

OPEC bulletin

2-3/20



Qaboos bin Said
Sultan of Oman

1940-2020



OPEC

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The destabilizing impact of COVID-19

The dramatic spread of the coronavirus, from a single case in China to a global pandemic in less than three months, has forced governments to take drastic measures to protect public health.

Besides the toll this new strain of coronavirus (COVID-19) has taken on people, it has also dented economic growth prospects and upended the oil market. The latter started the New Year on a positive note, supported by additional production adjustments put into place by OPEC and non-OPEC countries in the 'Declaration of Cooperation' for the first quarter of 2020.

"There is no doubt that in the last four weeks all the indices have deteriorated, be it in the economy, stocks, equities, financial instruments, metals, commodities and of course oil," Mohammad Sanusi Barkindo, OPEC Secretary General, told journalists in early March.

Yet the economic fallout of COVID-19 should come as no surprise. Well before this outbreak, researchers were warning that infectious disease epidemics pose a growing threat to public health and by extension, the global economy. The consensus of several revealing studies is that the world is ill prepared to cope, and this seems to be borne out by the current pandemic.

Other major outbreaks so far this century include the severe acute respiratory syndrome, or SARS (2002–03); the devastating Ebola virus in West Africa (2014–16); the Zika virus in Latin America, which nearly led to the postponement of the 2016 Rio Olympics; and a recent Ebola virus outbreak in the Democratic Republic of Congo. Furthermore, pandemic influenza alone is estimated to cost \$570 billion in premature deaths and lost income potential every year.

A recent study published by the *Journal of Infectious Diseases*, which used the West Africa Ebola virus as a reference case, suggests that epidemics may have a far deeper economic impact than previously thought. "The devastation of infectious disease outbreaks spreads much beyond the individuals directly infected," it says. "In today's interconnected world, economies and humans are linked far beyond their borders, which significantly increases the impact of any disease outbreak."

A similar study published in the respected British medical journal the *Lancet* noted that "the most authoritative analyses of the risks to economic growth and stability shows barely any reference to infectious diseases."

Weighing in on the disease threat, the World Economic Forum's (WEF) 2020 Global Risk Report warns that the world's "collective vulnerability to the societal and economic impacts of infectious disease crises appears to be increasing." It recommends more public-private partnerships and trust-based relationships to improve preparedness and minimize the economic shocks when epidemics strike.

Significantly, the World Health Organization (WHO) has also

expressed concern about COVID-19's broad economic impact. Dr Tedros Adhanom Ghebreyesus, WHO Director General, noted that the pandemic "is not just a public health crisis, it is a crisis that will touch every sector."

Major outbreaks like COVID-19 are especially destabilizing because they are unpredictable, dangerous and disruptive. While the priority has to be on public health, it is not too early to begin thinking about ways to mitigate such disruptions going forward. In fact, in exceptional times like this, regular dialogue, cooperation and trusted relationships grow in value.

To its enormous credit, OPEC offers a good model. The Organization's focus on collaboration, discussion and information-sharing has proven beneficial to Member Countries, oil producers in general, and consumers who depend on a stable and economic supply.

For starters, OPEC's universally respected work in supplying reliable, timely and accessible data is essential to gaining a better understanding of markets, trends and risks. Dependable and transparent data is a prerequisite for making strategic decisions and forms the front line in countering false or misleading information.

Secondly, OPEC's regular high-level dialogues with oil-consuming countries, other international and intergovernmental organizations, and independent producers are vital to strengthening understanding and collaboration. The fact that these dialogues are inclusive and transparent reassures producers, consumers, investors and the economy at large. It is no wonder that as COVID-19 began to dent the oil markets, leading independent and international oil producers were turning to OPEC for leadership.

OPEC's support, in conjunction with the OPEC Fund for International Development, for expanding energy access is also important. Energy poverty and vulnerability typically go hand in hand. Closing the energy poverty gap will help vulnerable communities become more prosperous and more resilient.

Finally, OPEC's cooperation with other oil-producing nations has contributed to stability and sustainability of energy supply, benefiting producers, consumers and the global economy. The 'Declaration of Cooperation' has proven to offer an effective, trusted and powerful instrument for voluntary collaboration. By extension, the 'Charter of Cooperation' provides an ideal platform for examining the risk of future epidemics and pandemics and working together to reduce their market impact.

Throughout its 60 years, OPEC has consistently demonstrated the benefits of dialogue, cooperation and information sharing to address common challenges. It is a model for the kind of international collaboration that will be needed to recover from COVID-19, and of equal importance, to mitigate the human and economic damage of future public health crises.





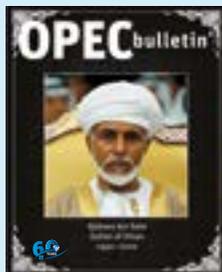
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**Cover**

This month's cover shows the Sultan of Oman, Qaboos bin Said, who passed away in January 2020 after a 50-year reign (see obituary starting on page 20).
Photo courtesy Reuters.

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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 14 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.



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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.

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OPEC Secretariat hosts 178th Extraordinary Meeting of the OPEC Conference



Opening session of the 178th Meeting of the OPEC Conference.

The attention of the entire oil industry focused on Vienna on March 5, 2020, as Ministers gathered to review current conditions of the market and take stock of developments. The outbreak of the coronavirus (COVID-19) and its relentless spread served as the critical backdrop for the meeting. The OPEC Bulletin files this exclusive report.



OPEC Conference President, Mohamed Arkab (l), Minister of Energy of Algeria; and Mohammad Sanusi Barkindo, OPEC Secretary General.

Sapphire Anniversary of the First OPEC Conference

The Conference President, Mohamed Arkab, Minister of Energy of Algeria, reflected on a critical anniversary in OPEC's history that the Conference was commemorating. As he said in his Opening Remarks at the Conference, "The 18th meeting of the Joint Ministerial Monitoring Committee, this meeting of the OPEC Conference, and



Algeria



Eng Mohamed Hamel (c), Senior Advisor to the Minister of Energy of Algeria, and Algerian Governor to OPEC; with Algerian delegates.



Angola



Dr Diamantino Pedro Azevedo (c), Minister of Mineral Resources and Petroleum, Angola; with Ms Teodolinda Rodrigues Coelho, Ambassador of Angola to Austria (r); and Estêvão Pedro (l), Angola's Governor for OPEC.



Congo



Jean-Marc Thystere Tchicaya (l), Minister of Hydrocarbons, Republic of the Congo; and Térésa Goma, Congo's Governor for OPEC.



Equatorial Guinea



Gabriel Mbaga Obiang Lima (c), Minister of Industry, Mines & Energy; Florencio Oyono Eneme Obono (r), Equatorial Guinea's National Representative to OPEC; and Agustín Mba Okomo (l).

the 8th OPEC and non-OPEC Ministerial Meeting are taking place on dates of immense significance in the history of OPEC.”

The President continued by drawing attention to the fact that, “Exactly 45 years ago, between the 4th and 6th of March 1975, my own country, Algeria, hosted the First OPEC Summit, or to give its correct title, the ‘Conference of Sovereigns and Heads of State of OPEC Member Countries’. It culminated in the adoption of the Organization’s First Solemn Declaration.”

The outstanding legacy of that first Summit is the OPEC Fund for International Development. Established in 1976 as the OPEC Special Fund, the OPEC Fund is a direct outcome of the issues discussed in Algiers by the OPEC heads of state as set out in its Declaratory Statement.

The Conference President paid tribute to Dr Abdulhamid Alkhalifa, Director-General of the OPEC Fund, and to his able staff, for their great achievements in contributing to reducing poverty and improving the lives of millions of people around the globe. He noted that OFID has contributed, since its founding, to funding development projects in no less than 134 countries, in the areas of energy, transportation, agriculture, water and sanitation, health and education.

Arkab noted how prescient the First Solemn Declaration was. In the Declaration, Member Countries “reaffirmed their support for dialogue, cooperation and concerted action for the solution of the major problems facing the world economy.”

