secretary General remarked on the strong partnerships OPEC has built with these agencies, and that this would bode well for open and transparent discussions and exchanges with the delegates.

“Each of these well-established institutions is a trusted partner in close cooperation with OPEC, and they are highly respected references for the global energy community,” he stated. “We encourage all the delegates to take advantage of their deep knowledge and experience and initiate debate on points that may require clarification and deeper understanding. In the end, the mutual goal of all those present is to improve transparency and predictability in an effort to enhance market stability.”

Engaging discussions

Some of the main points made over the two-day workshop, which was held under Chatham House Rules, were summed up by the Secretary General in his closing remarks on day two. These included:

- The importance of rich, historical experience and expert judgement, which are critical in short-term oil market forecasting. This naturally complements the quantitative analysis that relies on real-time data and a wide range of indicators that were shared by OPEC experts.
- Granular coverage and in-depth analysis in key sectors, products and countries are key factors in increasing accuracy. It was additionally noted that, although there is still considerable room for improvement in data coverage for some countries, coverage is nearly universal.
- Traditional models have become less relevant during this time of crisis with the COVID-19 pandemic, leading to the adoption of transitional models to address disruptions and impacts.
- A COVID-19 vaccine may be available by mid-2021, helping boost oil demand by the end of 2021.
- There continues to be considerable difficulty in forecasting Chinese demand, a major growth centre. India, it was mentioned, is also a challenge in this regard.
- There are divergent views with regard to US tight oil prospects, which are sensitive to price volatility.

The Workshop’s overwhelming success led to recommendations by some attendees to continue hosting similar technical meetings and workshops, which could perhaps focus on specific areas or topics to enable more in-depth discussions.



Further engagement envisaged

The Secretary General pledged further engagement with the attending agencies for the mutual benefit of OPEC and the participating non-OPEC producers of the DoC.

“Looking to the future, the OPEC Secretariat will continue to prioritize further engagement with your institutions and other industry research organizations,” he stated. “Events such as this one offer golden opportunities to exchange information and lessons learned, while also discussing challenges and even points of contention.”

Stepping back for a moment to consider the bigger picture, Barkindo concluded by drawing an apt parallel between OPEC’s engagement at the technical level and its multilateral efforts on the global stage.

“These technical engagements mirror what OPEC is accomplishing successfully on the global stage with its DoC partners: multilateral dialogue and cooperation,” he said. “At the end of the day, we all seek the same result – stability, growth and prosperity for current and future generations to come.”



OPEC hosts First OPEC-AFREC technical meeting



The OPEC Secretariat held the first technical workshop of OPEC and the African Energy Commission (AFREC) via videoconference on October 6. By Maureen MacNeill.

Mohammad Sanusi Barkindo, OPEC Secretary General, opened the meeting.

The workshop provided a platform for both organizations to interact and hold a productive dialogue on the energy sector, global oil market, energy poverty eradication, the use of conventional oil, and the improvement of research capacities. A preliminary meeting between the two organizations was held in 2016, which focused on data services.

Mohammad Sanusi Barkindo, OPEC Secretary General, opened the meeting by stating the Secretariat attaches special importance to the workshop. “This meeting is the starting point of what we hope will be constructive and regular dialogues with various African entities ... I am thrilled to see my home continent finally take its seat and bring its voice to the dialogue table.

“OPEC is committed to Africa and we highly value these dialogues, which will help fill in gaps in our knowledge.”

Africa’s oil industry holds huge potential, stated the Secretary General. “The continent is home to five of the top 30 oil-producing countries in the world, accounting for nearly 8.0 million barrels/day in 2019, just below ten per cent of world output. At the end of 2019, Africa was estimated to have proven reserves of oil in the region of 125 billion barrels. On the production side, there is still vast potential to achieve more!”

Barkindo added: “African countries face severe energy shortages and this has held back industrial

development. This is despite the fact that the continent possesses tremendous conventional and renewable energy resources.”

He quoted Akinwumi Adesina, president of the African Development Bank, who stated at a World Economic Forum on Africa: “We have got to be so impatient with moving Africa forward relentlessly — we have no choice. In 2025, there is absolutely no reason why Africa should not be totally lit up with the power it needs to industrialize, because we must not forget, no economy ever develops unless you have the base load power to drive industries and to be competitive ... let’s not forget for this continent to create the jobs it needs fast, we must have base load power. So I believe that in ten years ... we absolutely must develop Africa with pride and have universal access to electricity.”

Barkindo added that diversifying within the petroleum sector would help create jobs and protect economies on the continent.

The two great scourges of our time, COVID-19 and climate change, stand to hit African countries harder than the rest of the world, he said. “They are being harder hit, because most do not have the resources to support faltering economies in the form of financial stimulus or government handouts.”

He said that although the 2030 Agenda for Sustainable Development pledges to leave no one



Secretariat staff and virtual participants of the meeting.

behind, inequalities exacerbated by the pandemic could become even more pronounced in the long term, in particular for developing countries and vulnerable groups that feel the effects of the pandemic acutely. The lack of access to energy may magnify the socio-economic impacts of the pandemic, he added.

The Secretary General emphasized the importance of reliable data and accurate analysis, noting: “They are the backbone of good decision-making.” He added that both organizations have a similar focus in this regard.

“The exchange of information between our two organizations will be highly beneficial to us both,” he added.

The collaboration should have the added benefit of supporting the Sustainable Development Goals (SDGs), especially SDG7 on affordable and clean energy, which cross cuts and supports all of the other SDGs. In particular, it could benefit SDG1 on ending poverty, SDG3 on good health and well-being, SDG4 on quality education and SDG8 on decent work and economic growth.

“According to OPEC figures, global electrification increased from 83 per cent in 2010 to 90 per cent by 2018, but 789 million people still do not have access to electricity. The world’s deficit is concentrated in sub-Saharan Africa, where 47 per cent of the population have no electricity. Access to clean cooking fuels and technologies increased from 56 per cent in 2010 to 59 per cent in 2016. Most recent estimates indicate that the level of access in 2018 was 63 per cent, therefore, 2.8 billion people still have no access to modern cooking systems,” said Barkindo.

“In Sub-Saharan Africa, the number of people without access to clean fuels and technologies for cooking has further increased as a result of fast population growth. About 85 per cent of people in this region lacked access to clean fuels and technologies for cooking in 2018. There is a high human cost to this — millions die from respiratory illnesses as a result of a lack of clean energy for cooking.”

The Secretary General concluded by noting that arrangements for the First OPEC-Africa High-Level Meeting

and a technical meeting with the African Petroleum Producers Organization (APPO) are currently under way, as part of the newly established OPEC-Africa Energy Dialogue.

“The African continent is vast, and has remained largely unmapped in terms of energy resources and energy use. It is time to put this dynamic and growing continent on the energy map,” said Barkindo.

The membership of OPEC includes seven African oil producing countries: Algeria, Angola, Congo, Equatorial Guinea, Gabon, Libya and Nigeria.

WOO focus on Africa

The extension of the time horizon for this year’s OPEC *World Oil Outlook (WOO)* — which was launched on October 8 (see feature on page 26) — to 2045 has increased its Africa focus, underscoring the significance of the continent in the future. The future is Africa!

The *WOO 2020* creates a new Reference Case for projections with this time extension. This provides the space to expand upon developments identified in past years, such as expectations for an evolutionary shift in economic and energy demand growth to developing countries, especially those in Asia, the Middle East and Africa.

According to the *WOO 2020*, the global population is expected to increase by over 1.7bn people, from around 7.7bn in 2019 to almost 9.5bn in 2045. The majority of this growth is forecast to occur in developing countries, particularly in Africa,

The Middle East and Africa (excluding OPEC) region is currently experiencing a swift rate of population growth, with the trend expected to remain towards the end of the projection period. Notably, this is the only region that is expected to grow faster (adding 789m people) in the period between 2019 and 2045, compared with the 522m added in the 1993–2019 period. This development means the Middle East and Africa regions will have the largest growth share of the world’s population in 2045.



Amin Nasser: 2020 Energy Intelligence Energy Executive of the Year



On the first day of the 2020 Energy Intelligence Forum, Amin Nasser, Chief Executive Officer (CEO) of Saudi Aramco, was recognized by his industry peers with the Energy Executive of the Year award. On receiving the award, Nasser said that this is an occasion for reflection, as well as celebration and in looking back at his own career, “I cannot help but reflect with pride on Aramco and its position in the energy industry and in the Kingdom of Saudi Arabia.” The OPEC Bulletin reports on an extremely worthy recipient of this annual award.

The recipient of the Energy Executive Award of the Year is usually honoured in London in early October at an evening get together attended by a who's who of the global petroleum industry. The COVID-19 pandemic changed this in 2020, with the Energy Intelligence Forum moving online. However, the ceremony proved worthy of past ones, and was supported by the presence of Prince Abdul Aziz Bin Salman Al Saud, Saudi Arabia's Minister of Energy and the year's previous winner, Ben van Beurden, the CEO of Shell.

Prince Abdul Aziz praised Amin Nasser's "lifetime of achievement" and van Beurden said nobody deserves the award more than Amin Nasser, "a giant of our industry" driven by "doing the right thing" for his Kingdom, for Saudi Aramco, and for the energy industry itself. These comments proved a fitting opening to the award ceremony, and were echoed by other global oil industry leaders, with Mohammad Sanusi Barkindo, OPEC Secretary General, stating that "this award is a fitting tribute to the outstanding leadership and wisdom of our dear friend, Amin Nasser. Aramco continues to be one of the most admired and exemplary companies in the world."

Nasser said he was truly humbled to be recognized by his peers and colleagues. "Everyone likes to be recognized for the job they have done. But when it comes from those who know from personal experience just how complex, demanding, exciting, and ultimately rewarding your work can be that is truly humbling."

He also underscored the pride he takes from working at Aramco, and in being a second-generation Aramcon. "My father worked for the company for 42 years, mostly in junior grade codes — real hands-on stuff on the front-line. Up until his very last day on the job he reported for work at 7 am as normal. But when he and his colleagues came home each day, they walked like lions because of the pride they took in their work, the recognition they received from the community, and the knowledge that they were part of something meaningful."

Seeing this, he said "I resolved from an early age that I too would join Aramco. Looking back, he added "it is clear that our sense of pride does not come from record production levels, or technical achievements, or operational milestones. It comes from belonging to a community where people care for each other, care for their country, and care for the planet."

He stated that the company's great achievements are the result of a system and a set of strategies, but more importantly, they are the product of a deep-seated culture of responsibility. "From its earliest days, the company has always worked for all of its stakeholders, not

just its shareholders, and has always been committed to what today we would recognize as ESG (environmental, social and corporate governance). Contributing to the wider society while also delivering results has always been part of our DNA."

Looking ahead

In looking to the future, Nasser said that one major challenge is ensuring that the new generation gets every opportunity to experience the same deep sense of pride in addressing today's challenges "that we felt as young people." Thankfully, he added "there is still a sense of excitement about Saudi Aramco's future. And in our part of the world, bright and enthusiastic young men and women remain keen to be part of the energy industry and our company." There are evidently many challenges for the next generation to tackle, particularly when it comes to the environment and climate change.

While he said he finds it discouraging and even distressing that an industry that has done so much to enable prosperity for so many, so often finds itself on the defensive, he believed that the "energy industry continues to be the responsive and responsible motive force behind global economic activity, as well as social development and progress."

He said: "We are tackling issues related to carbon emissions and climate change from a proactive, leadership position, including through industry-wide collaborations. We are harnessing technological advances and a spirit of innovation to usher in an even more reliable and more efficient energy sector.

"Our companies are engaging with their various stakeholders around the world to better meet society's rising expectations. And in recent months we have successfully overcome the operational challenges posed by COVID-19, continuing to provide vital energy and indispensable products while safeguarding our people and our communities."

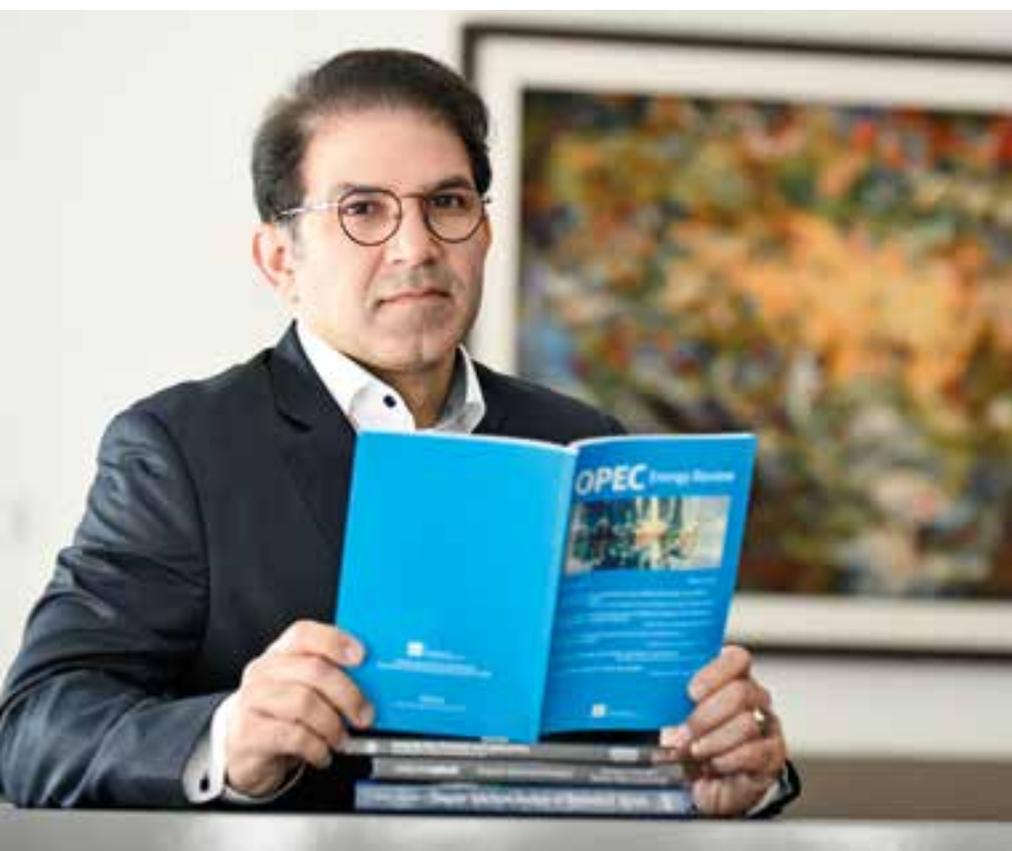
He underscored the importance of demonstrating confidence in the industry's future contributions. "I have a strong belief that with technology and collaboration our industry can and will overcome the biggest of its future challenges — foremost among them, climate change."