Arkab emphasized that, “These themes of cooperation, dialogue, soliciting the views of producers and

consumers, and reaching out to non-OPEC partners are as relevant today as they were in 1975.”

The spirit of the First Summit was present in the Algiers Accord of 2016 that launched the ‘Declaration of Cooperation’ process. It is clear that Algeria and Algiers have been the locations for many seminal moments in the history of OPEC. This also includes the famous 151st (Extraordinary) Meeting of the Conference that took place in Oran, Algeria, on December 17, 2008. At this meeting, the Conference agreed to a massive adjustment of production totaling 4.2m b/d in response to the global economic crisis.

Challenging global-economic context

Arkab underscored the difficult circumstances under which the Conference met. “We now convene at a time when the outbreak of COVID-19 has had a pronounced adverse impact on economic and oil demand forecasts in 2020, particularly in the first and second quarters,” he stated. The close working relationship between OPEC and China was also noted.

As Arkab explained, “We are extremely grateful to the Government of China for their cooperation with us over the last few weeks and months. Ambassador Wang Qun, Permanent Representative of the People’s Republic of China to the United Nations and other International Organizations in Vienna, provided a briefing at an extraordinary meeting of the Joint Technical Committee, which was held on the 4th of February. This is a clear indication of the warm relations that exist between China and our participating countries.”



IR Iran

Eng Bijan Namdar Zangeneh (c), Minister of Petroleum, IR Iran; with his delegation.



Iraq

Dr Hamed Younis Saleh (c), Deputy Minister for Refining Affairs, Ministry of Oil; Dr Baker Fattah Hussein (r), Iraq’s Ambassador to Austria; with members of the Iraqi delegation.



Kuwait

Dr Khaled Ali Al-Fadhel (c), Kuwait’s Minister of Oil, Minister of Electricity & Water; Sadiq Marafi (r), Kuwait’s Ambassador to Austria; and Haitham Al-Ghais (l), Kuwait’s Governor for OPEC.

Libya



Mustafa Sanalla (c), Chairman of the National Oil Corporation, Libya; with his delegation.



Nigeria 

Timipre Sylva (r), Nigeria’s Minister of State for Petroleum Resources; with Dr Adedapo Odulaja (l), Nigeria’s Governor for OPEC.



Saudi Arabia 

HRH Prince Abdul Aziz Bin Salman Al Saud (c), Saudi Arabia’s Minister of Energy; HRH Prince Abdullah Bin Khaled Bin Sultan Al Saud (l), Saudi Arabia’s Ambassador to Austria; and Eng Adeeb Al-Aama (r), Saudi Arabia’s Governor for OPEC.



United Arab Emirates 

Suhail Mohamed Al Mazrouei (c), Minister of Energy & Industry, UAE; Hamad Al Kaabi (r), the UAE’s Ambassador to Austria; and Eng Ahmed Mohamed Alkaabi (l), UAE’s Governor for OPEC.



Venezuela 

Manuel Salvador Quevedo Fernandez (c), People’s Minister of Petroleum of Venezuela; Eng Angel Gonzalez Saltron (r), Venezuela’s Governor for OPEC; and Jesse Chacón (l), Venezuela’s Ambassador to Austria.

The Conference President concluded by returning to the First Solemn Declaration for inspiration, saying “Forty-five years ago, OPEC Member Countries in their first Solemn Declaration stated that, “the interdependence of nations, manifested in the world economic situation, requires a new emphasis on international co-operation and declare themselves prepared to contribute with their efforts to the objectives of world economic development and stability.”

Arkab finished his remarks on an upbeat note, stating, “The timeless wisdom of these words has once more been vindicated as we meet to discuss the challenges of our own times. My country is proud of our Membership of OPEC, proud of the role we have played as a constructive partner over many decades and proud that Algeria hosted that first OPEC Summit.”

Press release following the Conference Meeting

Following the President’s remarks, the Conference held its closed session. It reviewed the report and recommendations of the Joint Ministerial Monitoring Committee (JMMC), whose work continues to be ably supported by the Joint Technical Committee (JTC) and the OPEC Secretariat.

In its concluding press release, the Conference noted the positive ramifications of the decision to further voluntarily adjust production at the 177th Meeting of the Conference, and subsequently the 7th OPEC and non-OPEC Ministerial Meeting, with market sentiment improving in the weeks thereafter.

Azerbaijan



Parviz Shahbazov, Minister of Industry and Energy, Azerbaijan.

Bahrain



Shaikh Mohammed bin Khalifa bin Ahmed Al Khalifa (l), Minister of Oil, Bahrain; and Jassim Al Shirawi (r), Bahrain.

Brunei Darussalam



Dato Seri Paduka Matsatejo Sokiaw (l), Deputy Minister of Energy, Manpower and Industry; and Mohammad Nizam bin Haji Ismi (r).

Kazakhstan



Nurlan Nogayev (r), Minister of Energy; and Murat Zhurebekov (l), First Vice Minister of Energy, Kazakhstan.

Malaysia



Dato' Ganeson Sivagurunathan (r), Malaysia's Ambassador to Austria; and Zainal Izran Zahari (l).

“The COVID-19 outbreak has had a major adverse impact on global economic and oil demand forecasts in 2020, particularly for the first and second quarters,” the release said. “Global oil demand growth in 2020 is now forecast to be 480,000 b/d, down from 1.1m b/d in December 2019. Moreover, the unprecedented situation, and the ever-shifting market dynamics, means risks are skewed to the downside.”

The Conference statement also underscored the purpose of recent activities, noting that “Member Countries reaffirmed their continued focus on fundamentals for a stable and balanced oil market, in the interests of producers, consumers and the global economy. The Conference emphasized the

Mexico



Eng Miguel Ángel Maciel Torres (l), Undersecretary of Hydrocarbons, Secretaria de Energia Mexico (SENER); with Jose Rodrigo Baez Ricardez (r).

Oman



Salim Nasser Al Aufi (r), Undersecretary, Ministry of Oil and Gas, Sultanate of Oman; and Yousuf Ahmed Hamed Aljabri (l), Oman's Ambassador to Austria.

ongoing dialogue with consuming countries, and the consultations undertaken in a collegial spirit before reaching decisions. Member Countries are resolute and committed to being dependable and reliable suppliers of crude and products to global markets.”

8th OPEC and non-OPEC Ministerial Meeting held

On March 6, 2020, delegates gathered for the 8th OPEC and non-OPEC Ministerial Meeting. The meeting was chaired by Mohamed Arkab, President of the OPEC Conference and Algeria's Minister of Energy,

The Russian Federation



Alexander Novak, Minister of Energy of The Russian Federation.

Sudan



Ms Maimona Ahmed Mohammed Khalid (r), Alternate Permanent Representative to the United Nations (Vienna), UNIDO and CTBTO; and Elsadiq Mohamed A E M Ahmed (l).

African Petroleum Producers Organization



Dr Omar Farouk Ibrahim, Secretary General of the African Petroleum Producers Organization (APPO).

and Alexander Novak, Minister of Energy of The Russian Federation.

Following the conclusion of the Ministerial Meeting, participating countries reaffirmed the frameworks of the ‘Declaration of Cooperation’ and the ‘Charter of Cooperation’ between oil producing countries; and extended the mandate of the Joint Ministerial Monitoring Committee (JMMC) and its membership, to review market conditions, oil production levels and other related matters, assisted by the Joint Technical Committee (JTC) and the OPEC Secretariat, as well as make recommendations to future Ministerial Meetings.

The Ministers also noted that they will continue further consultations under the applicable frameworks to determine required actions to help stabilize the oil market.

Following the meeting, Mohammad Sanusi Barkindo, OPEC Secretary General, told journalists assembled outside the OPEC Secretariat that the Ministers had taken a close look at market conditions and the extensive information supplied by the JMMC and JTC.