He added that "the decisions we make and the steps we take now will have an impact for many years, indeed, many decades to come. That is a great responsibility, and given the right resources, the right vision, the right spirit, and above all the right people, it is a responsibility I know our industry is capable of shouldering."



Big data research attracts global attention

An article on the revolutionary potential for big data applications in the petroleum and petrochemical sectors, written by Dr Hossein Hassani, Statistical Systems Coordinator in OPEC's Data Services Department, has become the top-cited item in the OPEC Energy Review.



Dr Hossein Hassani, Statistical Systems Coordinator in OPEC's Data Services Department.

The OPEC Energy Review article, *'Big Data: a big opportunity for the petroleum and petrochemical industry'*, examines the influence big data is having on the sectors' upstream and potential benefits for the midstream and downstream operations.

The scholarly article, published in April 2018, has been cited many times, making it the Review's top-cited article.

Hassani has written extensively on the importance of timely data to gain a deeper understanding of market movements, strengthening the accuracy of short- and long-term forecasts, and gaining a better understanding of issues related to energy access.

"The energy industry is fast becoming data-intensive and data-driven," Hassani told the OPEC Bulletin. "Leveraging big data would therefore boost the potential to transform the industry. It could help discover untapped interesting insights in the data."

Through its technical workshops and dialogues with other organizations, think tanks and energy stakeholders, OPEC is helping to enhance the timeliness, accuracy and availability of data and statistics. This has led to improvements in the understanding of market conditions that has helped facilitate responses throughout the COVID-19 crisis.

Improving oil market analysis

The OPEC Secretariat is pioneering efforts to develop a comprehensive and easy-to-use multi-dimensional tool for analyzing variables relevant to the oil market. This marks an unprecedented effort to integrate multiple global data sources, harness structured and unstructured data, and revolutionize current and future needs.

Furthermore, the Secretariat's use of big data involves developing tools to optimize response rates for data requests and integrate multiple databases into a single user-friendly platform.

Along with Mohammad Sanusi Barkindo, OPEC Secretary General, and other representatives from the OPEC Secretariat, Dr Hassani was an organizer in the

ground-breaking round-table discussion on big data during the 2019 Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC). The ADIPEC event focused on three areas: big data in the oil and gas industry; how big data can be used to alleviate energy poverty; and big data and its usage to address climate change and global warming.

The ADIPEC event, *'Big data: a pillar of tomorrow's petroleum industry'*, was organized by the OPEC Secretariat and took place on November 12, 2019, in Abu Dhabi. The round-table discussion was attended by Suhail Mohamed Al Mazrouei, Minister of Energy and Industry, United Arab Emirates, and other government dignitaries; national and international petroleum company leaders, including the Abu Dhabi National Oil Corporation (ADNOC); and academic representatives of Abu Dhabi's Khalifa University.

"The ability to achieve radical improvements in integrating, managing and utilizing enormous amounts of information has important implications going forward," Barkindo said in opening the session in Abu Dhabi. "Indeed, the link between transparent, accessible data and a secure, sustainable energy supply will only grow in importance.

"For OPEC, big data is leading to far-reaching improvements in the data services and information we provide to our Member Countries — and to the public at large — through our online platforms and publications," Barkindo added.

Author of numerous articles and books

Hassani, who earned a doctorate in Statistics from the School of Mathematics at Cardiff University in the UK, is the author of more than 150 articles in scholarly and research journals, and several books, including one on singular spectrum analysis (SSA). His work has received more than 4,000 citations so far, a significant rate averaging two per day in 2020, by international scientific and industrial communities.

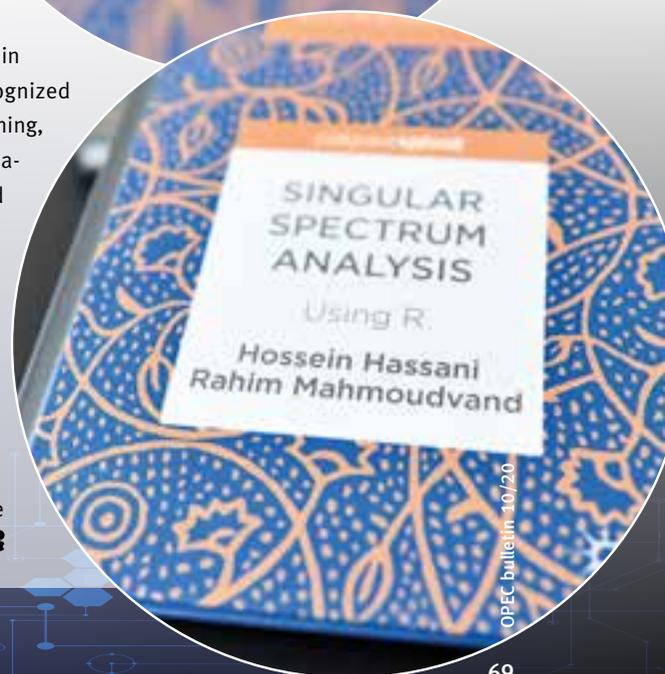
Hassani's research in big data and data mining has attracted interest from the scientific community, as well as industry. His publications received many citations and have been recognized as top-cited papers, including the one on big data appearing in the *OPEC Energy Review*. He has illustrated how big data and data mining can be used in various fields, such as the oil and gas industry, banking and finance, as well as efforts to alleviate energy poverty and address climate change, to name a few.

The SSA technique combines the potential of analysis, statistics, geometry and signal processing to create a powerful tool for data analysis and forecasting. Hassani is recognized as one of the leading expert scientists in this area with many more than 70 published scientific articles, many of them top cited, and two books on the topic. He has also shared and exchanged his knowledge by supervising ten PhD students across the globe. Several of his doctoral students are now university professors.

One of Hassani's books, *Fusing Big Data, Blockchain and Cryptocurrency* (Springer, 2019), examines the enormous potential of big data applications in finance and the digital economy. In the book, he writes: "The art of life is adding one more friend into your friend list every day instead of adding one more enemy into it. Let's make our life like big data, adding friends at an exponential rate."

Hassani began working at OPEC in 2014. He is an internationally recognized researcher in big data and data mining, time series analysis and its applications, particularly in analyzing and forecasting economic and financial time series.

Hassani has organized and chaired international workshops and conferences, and presented as the keynote speaker on many occasions. He has received several prestigious awards including an outstanding contribution award from the Chinese Academy of Sciences.

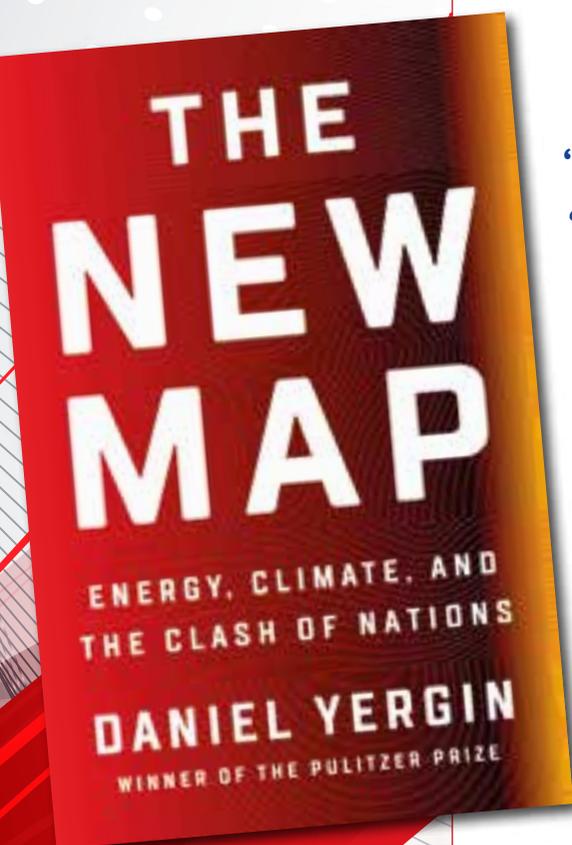


Masterly account of tumultuous decade by the oil-historian maestro

The New Map

Energy, Climate, and the Clash of Nations

by Daniel Yergin



‘The Prize’ remains the essential account of the history of oil. ‘The Quest’ took the story into the 21st century, particularly examining the prominence of climate issues in the energy industry. Dan Yergin’s latest book, ‘The New Map: Energy, Climate, and the Clash of Nations’, explores the many changes in the energy industry in the last decade, the contours of geopolitical developments, the energy transition and the unprecedented disruptions caused by the COVID-19 pandemic. The OPEC Bulletin files this review of Yergin’s excellent book.

Page-turner

Given the breadth and geographical expanse of the topics, it is a credit to Yergin that *‘The New Map’* remains so readable and enjoyable. In many ways, it is gripping like a thriller, with the reader engrossed from the outset. ‘Unputdownable’ is the term that springs to mind. It is a thought-provoking tome that covers many of the most seminal events in OPEC’s recent history.

As Yergin himself frames it, the book explores “the new global map that is being shaped by the dramatic

shifts in geopolitics and energy.” The first sections of the book are divided by region. Part one discusses *‘America’s Map’*, in particular the impact of the ‘shale revolution’. Yergin states, “together, shale oil and shale gas have proven to be the biggest energy innovations so far in the 21st century.”

The second section focuses on developments in the energy sector in the Russian Federation, including their ramifications for geopolitics. US-Russia relations

are explored, as well as Russia's role in the Middle East and its pivot towards the east, especially with regard to Russia's relationship with China.

China's Map forms the basis of the third section of the book. The importance of China has become more prominent in each of Yergin's books, a reflection of its increasing significance in the energy industry in the 21st century. An illuminating example in this regard is seen in the fact that when the SARS virus began in 2002, China accounted for four per cent of the world economy. With the outbreak of COVID-19 in 2019, it was 16 per cent. This section also explores the 'Belt and Road Initiative', the consequences of China's membership in the World Trade Organization (WTO), trade tensions, and the implications of 'decoupling' economies.

A particularly interesting dimension in the rise of China is the importance of 'containerization'. Yergin outlines the role of Malcom McLean's innovation and describes it as, "the most significant development in shipping since the shift from sail to steam power. It knitted together the global economy, enabling China to become the workshop of the world."

Section four deals with developments in the Middle East during the 2010s. It also explores how for many decades the industry was preoccupied with the notion of 'peak supply'. This has subsided in recent years and given way to discussions on 'peak demand'. Yergin outlines this trajectory, as well as other notable moments in the region over the last decade.

Following these explorations of geographical areas, the book analyzes the 'road map' with regard to the energy transition. It covers such developments as the electric car, ride hailing and sharing, and self-driving cars, all of which fall under the bracket of 'auto-tech'. It also encompasses the expansion of renewables, particularly solar and wind.

The 'Declaration of Cooperation'

Two chapters are particularly pertinent to OPEC. Chapter 34 is entitled '*Oil Shock*' and covers the period from 2014 to 2016. It provides a gripping account of the genesis of the 'Declaration of Cooperation' (DoC), notably the meeting on the sidelines of a G20 meeting in Hangzhou in China, September 4–5, 2016, between Russian President Vladimir Putin and the Deputy Crown Prince of Saudi Arabia, Mohammed bin Salman, and their determination to work tirelessly towards greater

stability in the market. The momentum generated in Hangzhou leads to what Yergin describes as the 'Algiers Accord'. The chapter goes on to describe the signing of the DoC in December 2016.

Yergin goes into detail about the role Mohammad Sanusi Barkindo, OPEC Secretary General, played in securing the DoC.

"Another factor facilitating a deal was that OPEC finally had a permanent Secretary General ... The new Secretary General was Mohammad Sanusi Barkindo, a Nigerian and former head of the Nigerian state oil company. He was a consensus-builder, barnstorming from one OPEC capital to another, understated, listening carefully, sorting, trying to bridge gaps."