“There is no doubt that in the last four weeks all the indices have deteriorated, be it in the economy, stocks, equities, financial instruments, metals, commodities and of course oil,” he said. He went on to say that although the OPEC and non-OPEC Ministerial Meeting was adjourned without a decision on additional production adjustments, “the consultations are continuing.”

Both the OPEC Conference and OPEC and non-OPEC Ministerial Meeting were preceded on March 4 by the 18th JMMC. 

International Energy Forum



Joseph McMonigle from the IEF.

Niger



Salissou Moussa Diakit , from the Ministry of Petroleum, Niger.

Senegal



Aguibou Ibrahima Hamady Ba from Senegal.



Following the meeting, Mohammad Sanusi Barkindo, OPEC Secretary General, told journalists assembled outside the OPEC Secretariat that the Ministers had taken a close look at market conditions and the extensive information supplied by the JMMC and JTC.



The 18th JMMC was held at the OPEC Secretariat on March 4.

Keeping an eye on COVID-19

On the sidelines of the 178th Extraordinary Meeting of the OPEC Conference on March 5, Ministers discuss the coronavirus and other developments affecting the oil market.

Mohamed Arkab

Minister of Energy and President of the OPEC Conference, Algeria



Mohamed Arkab

The outbreak of coronavirus (COVID-19) has had a major impact on the oil market but the situation is much different than the conditions that first led to the ‘Declaration of Cooperation’ (DoC) by OPEC and non-OPEC participating countries, according to Mohamed Arkab, Minister of Energy of Algeria and President of the OPEC Conference.

“The impact of the coronavirus on the petroleum market is notable,” he said. “Remarkable quantities in the market are not being used. We also have problems in many sectors: the economy, transportation and industry. This led to a lower demand for petroleum,” said Arkab, who became OPEC Conference President at the start of 2020.

He praised the DoC for its “positive effect on the petroleum market” over the past three years.

Speaking about his home country of Algeria, the Minister said the COVID-19 impact was evident in terms of declining domestic oil demand. The virus, he explained, “has a very negative impact on the demand of petroleum products and petroleum.”

Algeria has enormous untapped potential and is undertaking major projects, the Minister said, describing the country as “a key workshop for the oil and hydrocarbon sectors.”

“In Algeria, we have huge projects in the petroleum industry. We have 150 new, untapped oil fields. The size of the feasible mining area is larger than 1.5 million square kilometres. We so far investigated 38 per cent of the area. We also enacted a new petroleum bill that allows for more engagement by foreign partners in comparison to global standards.”

Dr Hamed Younis Saleh

Deputy Minister for Refining Affairs, Ministry of Oil, Iraq

Echoing the concerns of other Ministers attending the 178th Extraordinary Meeting of the OPEC Conference, Dr Hamed Younis Saleh, Deputy Minister for Refining Affairs, noted that COVID-19 has had a widespread impact on worldwide economic activity and oil market fundamentals.

Iraq took measures early on to minimize the risk posed by COVID-19, Saleh said. A high-level crisis committee was established, chaired by the Ministry of Health, and other state offices were brought in to provide support. “Until now, the situation is under control,” he said.

Turning to the 60th anniversary of OPEC in September, the Deputy Minister said plans are underway for a commemoration to be held at the historic Al-Shaab Hall, where the five OPEC Founder Members — IR Iran, Iraq, Kuwait, Saudi Arabia and Venezuela — held their first conference from September 10 to 14, 1960.



Dr Hamed Younis Saleh

“There are efforts being made to prepare the hall and make it fitting for the Organization and its history. There are also preparations being undertaken by the Ministry of Oil to welcome all OPEC Members to celebrate the 60th anniversary of the establishment of OPEC,” the Deputy Minister said.

Saleh added that Iraq is reviewing plans to upgrade its upstream and downstream operations. “There is a promising plan to develop refining in Iraq in terms of quality and quantity, because the circumstances that the country has gone through have notably affected the development of the oil industry.”

Mustafa Sanalla

*Chairman of the National Oil Corporation,
Libya*

Mustafa Sanalla, Chairman of the National Oil Corporation (NOC), noted that (at the time of the interview) Libya had not been affected by COVID-19 cases. However, he said special measures were being taken by NOC and its subsidiaries to protect the country’s oil sector.

“We have taken a lot of precautions especially on the border. We have offshore platforms and we have taken a lot of precautions in the oil fields,” he said.

Addressing the decline of oil production due to the country’s political situation, he expressed optimism about being able to resume full production, which fell to about 120,000 b/d in early March from 793,000 b/d in January. In December 2019 Libya’s oil output was 1.14m b/d.



Mustafa Sanalla

“NOC in Libya is like the glue that still unites Libya as a state,” Sanalla said, noting that the company has operations across the country. “NOC is a well-organized institution and we have a good relationship with all of our partners, especially the IOCs from all continents.”

He went on to thank the international community for its support and noted that NOC is apolitical, focussing on providing energy for the civilian population. “NOC is like the vein which is still keeping Libya alive,” he added.

Timipre Sylva

*Minister of State for Petroleum Resources,
Nigeria*

Nigeria is expecting a rise in investor interest in the energy market once the government’s Petroleum Investment Bill (PIB) is approved, as expected, later this year.

“The PIB has been in the making for about 20 years now,” said Timipre Sylva, Minister of State for Petroleum Resources. “It’s been a long time coming and we think that when it comes out later this year, it will come out with a lot of sweetness. We are very mindful of the fact that it’s a very competitive environment right now and we are taking that on board in the new law.”

“We are expecting that everybody will be interested because Nigeria is not just a brownfield, it has a lot of greenfield opportunities,” he said. “We believe the investment world will be quite pleased when we do come out with the bid round.”

The PIB will provide a more stable investment framework in the sector. “Things have remained quite stagnant



Timipre Sylva

and that's why we believe that with this bill it will bring a lot of certainty to the investment framework and people will get interested and come," he said.

The Minister said the country needed to ensure energy security for its growing population and economy. He also said Nigeria was focusing on the product side as well, to address demand and limited domestic production. "Because for so long Africa has been importing the finished products, you really need to be delivering on the doorstep," he said.

He noted that in Nigeria, the Dangote refinery project will start operations soon and the rehabilitation of the Port Harcourt refinery was expected soon as well. "We are also discussing on reviving the Warri and Kaduna refineries. And we are discussing the possibility of developing some petrochemical and fertilizer projects," he said.

In terms of addressing energy poverty, Sylva noted that there has to be a collective effort across Africa. He pointed to the development of the West African Gas Pipeline as a major step to improve energy access across the region. Other projects are also in the works, including a pipeline to carry oil from Nigeria to Algeria.

"The Nigeria-Algeria pipeline has been in the plan for a long time. We believe that it is only by trying to collectively come together that we can reduce energy poverty."

Suhail Mohamed Al Mazrouei *Minister of Energy and Industry, United Arab Emirates*

The United Arab Emirates (UAE) is taking a huge step to



Suhail Mohamed Al Mazrouei

reduce emissions through diversification and investment in technology.

Suhail Mohamed Al Mazrouei, Minister of Energy and Industry, said the UAE's energy strategy calls for reducing emissions from the power generation process by 70 per cent by 2050. "That's a huge commitment," he said, adding that carbon capture utilization and storage (CCUS) was part of the overall strategy to cut emissions.

"We had one of the first [CCUS facilities] in the region, the first commercial-scale CCUS facility, where we are capturing today around 800,000 tonnes of CO₂, compressing it, and sending it to one of our fields to replace the natural gas injection as a way to produce oil."

Following this success, the UAE plans to extend the use of CCUS. "We have now announced our willingness to go to a total of 5 million tonnes, so from 0.8 to 5 m t of CO₂ capture and utilization in other fields."

ADNOC, the national oil company, is expanding its CCUS capacity "and hopefully we will have those projects capturing CO₂ by 2030, and that is part of our commitment to reduce CO₂ emissions and decarbonize our economy."

Referring to the outbreak of COVID-19 and its impact on the oil market, the Minister stressed the importance of solidarity and OPEC's role. "We have uncertainty in terms of the demand forecast and this virus is affecting China. China is a big consumer and major economy, so definitely it will have an effect on the demand."



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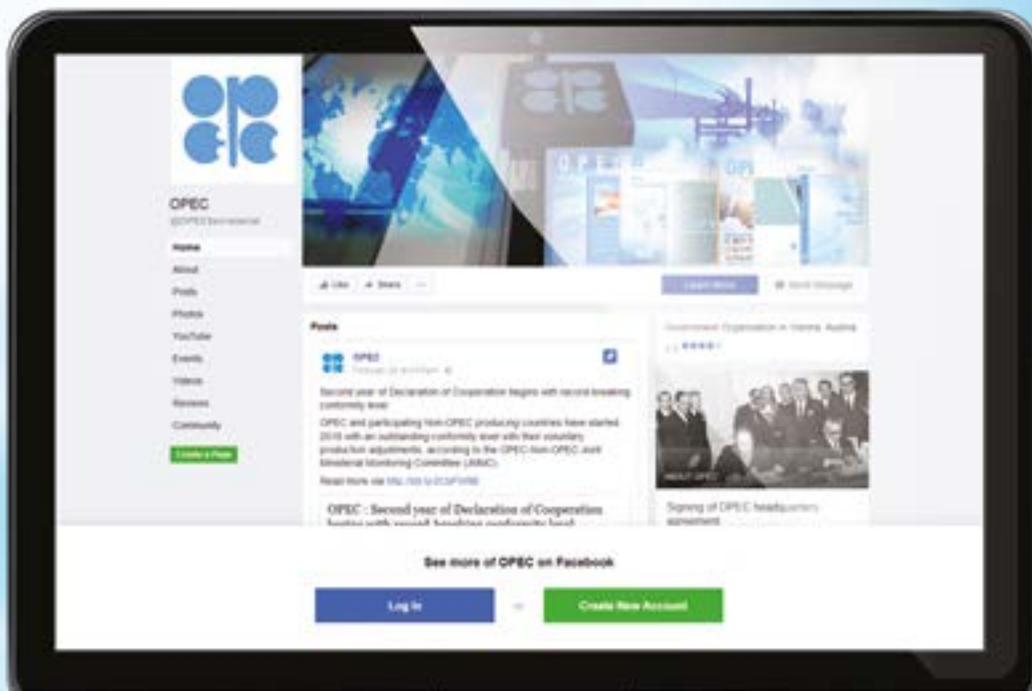
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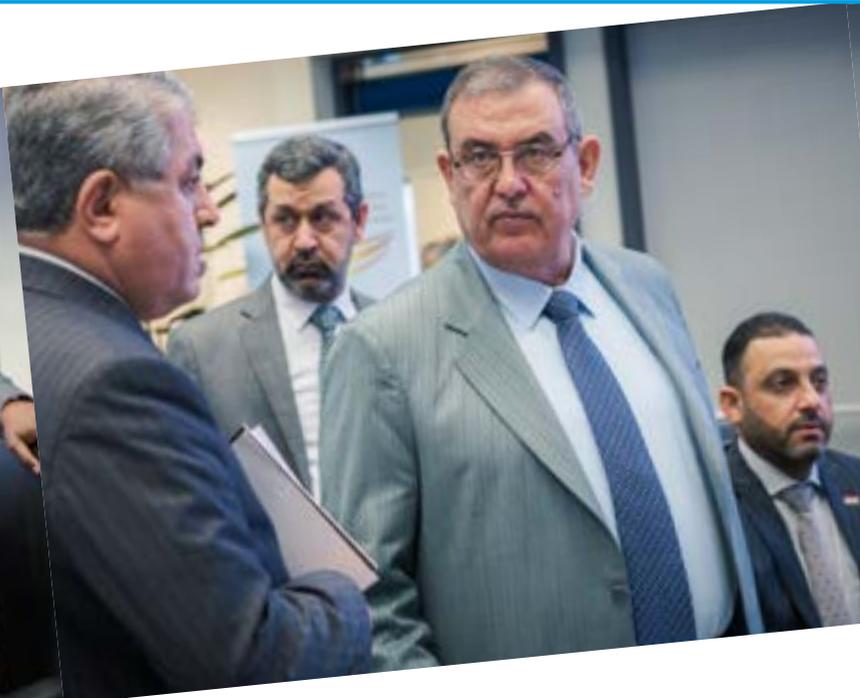
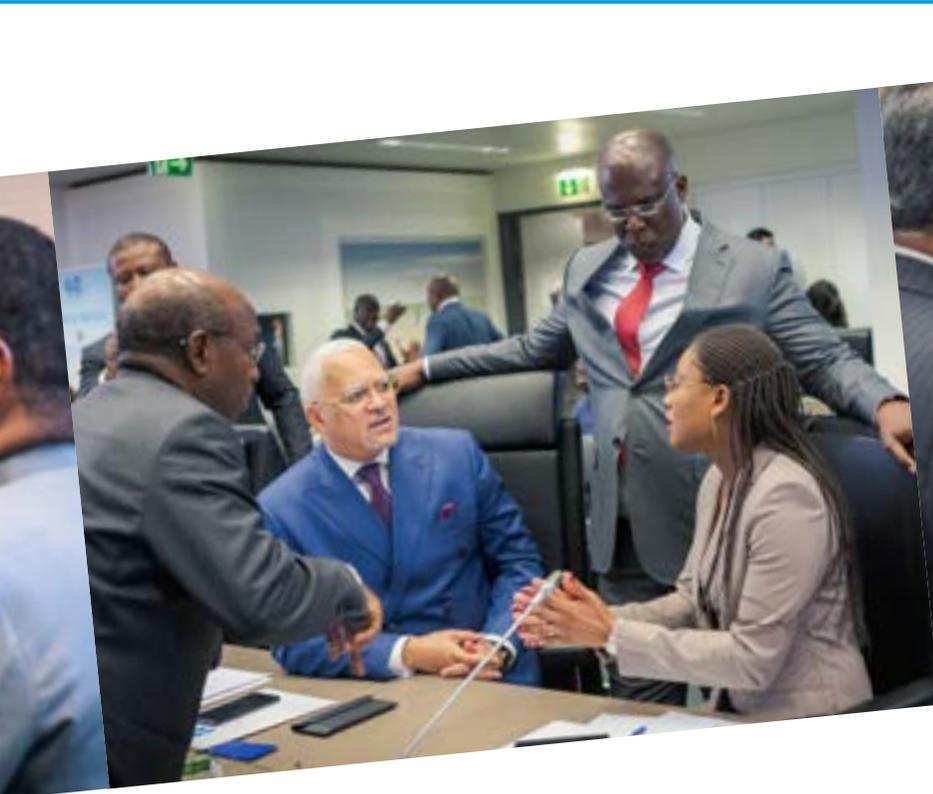
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Impressions of the Conference





In memoriam:

Sultan Qaboos bin Said of Oman

During the beloved leader's 50-year reign, the Sultanate of Oman strongly supported OPEC, including the 'Declaration of Cooperation' and the 'Charter of Cooperation'.

Sultan Qaboos bin Said was a visionary leader who devoted his life to the development and modernization of Oman while drawing international respect for his quiet diplomacy and peacemaking.

Sultan Qaboos died in Muscat on January 10 aged 79. He was the longest serving monarch in the Middle East and spearheaded sweeping reforms that brought prosperity to the country during his half century of leadership.

Under the Sultan's visionary guidance, Oman strongly supported OPEC and closely cooperated with the Organization in its commitment to oil market stability. Furthermore, Oman has been instrumental in the 'Declaration of Cooperation' process. Oman also endorsed the 'Charter of Cooperation' on July 2, 2019.