Yergin notes how careful the DoC partners were to solicit the views and heed the concerns of consumers. He describes how Indian Minister of Petroleum and Natural Gas and Steel, Dharmendra Pradhan, when attending the 7th OPEC International Seminar in June 2018, outlined his nation's concerns with the supply and demand balance. China and the US had also expressed their opinions. The DoC partners adapted their course of action accordingly at the 4th OPEC and non-OPEC Ministerial Meeting on June 23, 2018.

The historic decisions of April 2020

Chapter 36 is entitled '*The Plague*', and covers the outbreak of COVID-19 in 2020. As Yergin states: "The world seemed a different planet at the end of March from what it had been in the beginning of March ... such a sudden, massive decline in oil demand that has never been seen before."

Yergin then provides the details of the painstaking negotiations that led to the historic decisions on April 12, 2020, at the 10th (Extraordinary) OPEC and non-OPEC Ministerial Meeting. He explains the pivotal role that Saudi Arabia's presidency of the G20 played both in securing a decision by the DoC partners, as well as garnering the support and cooperation of several other major producers. As Yergin states: "What followed over the next several days was a dizzying whirl of day and night phone calls and video conferences among OPEC and OPEC+."

In describing the decisions of the ministerial meetings of April 12, 2020, Yergin states:

"The deal itself was historic, both for the number of participants and the sheer complexity ... Nothing like this had ever happened before in the world of oil."

Energy transition

Another fascinating chapter of the book is entitled, ‘What does ‘energy transition’ mean in the developing world?’ As Yergin himself writes:

“‘Energy transition’ means different things to different nations, especially in the developing world. A billion people lack access to electricity; three billion do not have access to clean cooking fuels. Instead they burn wood or charcoal or crop waste or cow dung indoors, impairing their health. This leads to a different perspective.”

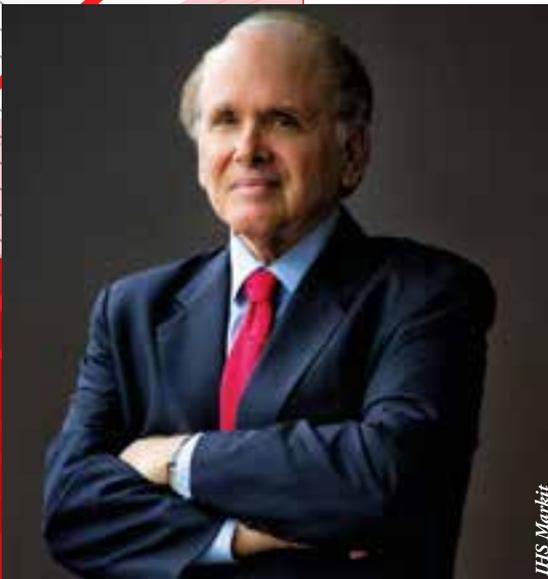
The WHO refers to the three billion as the ‘forgotten three billion’, who are at risk from indoor air pollution caused by these poor fuels. “Close to four million people

a year die from this indoor pollution, and many more suffer from a wider variety of illnesses.” These are important factors that must be incorporated into any discussion on the energy transition.

Fascinating read

The energy industry in 2020 is in a very different condition compared with 2011, when *‘The Quest’* was published. It is on a complex journey, involving a wide array of characters, themes, topics and regions. To compress this into a single, enjoyable volume takes the deft touch of a master storyteller. *‘The New Energy Map’* is further evidence that Dan Yergin is best qualified to excel in such a task. 

The OPEC Bulletin interviews Dan Yergin on the publication of ‘The New Map: Energy, Climate, and the Clash of Nations’



Daniel Yergin.

IHS Markit

Question: First, congratulations on writing another masterpiece. It really is a compelling page-turner. At the OPEC Secretariat, we advise every new staff member to read ‘The Prize’ and ‘The Quest’ to familiarize themselves with the oil industry. Do you see ‘The New Energy Map’ as forming part of a trilogy with these two works?

Answer: Thank you! I didn’t think of it as trilogy at first. Rather, I set out in ‘The New Map’ to capture the immense changes over the last decade.

But now that you say it, I realize it is a trilogy, really a story of the world that unfolds not just over decades but over centuries. But, if I had thought about it that way at the beginning, I would have been too overwhelmed to take it on.

‘The Prize’ covered the history of the oil industry from its beginnings to 1990. ‘The Quest’ was approximately a 20-year period, from 1990 to 2011. ‘The New Energy

Map’ deals with a shorter period, from 2011 to 2020, and yet the pace of change in the energy sector in this decade or so is incredible. Do you think the 2010s have been an unusually transformative decade for the oil industry?

Yes. The United States went from being the world’s largest oil importer to the biggest producer. Shale has proved to be a major disruptive technology. The Middle East has gone through great turmoil and change. And OPEC+ emerged in response to crises in the oil market. Some 195 nations signed onto the Paris climate agreement. ‘Environmental, Social and Governance [ESG]’ investing is affecting the flow of capital into the industry, and climate has come to the fore.

In Chapter 46 and throughout the book, you note how in the last five years or so, the ‘peak supply’ debate has been almost completely supplanted by the ‘peak demand’ debate. Could you pinpoint exactly when this happened and at a more meta-level, why is it that there seems to be a permanent need by some commentators for a ‘peak’ something in wider discussions about the oil industry?

Some people held onto ‘peak supply’ for a long time, but I think generally the idea got retired around 2012–13 as the US started to add roughly a million barrels per day of annual growth. I think by about 2017–18, in the aftermath of the Paris climate agreement, ‘peak demand’ was

gaining traction as a concept. With the Paris goal of ‘net zero carbon’ by 2050, it has become a major topic of discussion.

Is it a coincidence that this book was published the day (September 15) after OPEC’s 60th birthday?

Coincidences don’t happen. No, actually, it was a coincidence, and yet at the same time OPEC is looking to map out its own future, and I think the book provides a framework for thinking about the map.

The famous Mark Twain quote is very applicable to OPEC, in that “reports of its death are greatly exaggerated.” Since it formed in 1960, OPEC’s obituary has been written many times and many commentators have predicted its demise. Yet in 2020, OPEC’s relevance is greater than ever. What do you think has been the vital ingredient for OPEC’s ability to remain relevant and carve out a role for itself over and over again?

You’re quite right. One recurrent perennial is the obituary for OPEC. People make the mistake of thinking that OPEC is a single actor rather than representing the interests and views of its members. The price collapse of 2020 demonstrated its relevance. Of course, OPEC’s role and relation to consumers has changed mightily, as has its relationship with other producers, including the US. It has become a stabilizer. It also is a forum for exporters to address questions around emissions and the energy transition — something that certainly was not part of its remit in earlier days.

To what extent has the ‘Declaration of Cooperation’ partnership (OPEC+), the ‘Vienna Alliance’, become a new actor in its own right on the energy stage?

It was an historic step. OPEC+ is certainly a new player and one critical to the market. It was born out of the 2014 price collapse and reflects the fact that OPEC represents only part of the world’s oil exports.

Where do the production adjustment decisions taken by OPEC and our partners in April in response to the COVID-19 related demand contraction rank in the history of decisions taken by the Organization?

The decisions made in April 2020 rank right at the top of the most important and dramatic decisions made by OPEC and the other producers. The collapse in the spring of 2020 had no precedent. Secretary General Barkindo captured how dire the circumstances were at that point when he described the supply-demand balance as “horrifying”. This situation was not the result of supply and demand, but of what I call the ‘economic dark age’ that came with the coronavirus and shutdown of economies.

You rightly emphasize that the energy transition means different

things to different people, particularly for those in the developing world. It would be hard to find two people who agree on a definition of the energy transition. Your work has shown that the history of energy is not very static and the use of energy is not universal across the world. Is ‘energy transition’ a useful term? Was there ever a period in history when energy was not transitioning? Is the term ‘energy addition’ more useful?

In 13th and 14th century Britain, people began to use coal because there was a shortage of wood and the price was going up. But I date the beginning of the energy transition to January 1709 when a metal worker replaced coal with wood to “better” make iron. So the transition has been going on ever since. Better to call it energy evolution. In recent times, we’ve had ‘energy addition’, renewables on top of growing demand for oil and gas.

Do energy transitions happen by accident or design?

That’s a good question. Both and then some. People make it happen. The shale revolution was initiated by George Mitchell in Texas. It took almost two decades to make it happen. Conjunctions of technologies, economies, and determination make it happen. ‘Discovery’ over time makes it happen. And governments make it happen by their policies. This phase of the energy evolution is being driven by governments and policies.

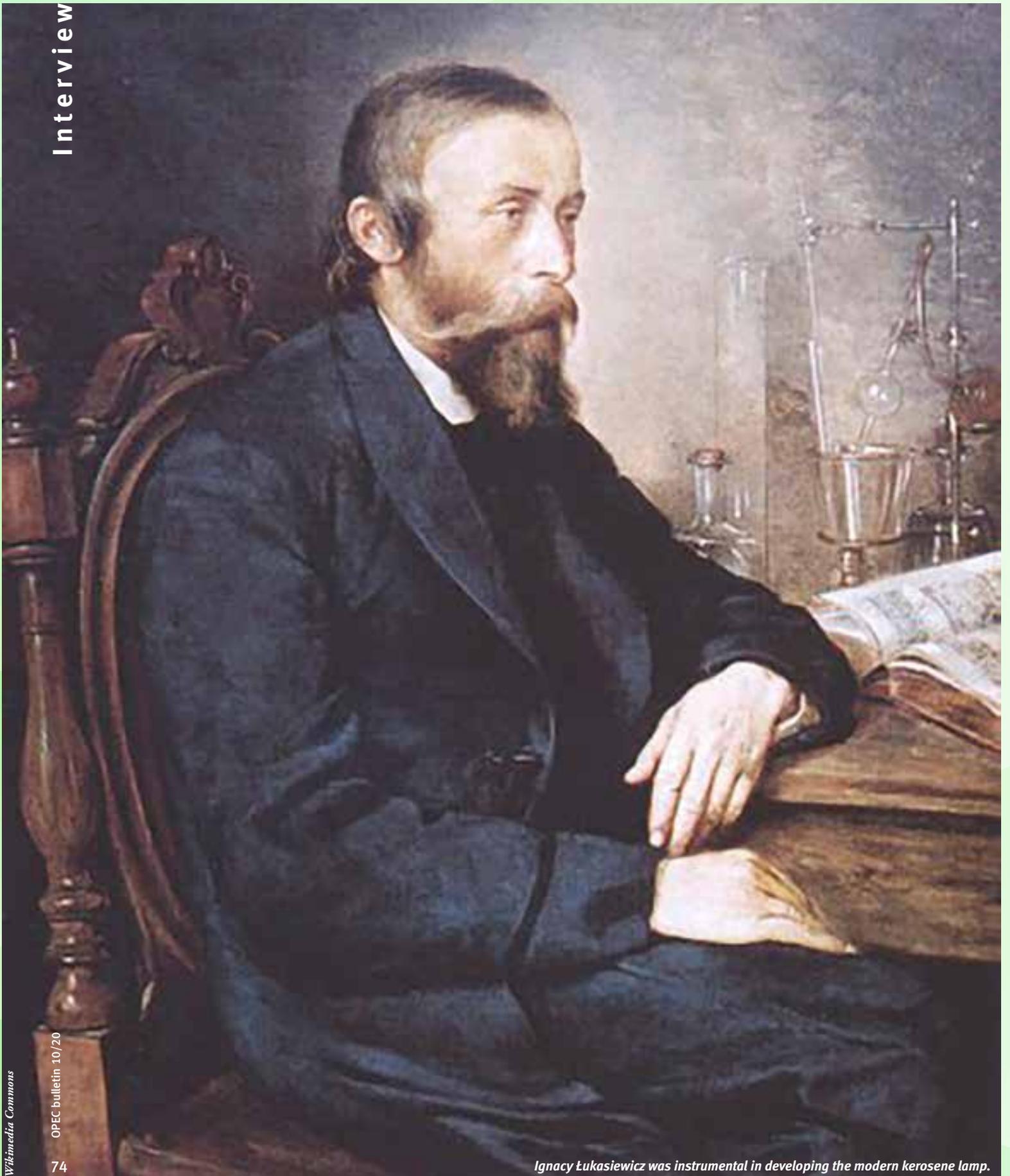
You have written extensively about OPEC for many decades, befriended many of the key figures in our Organization’s history. What do you find most interesting about analyzing OPEC?

For decades OPEC has been central in one way or the other to the global oil market. Understanding that through different eras and different pressures and shifting geopolitics has been critical. As the world has changed, so has OPEC and the perception of OPEC, and it is now, as Secretary General Barkindo demonstrates, an important part of the global energy dialogue and the wider dialogue about the world economy and climate. Also of great interest is how it operates as an international organization with diverse members, which interact differently with non-members. As a researcher, I, like my colleagues at IHS Markit, have great respect for OPEC as a research institution that contributes to understanding the always-changing dynamics of global energy.

Do you have a message to OPEC for its 60th birthday?

A half decade after the Paris climate agreement, we are now in what, in *The New Map*, I call the ‘post-Paris’ energy era. OPEC will have a very important role in this era in bringing the perspective of the producers to a complex global agenda, helping its members address issues around emissions and diversification, and conveying the challenges facing the majority of the world’s population that live in the developing world and their need for economic progress and better health.





Ignacy Łukasiewicz was instrumental in developing the modern kerosene lamp.