OPEC Secretary General, Mohammad Sanusi Barkindo, expressed his condolences in a letter to Dr Mohammed bin Hamad Al Rumhi, Minister of Oil and Gas.

"I am deeply saddened by his death", Barkindo said. "He was a remarkable and much-respected leader, the likes of which are few and far between throughout history.

The Secretary General added that Sultan Qaboos' "passionate foreign policy of conciliatory and peaceful co-existence and close international cooperation made

him known throughout the whole world. Living his overall passion for peace and brotherhood and true to his nature, the Sultan always maintained friendly relations with all neighbouring countries, as well as those outside the region."

Mohamed Arkab, Algeria's Minister of Energy and President of the OPEC Conference, also expressed his condolences in a letter to his Omani counterpart. "Sultan Qaboos exhibited a rare determination and vision over half a century that all leaders and countries should aspire to emulate. Since 1970, he has steered Oman into prosperity and modernization, having a profound impact on its overall development, and the well-being of each and every Omani citizen."

In announcing the Sultan's death, the Diwan of Royal Court declared a 40-day mourning period and noted that his reign "resulted in a balanced foreign policy that was saluted with solemn respect by the whole world." The period of mourning officially ended on February 19.

A modernizer with a global outlook

A graduate of the Royal Military Academy Sandhurst, England, Sultan Qaboos ascended to the Omani throne on July 23, 1970, at the age of 29. He launched a life-long campaign to improve education and socio-economic development while pursuing a course of multilateralism,



Reuters

Sultan of Oman Qaboos bin Said al-Said at the Beit Al Baraka Royal Palace in Muscat, Oman, in January 2019.

which was underscored by the country's admission to the United Nations in 1971, at a time when the world was riven by cold-war rivalries. Oman under Sultan Qaboos also pursued close relations with regional countries, becoming a founding member of the Gulf Cooperation Council in 1981.

Beloved by his people for the country's stability, progress and respected standing, Sultan Qaboos was

admired by his counterparts regionally and globally. Oman became a major facilitator of dialogue that contributed to easing tensions and resolving conflicts in the Middle East.

For a country of fewer than five million people, Oman's global influence has been huge. Under Sultan Qaboos, Oman played a pivotal role in facilitating discussions between representatives of IR Iran



Reuters

Oman's leader Sultan Qaboos bin Said during the opening of the Gulf Cooperation Council (GCC) summit in Doha in 2007.



Britain's Queen Elizabeth meets with Sultan Qaboos bin Said at Al Alam Royal Palace in Muscat, in November 2010.

Reuters



Reuters

Sultan Qaboos bin Said of Oman attends a summit by the leaders of six oil-rich Gulf Arab states in December 30, 2000, in Bahrain.



Dr Mohammed bin Hamad Al Rumhi, Minister of Oil and Gas.



The 7th Meeting Of



Group photo of OPEC and non-OPEC officials taken at the 7th meeting of the JMMC in Oman, January 2018.

and US. These talks paved the way to the 2015 Joint Comprehensive Plan of Action (JCPOA), which also involved China, France, Germany, Russia, the UK and the European Union. Although US President Donald Trump would later pull out of the deal that he inherited from his predecessor, the JCPOA was hailed as a triumph of diplomacy and affirmed Oman's importance as a go-between.

During a visit to Oman in early 2016, Ban Ki-moon, then UN Secretary General, praised Oman's role in the JCPOA and its wider involvement as a peacemaker and supporter of multilateralism. He saluted the Sultanate's contributions to the global community, "and in particular your commitment to the cause of peace and to the Charter of the United Nations. I commend your country's unique role of bringing people together — of facilitating dialogue and finding common ground."

Oman's importance as an oil and gas producer and supplier also grew under Sultan Qaboos, as did its relations with OPEC. Oman has attended OPEC Ministerial Conferences as an observer for more than 30 years. In addition to the 'Declaration' and 'Charter,' it has supported OPEC and non-OPEC technical meetings since their inception. It hosted the 7th Meeting of the Joint Ministerial Monitoring Committee (JMMC) in Muscat on January 21, 2018.

"As we gather in the magnificent city of Muscat, it is only right that we pay tribute to the enduring bonds of friendship between OPEC and Oman," Barkindo said in opening remarks of the JMMC meeting in Muscat.

Condolences from around the globe

The announcement of Sultan Qaboos' death brought condolences from around the world while leaders from Kuwait and neighbouring United Arab Emirates, along with many other countries, paid tribute to the late Sultan in Muscat.

Mohammad Javad Zarif, Foreign Minister of IR Iran, said: "We offer our dear neighbour Oman our condolences" and he called the Sultan's death "a loss for the region."

Barham Saleh, President of Iraq, praised the late Sultan's "moderation and wisdom and the ability to control differences in the interest of the development and progress of our countries and region."

"The Gulf, Arab and Islamic nations lost a very important figure and leader," said Kuwait's Emir Sheikh Sabah al-Ahmad al-Sabah.

A statement from the Royal Court of Saudi Arabia said the Custodian of the Two Holy Mosques, King Salman bin Abdulaziz Al Saud, and His Royal Highness Prince Mohammad bin Salman bin Abdulaziz Al Saud,



A press conference was held following the 7th meeting of the JMMC in Muscat, the Sultanate of Oman, in January 2018.

Crown Prince, Deputy Prime Minister and Minister of Defence, “expressed their sincere condolences and sympathy to the royal family and people of the Sultanate of Oman, as well as to the Arab and Islamic nations on the death of Sultan Qaboos, whose reign was full of accomplishments.”

Vladimir Putin, President of The Russian Federation, praised the late Sultan and the social and economic development that took place during his era. Putin “also underscored the personal contributions of the late Sultan in enhancing the friendship relations between the two countries,” according to the Oman News Agency.

In the UK, Queen Elizabeth II called the Sultan “a good friend of my family and the United Kingdom.” Flags at Buckingham Palace were lowered to half-staff after his death, a rare honour for a foreign leader.

Former US President George W Bush called the Sultan “a stable force in the Middle East and a strong US ally. His Majesty had a vision for a modern, prosperous, and peaceful Oman, and he willed that vision into reality”. Bush also noted that the Sultan’s “able leadership improved education, healthcare, and the arts throughout the beautiful country of Oman.”

Sultan Haitham sworn in

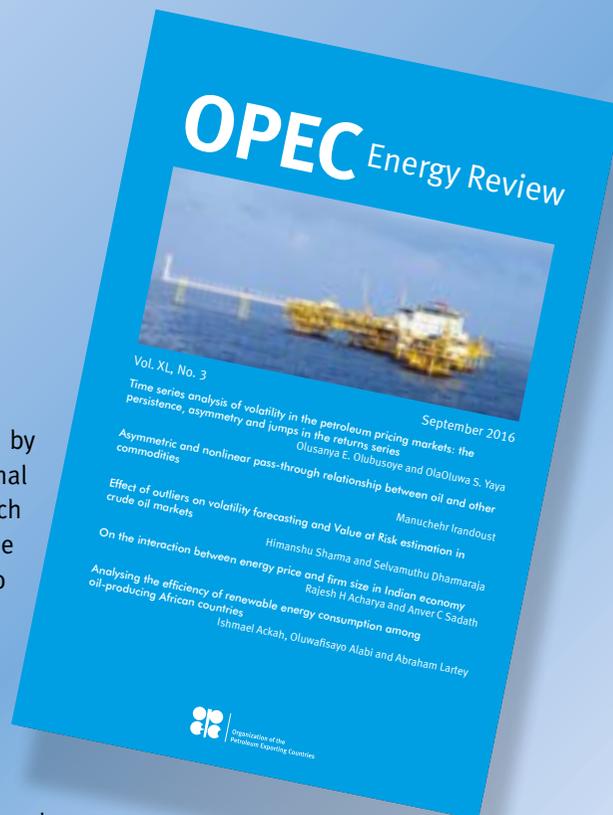
Sultan Qaboos was succeeded by his cousin Haitham bin Tariq al-Said, Minister for Heritage and Culture.

During his swearing-in ceremony on January 11, Sultan Haitham underscored the continued important of dialogue and cooperation. “Oman will maintain its role as an active member of the United Nations Organization, a member that respects the UN Charter and works with member states towards achieving international peace and security, as well as economic prosperity for all countries of the world”, he said.

“We will build our relations with all world countries on the basis of the great heritage left behind for us by the late Sultan, God bless him, a heritage whose essence is based on commitment to relations of friendship and cooperation with all and respect for charters, laws and agreements signed with other countries and organizations”, Sultan Haitham added.

Barkindo sent congratulations to Al Rumhi upon the succession of Sultan Haitham, noting his extensive experience in government and his leading role in the country’s economic and social development strategy. 

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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.

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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.

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A promising future for CCUS

*The topic of energy technology and innovation was front and centre at the International Carbon Capture Utilization and Storage Conference (ICCUS), which was held February 25–26, 2020, in Riyadh, Saudi Arabia. OPEC Secretary General, **Mohammad Sanusi Barkindo**, as well as OPEC and non-OPEC Member Country Heads of Delegation were featured in an impressive two-day programme that covered in great depth CCUS technology, which is poised to play a major role in the evolving energy transition. The OPEC Bulletin’s Scott Laury reports.*

ICCUS was hosted by the Kingdom of Saudi Arabia under the patronage of HRH Prince Abdul Aziz Bin Salman Al Saud (r), Saudi Arabia’s Minister of Energy, and Shaikh Mohammed bin Khalifa Al Khalifa, Minister of Oil of the Kingdom of Bahrain.





Front row (l–r): Eng Adeeb Al-Aama, Saudi Arabia’s Governor for OPEC; Shaikh Mohammed bin Khalifa Al Khalifa, Minister of Oil of the Kingdom of Bahrain; Mohammad Sanusi Barkindo, OPEC Secretary General; HRH Prince Abdul Aziz Bin Salman Al Saud, Saudi Arabia’s Minister of Energy; Suhail Mohamed Al Mazrouei, the United Arab Emirates Minister of Energy & Industry; and Eng Ahmed Mohamed Alkaabi, the UAE’s Governor for OPEC.

The event was hosted by the Kingdom of Saudi Arabia under the patronage of HRH Prince Abdul Aziz Bin Salman Al Saud, Saudi Arabia’s Minister of Energy, and Shaikh Mohammed bin Khalifa Al Khalifa, Minister of Oil of the Kingdom of Bahrain.

This ICCUS Conference marks the first time such an event has been held in an OPEC Member Country and is part of Saudi Arabia’s preparations for November’s G20 Summit, which will be held in Riyadh.

After the official ribbon cutting, which opened the event, on February 25, the Saudi Minister welcomed delegates to Saudi Arabia and delivered his keynote address.

Saudi Minister’s keynote address

The Minister began by recognizing the importance of CCUS and the significant efforts that have already been put forth in the industry to advance this technology. “This two-day event is a landmark gathering on a topic of critical importance to the Kingdom and the entire world, and it is wonderful to see such a large number of distinguished participants,” he said. “My friends,

although the task of reducing global greenhouse gas emissions is challenging, we are not starting from scratch. Past work in this area has been considerable, and we should applaud those efforts, acknowledge the benefits they have achieved over the years, and seek to build on their foundation.”

He stressed that a balanced approach will be necessary to ensure the world’s energy needs are met while minimizing the industry’s environmental footprint.

“We must also acknowledge that while alternative energy sources are expanding, the world continues to rely upon fossil fuels for the overwhelming share of its overall energy needs — a situation that will not change for many decades to come,” he explained.

“Given that energy is a key input for both economic and social development, we also need to develop and deploy energy solutions that effectively address the problem of greenhouse gas emissions while also powering prosperity now and in the future. Therefore, we must accelerate the adoption of high-impact solutions such as Carbon Capture, Utilization and Storage — and do so urgently.”





Amin Nasser (r), CEO of Saudi Aramco; with moderator, John Deferios (l), CNN Business Emerging Markets Editor at CNN.

Circular carbon economy

He went on to explain the central role the Circular Carbon Economy will play in the Kingdom.

“CCUS really comes into its own as part of a much broader Circular Carbon Economy concept, which will be at the forefront of Saudi Arabia’s Presidency of the G20 this year,” he said. “The Circular Carbon Economy serves as a platform to address energy issues in a holistic and inclusive manner — and CCUS plays a central role in this approach.”

The Circular Carbon Economy concept, he pointed out, entails the so-called “4 Rs”: reduce: minimizing the amount of carbon entering the system by utilizing energy efficiency, renewables, and nuclear power; reuse & recycle: using carbon emissions in useful products or applications, such as CO₂ to chemicals and materials; and remove: eliminating carbon from the system through CCS and direct air capture. He said that CCUS, within this framework, will be able to deliver economic as well as environmental benefits.

CCUS projects

He then provided an overview on the Kingdom’s CCUS projects. These include the Gulf region’s first world-scale CO₂ enhanced oil recovery project by Saudi Aramco, which started up in 2015 and captures 800,000 tonnes of CO₂

annually, as well as one of the world’s largest CO₂ capture and purification plants by SABIC, which processes 500,000 tonnes of CO₂ per year as feedstock for chemicals. And, finally, he highlighted the four decade-old Master Gas System, which captures flared gas and turns it into a value added, clean fuel and feedstock.

“The economic and environmental benefits have been enormous, and the Master Gas System continues to serve as proof-of-concept when it comes to integrating economic viability with environmental protection,” he said.

The Minister also emphasized the Kingdom’s active involvement in international climate change discussions and initiatives.

“In 2015, the Kingdom joined the ‘Mission Innovation’ and the Clean Energy Ministerial (CEM), co-leading the CCUS challenge with the United Kingdom and Mexico,” he explained. “That same year, the Kingdom joined the Clean Energy Ministerial (CEM), where the Kingdom co-led the CCUS initiative with the United States, the United Kingdom and Norway.”

Enhanced investment

The Minister explained that investment, especially from the private sphere, would be crucial for this technology to be commercially viable going forward.

“Now, the time has come for all of us to redouble our efforts in the area of CCUS — which is what brings us together today,” he said. “Without a doubt, technology development will play a pivotal role in finding effective solutions to the carbon emissions challenge, as well as supplying clean fuels and creating valuable feedstocks and ultimately useful products. But for those CCUS technologies and systems to be sustainable and quickly scalable, we must work together to create opportunities and remove barriers for private sector investment.”

This will require, he added, the concerted efforts of all stakeholders to help reduce costs and pick up the pace of development.

“That means working together to drive down the costs and aggressively accelerate the pace of implementing CCUS at a global scale, including the construction of necessary infrastructure,” he said. “At the same time, we need to look ahead to collectively identify new commercial models and strategies that will enable the research, development and deployment of the next generation of CCUS technology. And we need to encourage greater cooperation and collaboration among various



Saudi Aramco

The CCUS plant at Shazbah, Saudi Arabia.

countries, industries, R&D disciplines, and the public and private sectors.”

Ministerial panel

In his first intervention, Mohammad Sanusi Barkindo, OPEC Secretary General, participated in a Ministerial panel discussion with the theme ‘CCUS in climate and energy strategies’.

Fellow panellists included: Suhail Mohamed Al Mazrouei, Minister of Energy and Industry, the United Arab Emirates (UAE); Shaikh Mohammed Bin Khalifa Al Khalifa, Minister of Oil of the Kingdom of Bahrain; and Masagos Zulkifli, Minister of Environment and Water Resources, Singapore. The panel was chaired by Adam Sieminski, President, King Abdullah Petroleum Studies and Research Centre.