The man who helped ‘illuminate the darkness of the night’

A book on Ignacy Łukasiewicz, who was instrumental in developing the modern kerosene lamp, provides a fascinating – and often overlooked – history of Poland’s role in the early years of petroleum. The OPEC Bulletin interviews Anna Kozicka-Kołaczkowska, one of the authors.

A *Prometheus on a Human Scale* — Ignacy Łukasiewicz* tells the story of the 19th-century Polish pharmacist who is credited with the development of the modern kerosene lamp and refining techniques that spurred early advances in the oil industry.

Łukasiewicz and his colleagues are also known for developing the world’s first oil mine in Bóbrka, in the Podkarpacie region of modern Poland, which is still operational today.

This authoritative book on Łukasiewicz also digs into the contributions that he made to the industry in the 19th century. It presents a portrait of his involvement in politics, social activism and entrepreneurial enthusiasm that spurred the development and deployment of technology which would help define the petroleum industry in his homeland and beyond.

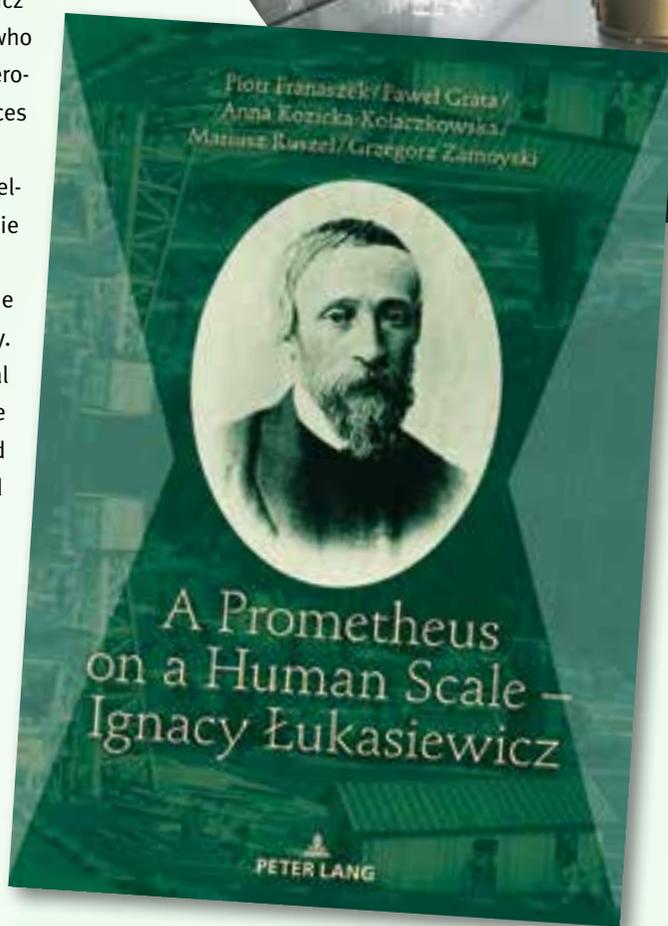
By the turn of the 20th century, Galicia, then an autonomous kingdom within the Austro-Hungarian Empire, was one of the world’s leading oil-producing regions.

A Prometheus on a Human Scale also explores some of the colourful figures in the region’s petroleum industry, including Witold Zglenicki, who worked in Azerbaijan and became a friend of the Swedish chemist and entrepreneur Alfred Nobel in Baku. The book describes how Zglenicki, a geologist and engineer, helped pioneer offshore drilling in the Caspian Sea and became a philanthropist in his own right, known as the ‘Polish Nobel’.

* *A Prometheus on a Human Scale — Ignacy Łukasiewicz*. By Piotr Franaszek, Paweł Grata, Anna Kozicka-Kołaczkowska, Mariusz Ruszel and Grzegorz Zamoyski (Peter Lang, Berlin, 2019).



Above:
Ignacy Łukasiewicz’s lamp on display at the pharmacy in Lviv, now part of Ukraine.



© Peter Lang



Above: Crude oil in the Franek well.

Left: Franek well.



Above: Oil tanks.

Left: Barrels of oil.

Anna Kozicka-Kończakowska (pictured), a graduate of the Jagiellonian University in Kraków, Poland, is a co-author of A Prometheus on a Human Scale. She has written extensively on the energy sector, including for the Ignacy Łukasiewicz Energy Policy Institute in Poland. She was interviewed by the OPEC Bulletin about the book and Poland's importance in the history of the oil industry.



Question: Poland is known today for being a major coal producer. Yet at the turn of the 20th century, it was one of the world's important oil producers, alongside the US and Russia. What were Poland's major contributions to the modern oil industry?

Answer: Crude oil has for ages been depicted in the most ancient books and other sources. People used it for multiple purposes, from lubrication and fur tanning to medicine and as bitumen. However, up until the mid-19th century it was rarely used to produce light or other forms of energy, due to its volatility and heavy fumes emitted during the burning process. The prestigious Justus von Liebig Institute in Munich described a sample of crude oil as 'fat with no value' in 1850.

Everything changed after the invention of the scientific method of distilling crude oil. It led to the discovery of kerosene, often also called naphtha. Kerosene burns with a bright, calm and non-explosive flame. This paved the way for crude oil to be used in a way as we know it today.

On December 2, 1852, Ignacy Łukasiewicz and Jan Zeh, two colleagues from the Under the Golden Star pharmacy in Lviv, registered a patent for crude oil distillation at the Vienna Patent Office. The process allowed for separation of crude oil into kerosene and other light and heavier fractions.

But for Łukasiewicz, this was just the beginning. In 1854, he dug the first oil wells in Bóbrka near Krosno in

the Podkarpacie region of Poland. He also established what was probably the first world's oil exploration and production company. At this time, the famous Edwin 'Colonel' Drake worked as a train conductor until he ventured to look for oil starting around 1858 in Pennsylvania.

Ignacy Łukasiewicz is well known in Poland for his early innovations like the safe kerosene lamp. Tell us more about his innovations.

Affordable energy for all was the grand vision of Łukasiewicz. Kerosene first distilled by Łukasiewicz had potential, but it required a lamp safe to use. Łukasiewicz, in cooperation with Adam Bratkowski, a tinsmith, developed a prototype of such a lamp by placing a glass chimney in a metal cylinder, inside which burned an adjustable wick. Kerosene was now able to illuminate houses and all indoor spaces. The invention passed its test on July 31, 1853, by illuminating the first night emergency surgery in the hospital in Lviv.

Your book describes some of the early advances in drilling. How did it come about that the Podkarpacie region became a leader in innovation and technology in the early decades of the oil industry?

Łukasiewicz was a great community and industry leader. He was a serious entrepreneur and an innovator. The world's first oil patch thrived and succeeded despite turbulent political and economic circumstances.

At the end of the 19th century, Podkarpacie was the world's third-largest oil producer. People

used to say that the roads in Krosno were paved with Łukasiewicz's gold.

Łukasiewicz and his team of engineers continued to innovate. They kept modernizing drilling methods and tools. They adopted steam engines early on. This extraordinary man shared, *pro bono*, the technical information, insights and experience related to oil exploration, development, production and refining.

He was equally eager to educate workers from Bóbrka and the surrounding region in south-east Poland, as well as elite petroleum engineers of the Standard Oil Co. Supposedly, the latter never understood why he refused to take money for the training. But for Łukasiewicz, the goal was to illuminate the darkness of the night.

His employees also studied methods in the US. One of them, Adolf Jabłoński, later published a book called *Kopalnictwo Naftowe (Oil mining)* that described known methods of oil drilling and production. The Łukasiewicz refining school was best known for the supreme quality of its petroleum products. His methods continued to be in use until 1914.

For these achievements, Łukasiewicz received honours from Austrian Emperor Franz Josef and the Pope.



Oil equipment on display at the museum.



Barrel for retail sale of kerosene.

Moreover, he was celebrated at industrial fairs from Vienna to Lviv. As a very humble man, he was more embarrassed than flattered by all these honours.

In the Ignacy Łukasiewicz Museum of the Oil & Gas Industry in Bóbrka, the public can visit a lot of old wells, facilities, equipment, tools, buildings and documentation that have been preserved from these pioneer times. It includes the oil well called 'Franek', one of the first built by Łukasiewicz. This well is still actively producing today! Clearly not in a commercial quantity, but it is surely one of the world's oldest oil wells in operation.

The geologist Witold Zglenicki, whom your book describes as the 'Polish Nobel', is another important figure in the oil history. Tell us more about his contributions.

At the dawn of 20th century, after studying in Warsaw and St Petersburg, Witold Zglenicki led the quality-control office of metals and precious stones in Baku.

At the same time, as a cartographer, geologist and mining engineer, he was venturing into oil. Zglenicki

pioneered a prototype of an offshore drilling platform at a time when the idea of oil being found under the seabed was considered absurd. He mapped oil fields under the Caspian Sea and divided oil plots. He developed a geological map of the entire Apsheron Peninsula, calculated the geological reservoirs and mapped oil fields in the Bay of Bibi-Ejbat. His maps were used throughout the 20th century.

Similarly to Alfred Nobel, he bequeathed his oil wealth to support scientific and social institutions and this gained him the nickname of the 'Polish Nobel'. Beneficiary institutions in Azerbaijan and Poland saw fabulous income from several dozen oil plots for a decade, which unfortunately were abruptly taken away with the emergence of the Soviet Union.

Poland: 150 years of oil history

Poland today is known as one of the top coal producers globally. Yet the country has been producing oil and gas for more than 150 years and has one of the world's longest histories of upstream operations, according to the Polish Geological Survey.

At the start of the 20th century, Poland was a leading oil producer, alongside the US and Russia. Today it produces around 20,000 b/d and has total proven crude oil reserves of around 173 million barrels.

The country had six active rigs in 2019, according to OPEC's Annual Statistical Bulletin (ASB). The ASB also estimates that the country has natural gas reserves of around 75 billion standard cubic metres.

All photographs taken at the Museum of Oil and Gas Industry Ignacy Łukasiewicz in Bóbrka (courtesy Anna Kozicka-Kolaczowska).

Barrels of kerosene.



Models of drilling rigs.



OPEC bulletin 10/20



IR Iran's NIOC signs several deals with local universities and research centres



IR Iran's Minister of Petroleum, Eng Bijan Namdar Zanganeh.

As part of its continuous efforts to enhance oil recovery, the National Iranian Oil Company (NIOC) has announced the conclusion of 13 major oil and gas extraction research contracts with local universities and research centres.

The value of the signed contracts amounts to €35 million.

The agreements were signed in a ceremony held in the presence of IR Iran's Minister of Petroleum, Eng Bijan Namdar Zanganeh.

The new agreements constitute the continuation of a key project between the national oil company and Iranian universities and research centres that commenced in 2013, according to Iran's *Shana*. They aim to explore and examine strategies to enhance oil recovery in oil fields.

Among the universities selected to participate in the project are: Tehran University; the University of Petroleum Industry; the Research Institute of Petroleum Industry (RIPI); Sharif University of Technology; Amirkabir University of Technology; Sahand Tabriz University; Shiraz University; Islamic Azad University; Ferdowsi University of Mashhad; Science and Technology University; and Isfahan University of Technology. 



UAE continues to expand its renewable energy portfolio



The United Arab Emirates has announced its intention to further enlarge its capacity of renewable energy as part of its ambitious plans to generate half of the country's needs for energy from clean energy sources by 2050.

The development of solar and nuclear power, as well as their addition to the energy grid, has played a key role in this advancement.

In an UN General Assembly virtual meeting, Awaidha Murshed Ali Al Marar, Chairman of the Abu Dhabi Department of Energy (DoE), said: "You will be surprised that we will exceed the current target," adding that the UAE accounts for around 70 per cent of all renewable energy projects in the GCC region.

Al Marar highlighted that the OPEC Member ranks second or third globally in respect to investment dedicated to solar power plants.

According to the National, a leading Emirati

newspaper, the UAE has boosted its efforts across the country to increase its capacity of renewable energy, adding that a key solar energy project was announced in April with a capacity of two gigawatts, which is planned to be developed in Abu Dhabi.

Al Marar also emphasized the UAE's efforts to tackle carbon dioxide emissions as part of its commitment to the UN's Sustainable Development Goals.

He said: "We have achieved affordable energy and water for 100 per cent. We have achieved almost 98.5 per cent with regard to fuel for cooking."

"The issue of carbon dioxide, we are still on the border average. But I can tell you good news, that when the nuclear plant is fully operated and the new [solar plant] Al Dhafrah is in operation as well, that will stabilize carbon dioxide target emissions," the Chairman added.

The UAE is also a key producer of crude oil. 

CALL FOR PAPERS



Special Edition — OPEC 60th Anniversary

Submission deadline: October 31, 2020

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.