During the engaging discussions between the panellists, the Secretary General emphasized that the oil and gas industry has a valuable role to play in the global efforts to stem the tide of climate change, adding that all technologies, including CCUS, will be essential in meeting global climate goals.

At the same time, it was pointed out that fossil fuels will remain crucial for energy security, national and global economic growth, social development and efforts pertaining to economic diversification.

Finally, the panellists agreed that enhanced

promotion of CCUS through multilateral platforms will be required to ensure the technology is developed and implemented in the most effective and widespread manner possible. These efforts would include a keen focus on developing more favourable financing and regulatory policies and, more specifically, advancing CCUS at the upcoming COP27 in Glasgow, Scotland.

The Secretary General’s keynote address

The Secretary General began his remarks by thanking the Kingdom of Saudi Arabia for hosting the event and complimenting the Saudi and Bahraini governments for their joint efforts in organizing the event.

“I commend you both for organizing this Conference, the timing of which could not be more crucial and the content of which is of utmost importance for the future of the oil and gas industry,” he said.

He noted the serious nature of the climate change issue and emphasized that OPEC was devoted to addressing it along with its international partners.

“OPEC is dedicated to identifying balanced, equitable, inclusive and common sense solutions to the challenges posed by climate change,” he said. “We believe that the oil and gas industry can and must be part of the solution to climate change. The science is clear on the gravity of this issue, and we are actively engaged in multilateral processes that aim to address this global challenge.”

With a global population estimated to increase by 1.6 billion — from 7.6bn in 2018 to 9.2bn in 2040 — he added that the world will need all forms of energy to meet rising energy demand in the long term.

“With this in mind, the focus must be on developing and implementing cleaner energy technologies across the value chain, enabling us to meet the world’s burgeoning energy needs in a sustainable and efficient manner,” he said.

No one left behind

While meeting future energy needs is of paramount importance, the Secretary General warned that those living in dire conditions with no access to energy must not be left behind.

“We must be inclusive and equitable in our decisions, and not forget our fellow citizens who, day in and day out, struggle for access to energy the rest of the world takes for granted,” he commented. “Here, I am referring to the serious scourge of energy poverty. The facts are sobering: there are more than 800 million people around the

world who lack access to electricity and almost three billion who live without modern fuels for clean cooking. Let me be clear: nobody should be left behind in the energy transition. Sustainable Development Goal number seven of the United Nations ensures access to affordable, reliable, sustainable and modern energy for all people — not just for a select group.”

Multilateral engagement

He added that OPEC is a co-author of the UNFCCC, the Kyoto Protocol and the Paris Agreement and is fully engaged in the multilateral approach to address climate change, which takes into consideration equity, historical responsibility and national circumstances.

“Energy poverty and climate change are two sides of the same coin,” he stated. “Thus, it is our firm belief that a well-coordinated and balanced approach with the participation of global stakeholders across the value chain will be essential to effectively addressing the complex issue of climate change while also meeting the unique energy requirements of those in developing nations.”

View of the Shazbah field in Saudi Arabia.



The Secretary General then provided an overview of the current status of CCUS and the advantages the technology can offer.

A flexible and effective technology

“According to the Global CCS Institute, CCUS is one of the few technologies that is able to adequately displace CO₂ from coal and gas-fired power stations and the only technology capable of decreasing large-scale emissions from diverse industrial sources,” he explained. “It is also a technology that can be retrofitted to many existing facilities, enabling them to operate cleanly for the remainder of their lifecycles. CCUS is also beginning to prove itself as a commercially viable solution, and is thus seen as a win-win proposal for many industry players.”

As far as the current global prevalence of the technology, he said, as of 2019, there were an estimated 51 large-scale CCS facilities around the world, including 19 that are operational, four that are under construction and 28 that are in various stages of development. These are located in the Americas, Europe, the Middle East, Central Asia and in the Asia Pacific region.

Total capture and storage capacity, he said, has risen by 34 per cent since 2017, which equals 97.5 million tonnes of CO₂ per year. To date, more than 260m t of anthropogenic CO₂ have been safely captured and permanently stored across the world. Additionally, he added, three-quarters of the CO₂ captured today in large-scale facilities comes from oil and gas operations, and the industry accounts for more than one-third of overall spending on CCUS projects.

Member Country initiatives

The Secretary General also recognized the efforts of OPEC Member Countries to mitigate climate change through technology while diversifying their economies, starting with Saudi Arabia.

“I must commend the efforts of Saudi Arabia, which is a leading advocate for harnessing technology to address climate change,” he said. “This was evident at last October’s Future Investment Initiative here in Riyadh, when HRH Prince Abdul Aziz Bin Salman Al Saud gave a prolific speech outlining Saudi Arabia’s transformative efforts. We published this speech in the *OPEC Bulletin*. If I may, your Highness, I would like to share an excerpt: ‘For us, transformation begins from within.

The Kingdom is putting its resources behind the Circular Carbon Economy by investing heavily in new energy and efficiency solutions for the world. In fact, Saudi Arabia is reforming its entire energy ecosystem.”

He then highlighted one of Saudi Arabia’s major CCUS projects, which is being carried out by Saudi Aramco.

“The Uthmaniyah demonstration project in the Eastern Province of the country was launched in 2015 with the goal of capturing 0.8 million tonnes per year of CO₂ at the Hawiyah natural gas processing plant and transporting it 85 kilometres by pipeline to the depleted Uthmaniyah area of the Ghawar field,” he explained.

Saudi Aramco describes it as “one of the Middle East’s largest CO₂ capture and storage demonstration projects.” The plant has the potential of capturing and processing an impressive 45 million standard cubic feet of CO₂ per day.

In the UAE, the Abu Dhabi National Oil Company has ambitious plans to increase its carbon capture programme six-fold by using Enhanced Oil Recovery technology at its maturing fields. He said, “the company’s commercial-scale Al Reyadah facility has the capacity to capture 800,000 t of CO₂ per year,” adding, “ADNOC’s goal is to increase this capacity six-fold to reach 5m t of CO₂ per year by 2030.”

He then spoke about Iran’s massive AMAK project, which is the country’s largest gas gathering and treatment project. It has the capacity, he explained, to avert the flaring of around 180 million cubic feet of gas per day, dehydrate it, inject into the pipeline and, finally, process it for further consumption.

In terms of Algeria, he stated that, since 2004, the country has been a pioneer in CCUS with its innovative In Salah project whereby the Krechba gas treatment plant, located about 1,200 kilometres south of Algiers, successfully stores CO₂ in analogous carboniferous sandstone wells.

In addition, he said that there were significant opportunities for Angola and Equatorial Guinea to employ CCUS in their depleted oil and gas fields, and Angola would have the added potential of using its deep saline aquifers for CCUS projects.

Private sector support

The Secretary General then touched on the key role played by the private sector to help evolve and expand CCUS on an international scale.

“At the beginning of this year, Microsoft announced its lofty aims to go carbon negative by 2030. This means the company would remove more CO₂ from the atmosphere than it emits. Over and above this, by 2050, it has pledged to reach an even higher target of removing from the environment all of the carbon the company has emitted either directly or by electrical consumption since it was founded in 1975,” he stated. “As part of these ambitious plans, the company announced a new four-year, \$1 billion Climate Innovation Fund to help, as the company describes it, “stimulate and accelerate the development of carbon removal technology.”

Part of this massive investment, he added, would be used to develop and refine CCUS technologies, helping advance the overall CCUS industry and accelerate efforts towards reaching the broader climate goals.

International oil companies

Shifting to the efforts of international oil companies, he spoke of the new commitments recently announced by BP.

“Just two weeks ago, BP released its goals to become a net-zero company by 2050. These ambitious targets include net zero emissions across the company’s operations, net zero carbon in its oil and gas production, as well as a 50 per cent cut in carbon intensity of its products. To achieve this, the company will fundamentally transform its organization and the way it does business.”

Naturally, the other major international oil companies are also actively pursuing similar agendas in intensifying their efforts towards a lower carbon future.