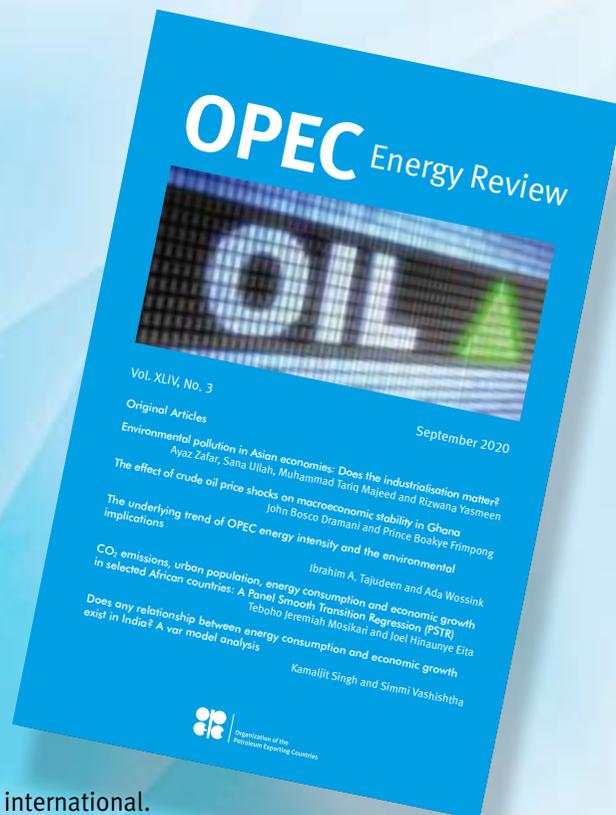
The OPEC Energy Review welcomes submissions from academics and other energy experts.

Submissions should be made via Scholar One at: <https://mc.manuscriptcentral.com/opec> (registration required).

A PDF of "Author Guidelines" may be downloaded at Wiley's OPEC Energy Review page at:

[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1753-0237/homepage/ForAuthors.html](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1753-0237/homepage/ForAuthors.html)

All correspondence about subscriptions should be sent to John Wiley & Sons, which publishes and distributes the quarterly journal on behalf of OPEC (see *inside back cover*).



OPEC Energy Review

Chairman of the Editorial Board: Mohammad Sanusi Barkindo, Secretary General

Editorial Board: Dr Ayed S Al-Qahtani, Director, OPEC Research Division

General Academic Editor: Professor Sadek Boussena

Executive Editor: Hasan Hafidh



A major port infrastructure project in Togo is driving regional competitiveness and economic growth

Deep water development

Shutterstock

Togo is a relatively small West African country on the Atlantic coast, bordered by Ghana, Benin and Burkina Faso. During recent years, it has made progress on reducing poverty and improving key health and education measures. The government of Togo's National Development Plan (2018–22) aims, among other things, to strengthen economic infrastructure and create jobs on a 'massive' scale.



The OPEC Fund has financed socio-economic development in Togo for more than four decades. A good example of the organization's efforts to support job creation and economic growth is provided by the Lomé Container Terminal (LCT) project. The OPEC Fund partnered with the African Development Bank and other development actors* to finance the LCT, the total cost of which is estimated at €350 million. It is one of the largest foreign direct investments by the private sector in Togo's history.

Togo's Port of Lomé is one of the few natural deep-water ports in West and Central Africa. The funding has helped develop a new transshipment container at the port that also supports import and export traffic. The terminal is currently building up handling capacity and when fully operational will have an annual capacity of around 2.2 million container units. It will enable shipping lines to deploy the largest container vessels in West and Central Africa.

"The OPEC Fund contributed a private sector loan of \$30 million to this essential infrastructure project," says OPEC Fund Private Sector Officer Cynara Salmans. "The terminal plays a critical role in promoting growth and regional integration. Hundreds of jobs have already been created during the construction and operational phases and, by boosting Togo's competitiveness, the project will generate sustainable jobs and increasing opportunities into the future."

"We expect this project to encourage other port facilities in the region to become more efficient and to improve their infrastructure to remain competitive," continues Salmans. "So the impact will be multiplied. LCT brings worldclass port operation and management expertise to Togo, which is, in turn, improving the skills of the local workforce. And more generally, the new port is increasing the government of Togo's revenues through traffic-related tax payments."

New and upgraded infrastructure — one of the objectives of Sustainable Development Goal (SDG) 9 — is a vital ingredient to the African continent's continued development. The LCT is just one of many examples of how private investment provides an important contribution to the SDGs and to international development more generally. 

* IFC is the lead arranger on the financing mobilized from a consortium including the OPEC Fund, as well as the African Development Bank, Germany's DEG — Deutsche Investitions- und Entwicklungsgesellschaft mbH, FMO and France's PROPARCO.



About the OPEC Fund

The OPEC Fund for International Development (the OPEC Fund) works in cooperation with developing country partners and the international development community to stimulate economic growth and social progress in low- and middle-income countries around the world. The organization was established by the Member Countries of OPEC in 1976 with a distinct mandate: to drive development, strengthen communities and empower people.

“Achieving the Sustainable Development Goals requires actors to work together at scale across public and private sectors.”

Cynara Salmans

OFFICER STORIES:

Up close with the OPEC Fund’s Cynara Salmans

Cynara Salmans joined the OPEC Fund in 2018 after previously working with European development finance institutions Deutsche Investitions- und Entwicklungsgesellschaft (DEG) and the Dutch entrepreneurial development bank (FMO). She is a specialist in private sector financing.

“Achieving the Sustainable Development Goals requires actors to work together at scale across public and private sectors,” says Salmans. “It’s not simply a case of mobilizing increased amounts money. We need to improve how and private actors interact to achieve measurable results. This is something we’re focused on in the OPEC Fund we will be sharing our stories in the weeks and months ahead.”

The OPEC Fund private sector loan contribution:

\$30m



Visit our website

www.opec.org



Assessment of the global economy in 2020 and 2021

September 2020

The global economy has witnessed unprecedented upheaval in 2020. After a tentative pick-up at the start of the year, the emergence of the COVID-19 pandemic led to broad-based economic dislocation across the world and in all sectors. The lockdown measures implemented brought the global economy to an almost stand-still between mid-March and mid-May. This is reflected in the sharp decline in global economic activities, which in 1H20 heavily impacted the energy market, with huge demand drops and crude oil prices hitting historical lows in April. Since mid-May, lockdown measures have gradually eased. Curbed demand and forced 1H20 savings, in combination with exceptional fiscal and monetary stimulus, are now supporting a strong 2H20 global economic recovery, although this will not compensate for the large decline in 1H20.

As a result, 2020 global GDP is forecast to decline by 4.1 per cent. China is expected to be the only major economy showing positive growth this year, although the recovery in the US and Euro-zone appears to be gaining traction. This momentum is forecast to carry over into 2021, when global growth is forecast to reach 4.7 per cent. Given the ongoing global economic challenges, the oil sector recovery, supported by the efforts of OPEC and non-OPEC oil-producing nations participating in the 'Declaration of Cooperation' (DoC) to stabilize the market, is vital in fuelling global economic developments.

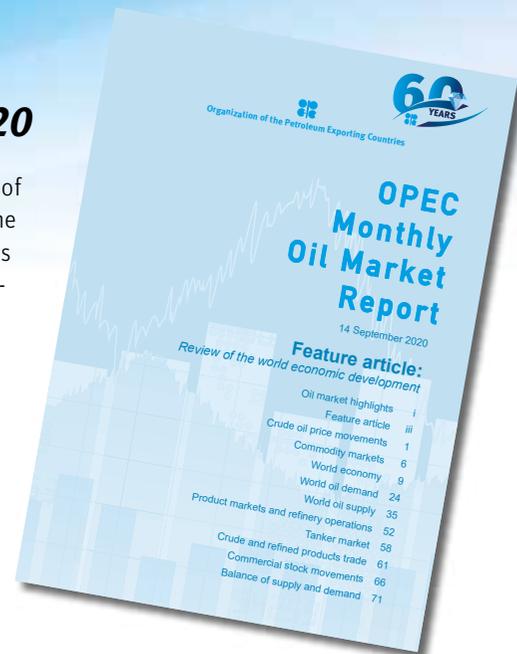
While the forecast considers no further deterioration of the COVID-19 situation, a lasting solution to the pandemic — a natural end or a vaccine — will provide an upside to the current forecast. Major risks that could dampen the current growth forecast include high-debt levels, ongoing geopolitical risks, trade-related challenges, and a hard Brexit.

In terms of geographical breakdown, the OECD group of countries' saw an unprecedented 9.8 per cent q-o-q drop in 2Q20, following a 1.8 per cent q-o-q GDP decline in 1Q20. Since lockdown measures eased, however, a recovery has become visible. Labour market improvements and a recovery in consumption suggest the US economy may suffer less than others in the OECD, despite the large number of infections. The US GDP is forecast to contract by 5.1 per cent in 2020,

followed by growth of 4.1 per cent in 2021. The Euro-zone's economy is gaining some momentum, but it is still forecast to contract by 7.7 per cent in 2020, before an expansion of 4.3 per cent in 2021. Japan is forecast to contract by 5.5 per cent in 2020, but the 2021 rebound is anticipated to gain less traction than others in the OECD, with growth at 3.2 per cent.

In the emerging economies, China has managed to minimize the impact of COVID-19, leading to expected growth of 1.8 per cent in 2020 and 6.9 per cent in 2021. India's economy has been significantly impacted, not only by lockdown measures, but by continuing uncertainty amid the rise of COVID-19 infections. India's GDP is forecast to decline by 6.2 per cent in 2020 but recover to 6.8 per cent growth in 2021. Brazil's 2020 GDP growth is forecast to decline by 6.5 per cent and grow mildly by 2.4 per cent in 2021, impacted by ongoing domestic challenges and external trade. Russia's economy is forecast to decline by 4.9 per cent in 2020, but then benefit from the oil market recovery with expected growth of 2.9 per cent in 2021.

The effect of the COVID-19 outbreak on economic growth has significantly impacted oil demand growth in 1H20. This has led to a projected global oil demand decline of 9.5 million barrels/day (m b/d) for 2020, followed by growth of 6.6m b/d in 2021. Non-OPEC supply is expected to decline by 2.7m b/d in 2020, while growth of 1.0m b/d is anticipated for 2021. The impact of COVID-19 related developments on already fragile global economic conditions remains challenging and will require coordinated global policy action from all market participants, including the efforts undertaken by OPEC and non-OPEC oil producers participating in the DoC.



MOMR ... oil market highlights

September 2020

Crude oil price movements – Crude oil spot prices extended gains in August, reaching a six-month high. The OPEC Reference Basket (ORB) value rose in August, increasing more than other spot references. On a monthly basis, the ORB increased by \$1.77 to \$45.19/barrel, up by 4.1 per cent. Crude oil futures prices rose further in August by about four per cent m-o-m, supported by positive market sentiment, steadily improving market fundamentals, positive economic indicators, and a weaker US dollar. On a monthly average, the ICE Brent front month rose by \$1.80, or 4.2 per cent, to average \$45.02/b, while NYMEX WTI increased by \$1.62, or 4.0 per cent, to average \$42.39/b. The price structures of the three main futures markets moved into a deeper contango. Hedge funds and other money managers showed no clear positioning trend in August amid the uncertain outlook on economic and oil demand recovery. The sweet/sour crude differential remained narrow in all markets.

World economy – The global economic growth forecast is revised down to -4.1 per cent for 2020 from -4.0 per cent in the previous month, amid further slowing momentum, especially in emerging and developing economies. GDP growth in 2021 remains unchanged at 4.7 per cent. The US is revised up slightly and forecast to contract by 5.1 per cent in 2020, followed by growth of 4.1 per cent in 2021. The Euro-zone is revised up as well and forecast to contract by 7.7 per cent in 2020, but grow by 4.3 per cent in 2021. Japan is revised down and forecast to contract by 5.5 per cent in 2020 and recover to 3.2 per cent in 2021. China's 2020 GDP growth remains at 1.8 per cent followed by growth of 6.9 per cent in 2021. India's 2020 growth forecast is revised down further from -4.6 per cent to -6.2 per cent, followed by growth of 6.8 per cent in 2021. Brazil's 2020 GDP growth is revised up to -6.5 per cent, before rebounding to 2.4 per cent in 2021. Russia's 2020 forecast is revised down to -4.9 per cent, while it is expected to recover in 2021 with a level of 2.9 per cent. In addition to COVID-19-related developments, numerous uncertainties remain, including high debt levels, inflation, ongoing geopolitical risks, trade-related challenges, as well as the possibility of a hard Brexit.

World oil demand – For 2020, the global oil demand contraction is revised down further by 400,000 b/d, now contracting by 9.5m b/d, to average 90.2m b/d. In the OECD, demand is revised higher by around 100,000 b/d due to lesser-than-expected declines in all sub-regions during 2Q20. In the non-OECD, the 2020 oil demand outlook is revised lower by around 500,000 b/d, due to weaker oil demand performance in Other

Asia, particularly in India. Turning to 2021, the negative impact on oil demand in Other Asia is projected to spill over into 1H21. At the same time, a slower recovery in transportation fuel requirements in the OECD will limit oil demand growth potential in the region. Additionally, risks remain elevated and skewed to the downside, particularly in relation to the development of COVID-19 infection cases and potential vaccines. Furthermore, the speed of recovery in economic activities and oil demand growth potential in Other Asian countries, including India, remains uncertain. As such, 2021 world oil demand is now forecast to grow by 6.6m b/d, some 400,000 b/d lower compared with the previous month's assessment, to average 96.9m b/d.

World oil supply – The non-OPEC liquids production forecast in 2020 is revised up by 360,000 b/d, due to a higher-than-expected recovery in the US in June, which added 1.0m b/d m-o-m, and is now contracting by 2.7m b/d, y-o-y. A production recovery has already begun in the US, Canada and Latin America in 3Q20, although Hurricane Laura partially impacted production in the US Gulf of Mexico (GoM). The main declines in 2020 are expected to be in the US with 1.0m b/d, Russia with 1.1m b/d and Canada. The non-OPEC liquids production forecast for 2021 is adjusted up by 371,000 b/d and now is expected to grow by 1.0m b/d. The US with 400,000 b/d, Canada, Brazil and Norway will be the main drivers of growth. OPEC NGLs are estimated to decline by 100,000 b/d, y-o-y, in 2020, with the preliminary 2021 forecast indicating growth of 100,000 b/d, averaging 5.2m b/d. OPEC crude oil production in August increased by 760,000 b/d m-o-m to average 24.05m b/d, according to secondary sources.

Product markets and refining operations – In August, refinery margins globally witnessed a trend reversal and lost ground due to a growing surplus of products, as seen by higher product inventory levels. Consequently, product markets at the top and middle sections of the barrel weakened, particularly in Europe, where refining economics hit record-breaking lows and remained barely positive, despite the positive performance at the bottom of the barrel witnessed in all regions.

Tanker market – Dirty tanker rates in August settled at the lowest levels seen since the end of June, and are likely to remain at these new levels for the coming months, amid ample tonnage and sluggish demand for tankers. Floating storage continued to unwind, removing support to the high rates observed in recent months. Clean tanker freight rates picked up from the poor

performance seen in the previous month, but remained below levels seen in the same month last year due to continued sluggish demand for product trade flows.

Crude and refined products trade – Preliminary data shows US crude imports declined further in August, averaging 5.5m b/d, approaching the quarter-century low seen in April of this year. US crude exports edged up last month, turning positive after five months of declines, to average 2.9m b/d, well below the peak of 3.7m b/d seen in February 2020. The latest monthly data showed continued strong flows of US crude to China in June, down from the massive 1.3m b/d seen in May but still strong at 700,000 b/d. China crude imports averaged the second-highest on record at 12.1m b/d in July, down from a record high of 13.0m b/d in the previous month. Customs data shows a further scale-back in crude imports in August to around 11.2m b/d, but still 13 per cent higher than last year's levels. Product imports fell sharply in July, down from an all-time high in May 2020, as naphtha and fuel oil imports contracted. Product exports edged lower, with declines in gasoil and jet fuel outweighing an increase in gasoline. India crude inflows in July fell below 3.0m b/d for the first time in more than a decade, following the sixth consecutive monthly decline. The decline came as state-run refiners maintained runs at 75 per cent of capacity compared to 90 per cent in June. Preliminary tanker tracking data points to a slight recovery in crude imports in August. Japan's crude imports picked up in July after bottoming out at the lowest point in more than a decade the month before.

Commercial stock movements – Preliminary July data showed that total OECD commercial oil stocks fell by 4.5m b m-o-m. At 3,231m b, they were 273.7m b higher than the same time a year ago and 260.6m b above the latest five-year average. Within the components, crude stocks went down by 9.7m b m-o-m, while product stocks increased by 5.3m b m-o-m. OECD crude stocks stood at 95.6m b above the latest five-year average, while product stocks showed a surplus of 165.1m b. In terms of days of forward cover, OECD commercial stocks fell by 1.2 days m-o-m in July to stand at 72.2 days. This was 10.8 days above the July 2019 level and 9.9 days above the latest five-year average.

Balance of supply and demand – Demand for OPEC crude in 2020 is revised down by 700,000 b/d from the previous month to stand at 22.6m b/d, around 6.7m b/d lower than in 2019. Demand for OPEC crude in 2021 is revised down by 1.1m b/d from the previous month to stand at 28.2m b/d, around 5.5m b/d higher than in 2020. 

The feature article and oil market highlights are taken from OPEC's Monthly Oil Market Report (MOMR) for September 2020. Published by the Secretariat's Petroleum Studies Department, the publication may be downloaded in PDF format from our Website (www.opec.org), provided OPEC is credited as the source for any usage. The additional graphs and tables on the following pages reflect the latest data on OPEC Reference Basket and crude and oil product prices in general.

Winter oil market outlook

October 2020

So far, product markets in 2020 have suffered tremendously due to the demand contraction triggered by the COVID-19 pandemic. Lockdown measures have drastically reduced fuel consumption, particularly for jet fuel, as the air transportation sector was hit hardest. In response, global refinery intakes in the first three quarters of the year have remained some 7.5 million barrels/day, on average, below the same period a year earlier. In fact, refinery intakes plummeted to historic lows of 68.7m b/d in May 2020, down sharply from the pre-pandemic level of 83.1m b/d in December 2019. Since then, the easing of lockdowns along with improvements in road and air transport activities, linked to the summer season, have only provided limited improvement, with refinery throughputs still averaging below year-ago levels.

On a regional basis, almost all products in the US have seen stark declines in demand, on account of the rampant spread of COVID-19, mainly in gasoline, distillates and jet fuel. However, naphtha saw some support, as the petrochemical sector resorted to a more naphtha-based diet. In Europe, following a short-lived recovery over the summer months, COVID-19 infections are on the rise again, with Spain, France and the UK being among the most affected countries. Currently, European governments are re-introducing and intensifying lockdown measures to reduce the number of cases and control hospitalization rates. On the other hand, the gasoil market has benefitted from relatively healthy demand from the trucking and freight sectors.

In Asia, the picture was mixed. In China, better-than-expected growth was observed in recent months across all product categories. Meanwhile in India, the worsening situation with regard to the spread of the pandemic took a toll on oil demand in the country, impacted by a steep drop in diesel and transportation fuel requirements. Despite this, refinery runs in Asia remained high over the summer months, in order to take advantage of cheap crude oil prices.

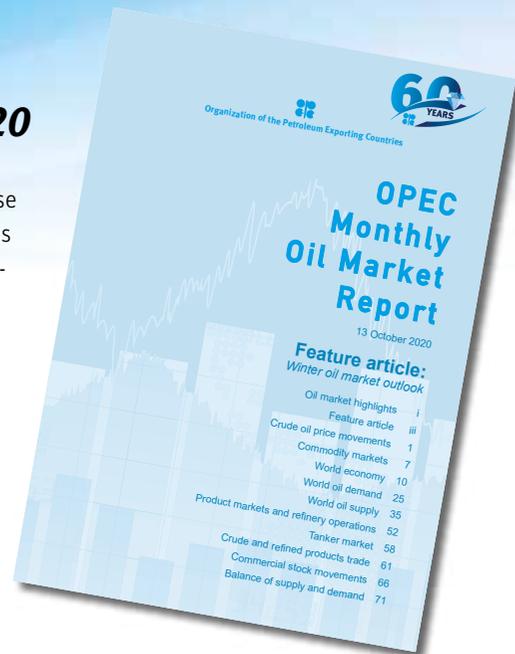
Looking ahead, heating oil consumption in the US

is expected to increase in the coming months as more people continue to work from home. In addition, prospects for a colder-than-normal winter could add support. However, teleworking will negatively impact transportation fuels. Nevertheless, product stocks remain exceedingly high, which will pressure distillate margins. Moreover, the switch to winter-grade gasoline requires additional volumes of naphtha-based blending components.

In Europe, the resurgence of the pandemic will most likely continue to weigh heavily on jet fuel and gasoline markets, while distillate markets will continue to see support from high levels of heavy trucking and forecasts for a colder winter. However, this is only expected to provide limited recovery and levels are still projected to remain well below a year ago.

In Asia, projections for a colder winter are expected to boost kerosene and LPG demand in the region. However, overall product imbalances will most likely grow, as overall fuel exports to other regions, particularly the OECD, are expected to decline. This could result in increasing product stock overhangs and eventually prompt refiners to reduce intakes.

Overall, global refinery throughput will continue to recover slowly, with the near term market environment expected to remain relatively weak, due to the large overhang in middle distillate stocks. The ongoing regional resurgence in COVID-19 infections will continue to negatively impact market sentiment until such a time as a vaccine is made available. Nevertheless, the predicted colder winter could lend some upside in the Northern Hemisphere.



MOMR ... oil market highlights

October 2020

Crude oil price movements — Spot crude prices settled significantly lower in September, after four consecutive months of gains. The OPEC Reference Basket (ORB) fell by \$3.65, or 8.1 per cent m-o-m, to \$41.54/b, while the year-to-date averaged \$40.62/b. Crude oil futures prices on both sides of the Atlantic declined during September, for the first time since April. ICE Brent was down 7.0 per cent m-o-m, averaging at \$41.87/b, while NYMEX WTI dropped 6.5 per cent m-o-m, settling at \$39.63/b. The Brent-WTI spread continued narrow at just over \$2/b. All three futures market structures remained in contango during September, with ICE Brent and NYMEX WTI futures markets moving into a deeper contango, while the contango in DME Oman eased slightly. Hedge funds and other money managers were less bullish on the oil price outlook in September, and were net sellers of crude in both Brent and WTI.

World economy — The global economic growth forecast remains at minus 4.1 per cent for 2020, while for 2021 it is revised downward to 4.6 per cent, from 4.7 per cent in last month's assessment. In 2020, the US economic growth forecast is revised up to minus 4.2 per cent y-o-y, followed by a downwardly revised growth of 3.9 per cent in 2021. The Euro-zone's economic growth forecast in 2020 remains at minus 7.7 per cent, followed by downwardly revised growth of 4.2 per cent in 2021. Japan economic growth is revised down for both 2020 and 2021, and is now forecast to contract by 5.7 per cent in 2020, then recover to growth of 2.8 per cent in 2021. China's economic growth in 2020 is revised up to 2.0 per cent, followed by growth of 6.9 per cent in 2021. India's economic growth forecast in 2020 is revised down further to minus 7.5 per cent, followed by growth of 6.8 per cent in 2021. Brazil's economic growth in 2020 is revised up to minus 6.2 per cent, before rebounding to growth of 2.4 per cent in 2021. Russia's economic growth forecast in 2020 remains unchanged, at minus 4.9 per cent, but is expected to recover in 2021 to grow by 2.9 per cent.

World oil demand — In 2020, world oil demand is estimated to decline by 9.5m b/d y-o-y, relatively unchanged from last month's assessment, reaching a level of 90.3m b/d. In the OECD, demand growth is revised slightly lower by around 60,000 b/d in 2020. This downward revision accounts for lower expectations for transportation fuel consumption in the US and parts of Europe in 2H20 following a weak summer driving season, which has more than offset a less-than-expected decline in 1H20 data, due to steady petrochemical feedstock demand in the US and increased heating fuel restocking in

Europe. In the non-OECD, oil demand in 2020 was adjusted slightly higher, by around 50,000 b/d m-o-m, due to better-than-expected demand from China. In 2021, world oil demand is revised lower by 80,000 b/d, compared to last month's assessment, now forecasting a growth of 6.5m b/d, reaching a level of 96.8m b/d. This downward revision mainly reflects lower economic growth outlook for both the OECD and non-OECD regions, compared to last month's forecast.

World oil supply — The non-OPEC liquids supply forecast in 2020 is revised up by 310,000 b/d from the previous month's assessment, mostly due to a higher-than-expected recovery in US liquids production. Non-OPEC liquids supply is now estimated to contract by 2.4m b/d y-o-y, to average 62.8m b/d. Oil supply in 2020 is forecast to decline mainly in Russia with 1.1m b/d, US with 700,000 b/d, Canada, Kazakhstan, Colombia, Malaysia, and Azerbaijan, while it is projected to grow in Norway, Brazil, China, Guyana and Australia. The non-OPEC liquids production forecast for 2021 is revised down by 110,000 b/d, mainly for the US, and is now expected to grow by 900,000 b/d, to average 63.67m b/d. The main drivers for supply growth are expected to be the US with 300,000 b/d, Canada, Brazil and Norway. The majority of this growth represents a recovery of production from 2020, rather than new projects. OPEC NGLs in 2020 are estimated to decline by 100,000 b/d y-o-y, and forecast to grow by 100,000 b/d y-o-y in 2021, to average 5.2m b/d. OPEC crude oil production in September decreased by 50,000 b/d, m-o-m, to average 24.11m b/d, according to secondary sources.

Product markets and refining operations — In September, refining margins showed mixed results. In the Atlantic Basin, product markets benefited from refinery run cuts, despite weakness coming from the middle of the barrel due to high gasoil availability, amid more stringent lockdown measures, as COVID-19 infection rates continued rising. In the US, the landfall of Hurricane Laura in early September affected several refinery operations, while maintenance-related shutdowns in Europe led to a relatively tighter gasoline market in both regions. In Asia, growing product surplus continued to pressure product markets, outweighing all gains from healthy gasoline demand in India, but refinery intakes within the region remained strong.

Tanker market — Dirty tanker rates remained weak in September, as tonnage demand was weak and the unwinding of floating storage increased availability. After three spectacular quarters in 2020, ship owners are expecting a

slow fourth quarter for tanker demand and an uncertain outlook for the coming year. Clean tanker rates have seen some pick up as the easing of COVID-19 restrictions has revived some product trade flows.

Crude and refined products trade — Preliminary data shows that US crude imports continued to slide, averaging 5.2m b/d in September, the lowest since 1992. US crude exports in September rebounded after falling the month before to average 3m b/d. Japan's crude imports showed a recovery, averaging 2.4m b/d in August, up from a low of 1.9m b/d in June 2020, but well below the recent 3.1m b/d peak seen in March. Product imports also remained relatively healthy in August, up 11 per cent m-o-m. Naphtha inflows increased, as refiners prefer imports over increasing refinery runs amid high distillate stocks. China's crude imports have come back down from the higher levels seen in June and July, averaging 11.2m b/d in August. Product imports improved, but remained below the inflated levels seen in May and June, averaging 1.3m b/d in August. Product exports returned above 1m b/d in August, with gasoil and fuel oil outflows increasing from the low levels seen the month before. Following seven months of consecutive declines, India's crude imports increased in August, averaging 3.6m b/d, as refiners returned to the market after drawing down high inventories in the previous two months. However, refinery runs and product demand remain weak, amid continued lockdown measures.

Commercial stock movements — Preliminary August data showed that total OECD commercial oil stocks fell by 20.7m b, m-o-m. At 3,204m b, they were 226.8m b higher than the same time one year ago and 219.3m b above the latest five-year average. Within the components, crude stocks declined by 30.2m b m-o-m, while product stocks increased by 9.4m b, m-o-m. OECD crude stocks stood at 78.1m b above the latest five-year average, while product stocks exhibited a surplus of 141.3m b. In terms of days of forward cover, OECD commercial stocks fell by 1.3 days, m-o-m, in August to stand at 71.9 days. This was 9.6 days above the August 2019 level, and 9.1 days above the latest five-year average.

Balance of supply and demand — Demand for OPEC crude in 2020 is revised down by 300,000 b/d from the previous month's assessment to stand at 22.4m b/d, around 7.0m b/d lower than in 2019. Similarly, demand for OPEC crude in 2021 is revised down by 200,000 b/d from the previous month's assessment to stand at 27.9m b/d, around 5.6m b/d higher than in 2020. 📊

The feature article and oil market highlights are taken from OPEC's Monthly Oil Market Report (MOMR) for October 2020. Published by the Secretariat's Petroleum Studies Department, the publication may be downloaded in PDF format from our Website (www.opec.org), provided OPEC is credited as the source for any usage. The additional graphs and tables on the following pages reflect the latest data on OPEC Reference Basket and crude and oil product prices in general.

Table 1: OPEC Reference Basket spot crude prices
\$/b

Crude/Member Country	2019				2020									Weeks 35-31/2020 (week ending)				
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aug 28	Sep 4	Sep 11	Sep 18	Sep 25
Arab Light – Saudi Arabia	62.74	60.99	64.01	67.45	66.56	56.84	35.58	18.27	24.99	36.12	43.52	45.33	42.09	45.84	45.29	40.70	41.44	42.05
Basrah Light – Iraq	61.85	59.52	62.54	65.83	64.06	54.75	33.25	16.82	24.73	37.23	44.63	46.10	42.09	46.61	45.19	40.75	41.53	42.06
Bonny Light – Nigeria	64.02	61.45	63.69	68.18	65.89	57.77	33.41	15.54	24.86	39.03	43.46	45.40	40.78	45.78	43.26	39.61	40.55	40.76
Djeno – Congo*	59.97	57.13	61.40	66.05	62.95	54.37	29.11	11.91	21.36	32.63	35.82	37.34	33.13	37.72	35.53	31.96	32.90	33.11
Es Sider – Libya	62.32	59.78	63.51	67.60	63.63	55.70	31.49	14.58	24.56	38.68	42.17	43.69	39.18	44.07	41.64	38.01	38.95	39.16
Girassol – Angola	65.36	61.34	65.65	69.69	65.41	57.25	32.45	14.70	28.62	43.10	45.78	45.83	41.10	46.07	43.64	39.91	40.85	41.06
Iran Heavy – IR Iran	60.32	57.94	60.73	63.80	62.61	52.87	32.79	17.16	23.55	36.26	43.30	45.07	41.93	45.57	45.17	40.53	41.22	41.90
Kuwait Export – Kuwait	62.16	60.52	63.72	66.26	65.37	55.90	34.85	17.22	24.54	35.58	43.31	45.08	42.12	45.62	45.31	40.71	41.43	42.08
Merey – Venezuela	61.79	45.69	43.44	49.94	56.20	35.99	18.39	7.04	16.33	24.73	28.32	35.21	28.22	35.65	31.51	27.02	27.73	28.17
Murban – UAE	62.39	60.88	63.48	66.66	66.09	57.06	35.60	23.94	28.23	39.33	43.73	45.49	41.88	45.71	45.81	40.49	40.95	41.57
Rabi Light – Gabon	61.82	58.98	61.24	64.08	60.80	53.27	30.16	13.30	26.08	40.70	43.56	43.75	39.38	44.03	41.91	38.22	39.16	39.27
Saharan Blend – Algeria	62.47	60.48	63.86	68.10	65.28	57.91	34.23	17.08	26.31	40.48	44.12	45.64	40.98	46.02	43.47	39.81	40.75	40.96
Zafiro – Equatorial Guinea	64.47	60.86	65.36	69.74	65.31	56.65	30.95	13.40	26.76	40.79	43.82	45.19	40.62	45.57	43.38	39.59	40.20	40.42
OPEC Reference Basket	62.36	59.91	62.94	66.48	65.10	55.53	33.92	17.66	25.17	37.05	43.42	45.19	41.54	45.65	44.67	40.19	40.93	41.47

Table 2: Selected spot crude prices
\$/b

Crude/country	2019				2020									Weeks 35-31/2020 (week ending)				
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aug 28	Sep 4	Sep 11	Sep 18	Sep 25
Arab Heavy – Saudi Arabia	62.19	60.22	63.32	65.63	64.41	54.98	34.87	18.05	24.51	35.45	43.33	45.01	42.13	45.53	45.35	40.72	41.39	42.11
Brega – Libya	62.07	59.48	62.86	66.95	63.33	55.40	31.36	14.48	24.46	38.73	42.27	43.85	39.28	44.27	41.76	38.11	39.05	39.26
Brent Dtd – North Sea	62.57	59.73	63.11	66.90	63.38	55.45	31.71	18.83	28.81	40.08	43.27	44.79	40.58	45.17	42.98	39.41	40.35	40.56
Dubai – UAE	61.11	59.46	61.91	64.86	64.10	54.25	33.78	21.33	30.35	40.71	43.19	43.89	41.45	44.41	44.58	40.00	40.71	41.43
Ekofisk – North Sea	63.76	61.06	65.07	69.17	65.42	58.45	32.64	15.55	28.54	41.18	44.27	45.66	40.94	45.87	43.05	39.77	40.65	40.86
Iran Light – IR Iran	60.08	57.71	62.87	65.49	61.29	53.54	27.94	14.93	29.27	40.79	42.71	43.44	39.41	44.03	41.43	38.19	39.13	39.42
Isthmus – Mexico	62.07	59.13	61.69	60.28	55.93	47.50	23.99	7.78	25.17	35.07	38.45	41.24	38.06	41.84	40.12	36.49	38.02	38.11
Oman – Oman	61.97	60.27	62.81	65.49	65.01	54.61	34.85	23.65	33.48	41.58	43.68	44.32	41.60	44.85	44.79	40.24	40.87	41.57
Suez Mix – Egypt	59.95	57.58	62.74	65.36	61.16	53.41	27.81	14.80	29.14	40.66	42.58	43.31	39.28	43.90	41.30	38.06	39.00	39.29
Minas – Indonesia*	60.18	57.36	60.30	62.78	62.10	53.39	32.40	24.24	29.66	38.42	41.01	42.78	39.81	43.10	43.09	38.63	39.08	39.59
Urals – Russia	61.65	59.28	64.44	67.09	62.86	55.11	29.51	16.61	30.65	42.36	44.28	45.03	40.98	45.60	43.49	39.76	40.70	40.99
WTI – North America	56.86	53.98	57.25	59.81	57.56	50.60	29.89	16.52	28.57	38.30	40.75	42.36	39.61	43.01	41.60	37.84	39.56	39.78

Notes:

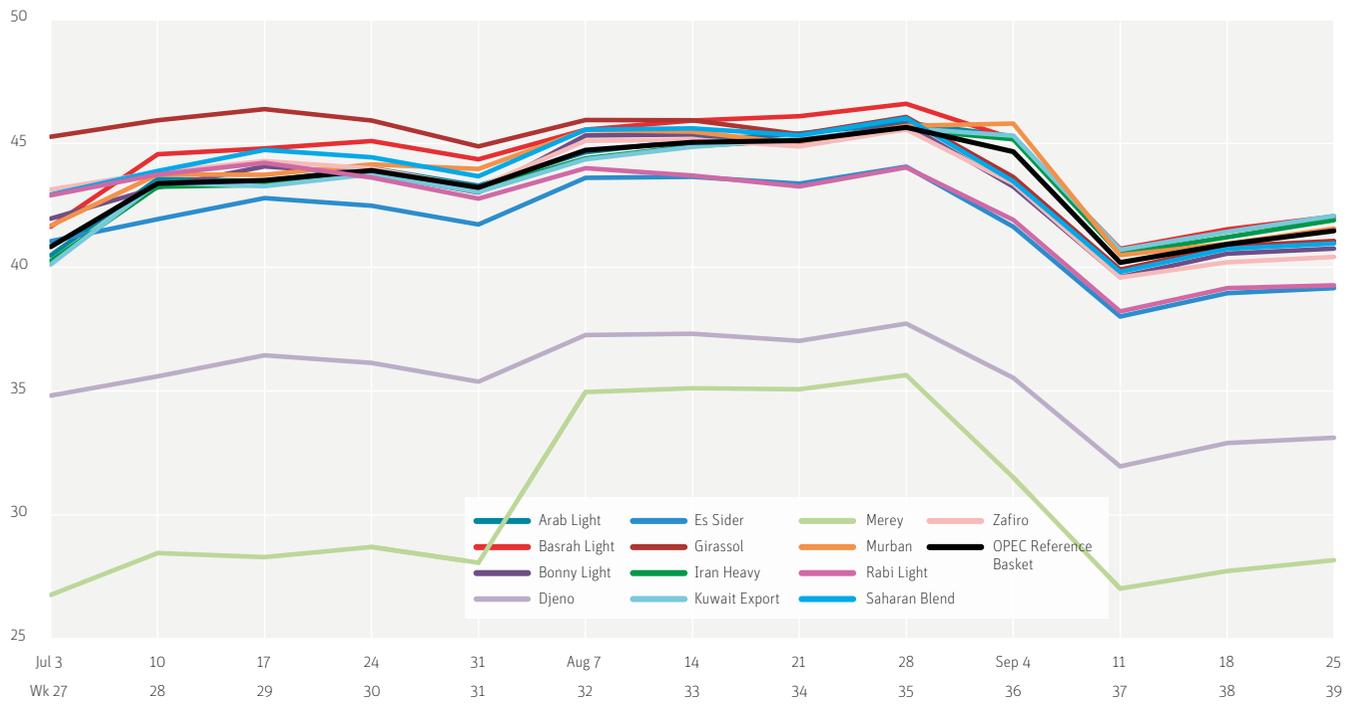
Brent for dated cargoes; Urals cif Mediterranean. All others fob loading port.

* The Republic of the Congo joined on June 22, 2018.

Sources: Argus; Secretariat's assessments.

Graph 1: Evolution of the OPEC Reference Basket spot crude prices, 2020

\$/b



Graph 2: Evolution of selected spot crude prices, 2020

\$/b

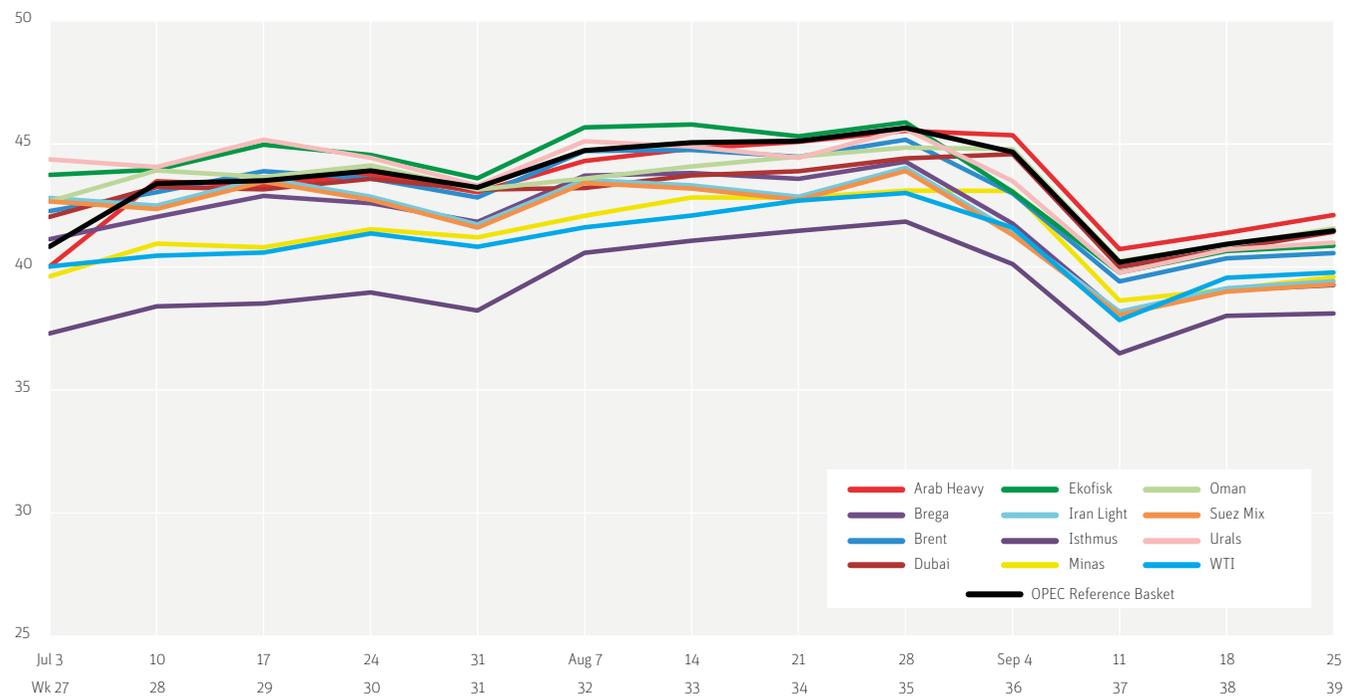


Table and Graph 3: North European market – spot barges, fob Rotterdam

\$/b

	naphtha	regular gasoline unleaded	diesel ultra light	jet kero	fuel oil 1 per cent S	fuel oil 3.5 per cent S
2019 September	52.82	77.21	79.71	81.42	61.57	48.81
October	53.92	76.25	78.47	80.14	58.86	35.32
November	58.59	78.22	78.14	79.04	58.57	29.32
December	59.70	77.35	80.37	80.25	65.03	32.15
2020 January	58.21	76.19	76.07	76.93	68.08	38.57
February	51.30	69.65	66.45	65.67	54.82	38.21
March	27.08	40.52	46.36	40.49	29.98	21.12
April	15.14	27.61	33.12	23.24	22.25	15.50
May	24.74	37.80	34.10	28.25	25.95	20.92
June	37.59	49.75	44.56	41.26	35.88	32.56
July	42.04	54.10	49.53	44.92	39.08	35.96
August	41.95	53.41	49.70	44.60	41.17	39.65
September	40.42	50.45	41.92	39.93	37.71	33.88

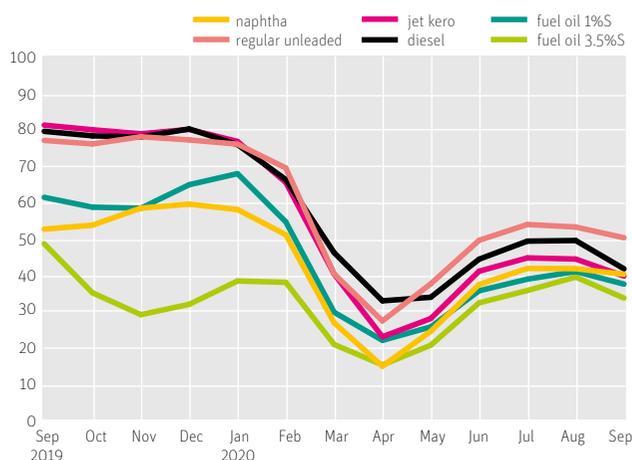


Table and Graph 4: South European market – spot cargoes, fob Italy

\$/b

	naphtha	premium gasoline 50ppm	diesel ultra light	fuel oil 1 per cent S	fuel oil 3.5 per cent S
2019 September	52.40	71.74	80.39	63.84	51.05
October	52.79	70.58	79.43	62.46	40.90
November	56.62	73.46	79.19	62.64	29.53
December	56.98	72.47	81.57	69.69	32.85
2020 January	56.03	70.83	76.90	71.66	40.11
February	49.46	64.69	67.60	58.81	40.47
March	24.88	34.88	46.76	33.38	22.93
April	10.50	23.42	32.21	25.41	15.90
May	22.71	32.59	35.23	28.78	21.71
June	36.60	43.96	45.89	38.36	32.68
July	41.56	47.45	50.49	41.68	36.18
August	41.49	49.00	50.33	43.66	38.20
September	39.21	48.52	44.31	40.56	34.92

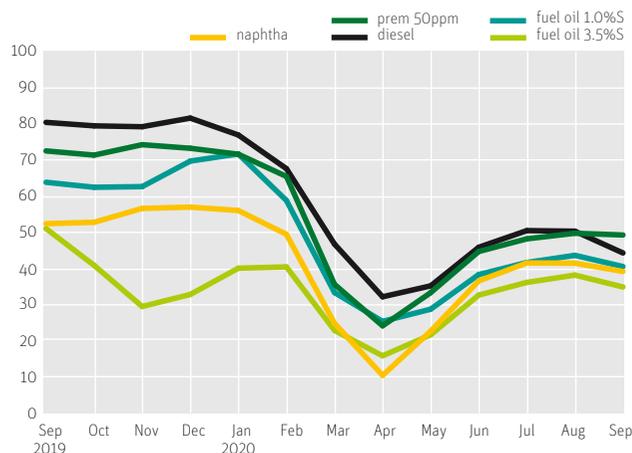
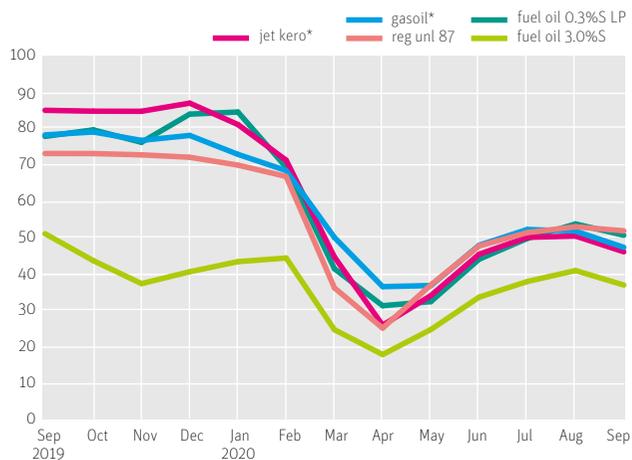


Table and Graph 5: US East Coast market – spot cargoes, New York

\$/b, duties and fees included

	regular gasoline unleaded 87	gasoil*	jet kero*	fuel oil 0.3 per cent S	fuel oil 3.0 per cent S
2019 September	72.82	77.91	84.68	77.52	50.80
October	72.80	78.73	84.44	79.31	43.41
November	72.45	76.42	84.41	75.89	37.09
December	71.78	77.78	86.65	83.63	40.35
2020 January	69.63	72.58	80.77	84.21	43.13
February	66.51	68.13	70.97	69.02	44.12
March	35.93	49.77	44.40	41.19	24.44
April	24.87	36.26	25.67	31.03	17.61
May	36.74	36.56	33.80	32.15	24.48
June	47.44	47.62	45.16	43.79	33.37
July	51.09	51.96	49.80	49.49	37.67
August	52.70	51.50	50.15	53.48	40.68
September	51.58	47.05	45.83	50.37	36.70



* FOB barge spot prices.

Source: Argus. Prices are average of available days.

Table and Graph 6: Singapore market – spot cargoes, fob

\$/b

	naphtha	premium gasoline unl 95	premium gasoline unl 92	gasoil	jet kero	fuel oil 180 Cst	fuel oil 380 Cst
2019	September	54.21	74.40	69.55	77.11	74.58	61.34
	October	57.14	74.19	68.04	75.55	75.38	46.25
	November	59.76	76.11	71.39	75.22	74.89	55.62
	December	63.62	74.82	71.34	78.24	77.75	55.42
2020	January	61.06	71.13	69.08	76.03	75.34	59.77
	February	52.56	64.34	62.62	64.66	63.05	44.34
	March	30.60	36.42	35.08	44.42	39.39	37.64
	April	17.86	20.49	19.42	28.85	21.35	31.19
	May	26.49	33.44	30.81	34.04	28.94	32.10
	June	39.06	45.21	42.75	46.05	41.16	41.38
	July	43.60	46.56	44.74	49.82	43.92	45.84
	August	43.08	48.18	46.96	48.10	43.28	46.51
	September	43.19	47.27	45.66	43.30	39.37	46.51

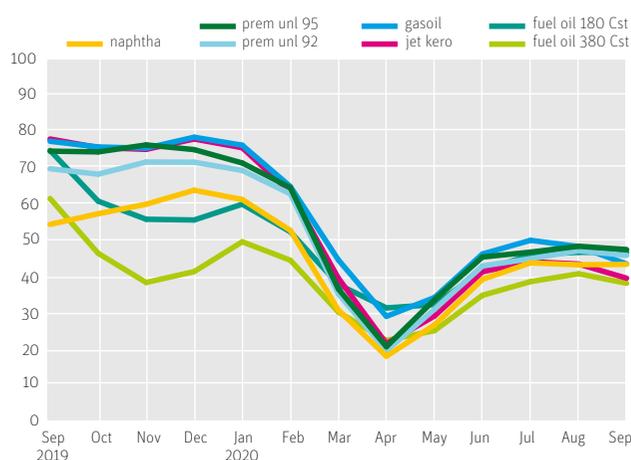
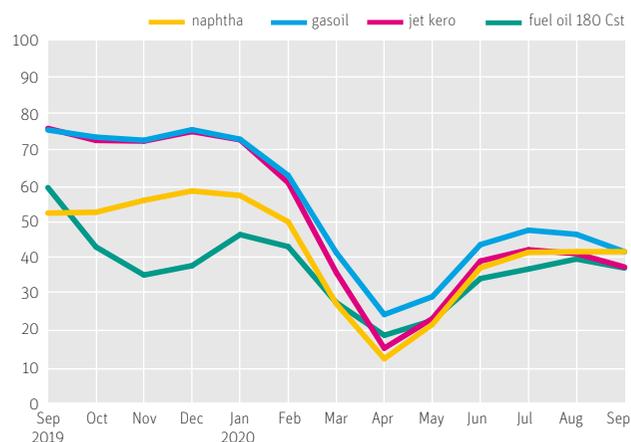


Table and Graph 7: Middle East Gulf market – spot cargoes, fob

\$/b

	naphtha	gasoil	jet kero	fuel oil 180 Cst	
2019	September	52.47	75.28	75.71	59.47
	October	52.70	73.31	72.42	43.18
	November	55.96	72.45	72.24	35.47
	December	58.54	75.36	74.85	38.03
2020	January	57.28	72.72	72.59	46.56
	February	50.06	62.81	60.82	43.26
	March	27.60	41.63	36.18	27.92
	April	12.50	24.62	15.40	18.92
	May	21.91	29.52	23.50	22.97
	June	37.45	43.80	39.30	34.49
	July	41.71	47.77	42.40	37.10
	August	41.88	46.63	41.33	39.86
	September	41.88	41.85	37.66	37.39

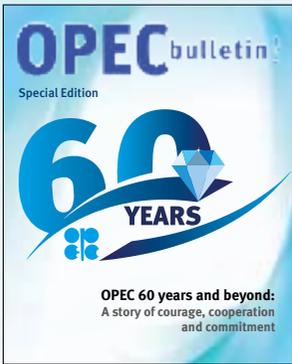


Source: Argus. Prices are average of available days.

OPEC offers a range of publications that reflect its activities. Copies can be obtained by contacting this Department, which regular readers should also notify in the event of a change of address:

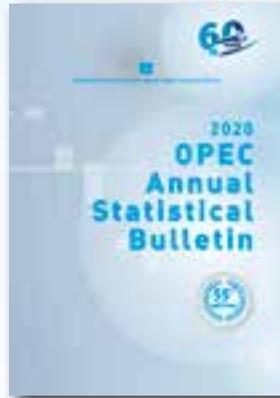
PR & Information Department, OPEC Secretariat
Helferstorferstrasse 17, A-1010 Vienna, Austria
Tel: +43 1 211 12-0; fax: +43 1 216 4320; e-mail: prid@opec.org

OPEC Bulletin
(free of charge)



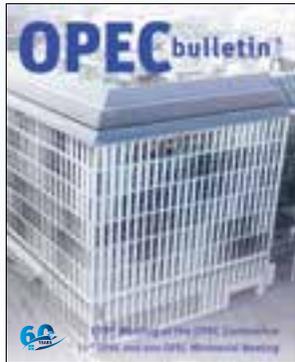
August/September 2020

Annual Statistical Bulletin
2020



92-page book
 Interactive version
 available at
<http://asb.opec.org/>

World Oil Outlook 2020
(free of charge)



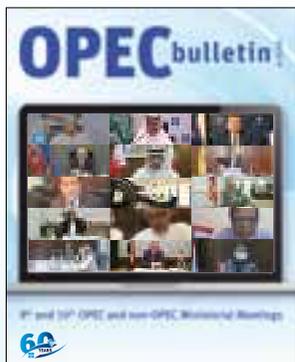
June/July 2020

OPEC Monthly Oil Market Report
(free of charge)



- Crude oil and product prices analysis
- Member Country output figures
- Stocks and supply/demand analysis

Annual Report 2019
(free of charge)



April/May 2020



OPEC Energy Review

Contains research papers by international experts on energy, the oil market, economic development and the environment. Available quarterly only from the commercial publisher. Annual subscription rates for 2015:

	Institutional		Personal	
	Print	Online	Print & online	Print & online
Europe €	615	615	738	182
UK £	485	485	582	123
Americas \$	814	814	977	203
Rest of world \$	949	949	1,139	£123

Canadian residents, please add five per cent for GST.

Orders and enquiries:
 John Wiley & Sons, 9600 Garsington Road, Oxford OX4 2DQ, UK.
 Tel: +44 (0)1865 776868; fax: +44 (0)1865 714591; e-mail: cs-journals@wiley.com;
<http://onlinelibrary.wiley.com/>

www.opec.org 