Policy issues

Moving on to the policy arena, the Secretary General said CCUS will be considered a key feature of the global mitigation efforts.

“On the policy front, CCUS is seen as an integral part of any strategy to limit global warming and meet the temperature target of well below 2° Celsius in line with the Paris Agreement’s long-term goal,” he commented. “Industrialized countries are putting this option

on the table as a means of meeting their mitigation contributions.”

As examples, he pointed to the European Union, which has defined CCUS as one of seven technological tools to reach the goal on climate neutrality by 2050, and in the US, he mentioned the new US House Republican climate agenda, which calls for tax breaks to encourage the development of technology for CCUS from coal and gas plants.

While there is clearly positive momentum for the growth and support of CCUS, he added that there are still some hurdles to be overcome looking ahead.

“Article 6 of the Paris Agreement remained an unresolved issue from COP24 in Katowice, and was then placed on the agenda for COP25 in Madrid,” he said. “One of the concerns is in paragraph 4 of Article 6 on the transition of activities from the Kyoto Protocol and provisions for Clean Development Mechanism (CDM) activities. There is a need to ensure that CCUS projects would be eligible for the new mechanisms created under Article 6.4.”

This and other important policy-related issues will be addressed at the upcoming COP26 in Scotland.

“Looking ahead to COP26 in November of this year to be held in Glasgow, what some are calling a “grand coalition” is being developed to help bring together stakeholders from across the industry to enhance synergies and build consensus on the importance of leveraging all viable technologies, especially CCUS, to help reduce greenhouse gas emissions,” he said. “These developments point to the dire need for ongoing promotion of CCUS in all multilateral platforms. Indeed, this will be crucial to securing the future growth of this technology.”

Financing

Another challenge, he pointed out, will be to ensure adequate financing of CCUS projects.

“Experts estimate that approximately 2,000 large-scale facilities are required to meet global emissions reduction targets by 2040. This equates to hundreds of billions of dollars in required investments,” he explained. “According to the latest IEA study on CCUS, 35 per cent of overall CCUS capital expenditures, often backed by public funding, have been allocated to oil and gas companies. These include recent commissions for projects related to Chevron, CNPC, and Shell.”

Due to the fact that the majority of funding is generated from public sources, he said it will be crucial going

forward for private sector financing to be significantly enhanced to ensure the large-scale deployment of CCUS.

“In this regard, members of the Oil and Gas Climate Initiative recently announced their plans to launch a new initiative to attract large-scale CCUS investment at industrial hubs around the world,” he said. “This financing would logically extend to public-private partnerships aimed at the development of innovative solutions for CCUS.”

He also spoke about the Green Climate Fund, which was set up in 2010 by the UNFCCC as the world’s largest dedicated fund helping developing countries reduce their greenhouse gas emissions.

“We hope this important Fund will make CCUS an integral part of their project portfolio for mitigation efforts in the years to come.”

Role of the energy industry

On the topic of the role of the energy industry in mitigating climate change, the Secretary General made it clear that it will be part of the solution.

“I do think it is important that we do not get caught up in the false narratives of the prophets of doom — those that say the oil industry is on its last lap, and that

peak oil is upon us. We need to understand that the scale and complexity of climate challenge means that no single energy source can solve the problem,” he said. “The fact is, the oil and gas industry — with its extensive know-how and deep technological expertise — is uniquely positioned to be a solutions-provider in our common goals of reducing the environmental footprint.”

He added the scope of the problem will require all industry stakeholders to work together and do their part.

“OPEC, its non-OPEC partners of the ‘Declaration’ and ‘Charter of Cooperation’, along with the entire global oil industry, will have a role to play in providing viable and effective solutions for a sustainable energy future,” he proclaimed. “We must continue to look forward and prepare for what lies ahead. In doing so, one main priority will be to successfully meet the world’s future energy needs in a sustainable and fair manner. This will be vitally important for the future we are building for our children and our children’s children.”

View of the Hawiyah gas plant in Saudi Arabia.



Keynote address of HRH Prince Abdul Aziz Bin Salman Al Saud

Delivered by HRH Prince Abdul Aziz Bin Salman Al Saud, Saudi Arabia's Minister of Energy, at the International Carbon Capture Utilization and Storage (ICCUS) Conference, February 25, 2020, Riyadh, Saudi Arabia.



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

Saudi Aramco

It is my great pleasure to welcome you to the *International Carbon Capture and Utilization Conference* in Riyadh, the first of its kind held in the Middle East. This two-day event is a landmark gathering on a topic of critical importance to the Kingdom and the entire world, and it is wonderful to see such a large number of distinguished participants.

My friends, although the task of reducing global greenhouse gas emissions is challenging, we are not starting from scratch. Past work in this area has been considerable, and we should applaud those efforts, acknowledge the benefits they have achieved over the years, and seek to build on their foundation.

However, we must also recognize that the current scope, scale

and speed of such efforts will not be sufficient for the global community to address the issue of climate change, or to reduce greenhouse gas emissions to the levels that must be achieved in the desired time frame.

We must also acknowledge that while alternative energy sources are expanding, the world continues to rely upon fossil fuels for the overwhelming share of its overall energy needs — a situation that will not change for many decades to come. At the same time, the world's total energy demand will continue to grow, given our planet's increasing population and rising living standards in the developing world.

Given that energy is a key input for both economic and social

development, we also need to develop and deploy energy solutions that effectively address the problem of greenhouse gas emissions while also powering prosperity now and in the future.

Therefore, we must accelerate the adoption of high-impact solutions such as carbon capture, utilization and storage (CCUS) — and do so urgently.

I strongly believe that CCUS can and will serve as a cornerstone for the global energy and environmental systems of tomorrow, because it is a tried and tested technology today. Far from being a “magic bullet” solution that exists only as a concept, a lab-bench prototype, or a pilot demonstration program, CCUS is already making a positive difference, and is ready to be deployed at a greater scale.

At the same time, the considerable progress that continues to be made in the research, development, demonstration and global deployment of CCUS is extremely encouraging, and underscores the tremendous future promise of this proven technology.

That’s important, because according to the Intergovernmental Panel on Climate Change, our global climate goals may not be achieved without utilizing CCS — in part because there are entire sectors such as cement, steel and chemicals where alternative, non-carbon options don’t exist in the way they do for power generation. CCUS, though, has the capacity to reduce emissions across various sectors, can be tied in with the increasing focus on hydrogen, and just as importantly is able to transform carbon into a useful, economically beneficial commodity.

In fact, CCUS really comes into its own as part of a much broader Circular Carbon Economy concept, which will be at the forefront of Saudi Arabia’s Presidency of the G20 this year. The Circular Carbon Economy serves as a platform to address energy issues in a holistic and inclusive manner — and CCUS plays a central role in this approach.

The 4Rs of the Circular Carbon Economy

- Reduce: Minimizing the amount of carbon entering the system by utilizing energy efficiency, renewables, and nuclear power;
- Reuse and recycle: Using carbon emissions in useful products or applications, such as CO₂ to chemicals and materials;
- Remove: Eliminating carbon from the system through CCS and Direct Air Capture.

So, as you can see, CCUS is front and center in two of the four Rs — making its accelerated and expanded adoption even more vital, since it is the linchpin of a much larger effort to reduce and redirect carbon emissions. And again, let me stress that within the Circular Carbon Economy framework, CCUS will deliver economic as well as environmental benefits, helping us to achieve objectives in both areas concurrently.

For its part, the Kingdom is already investing in the development of new technology for clean energy solutions including utilization of CCUS.

Some of those investments are already in place, and are making a tangible difference. For example, Saudi Aramco demonstrated the Gulf region’s first world-scale CO₂ enhanced oil recovery project in 2015, which captures 800,000 tons of CO₂ annually, while SABIC built one of the world’s largest CO₂ capture and purification plants to provide carbon dioxide as a feedstock for chemicals, using 500,000 tons of CO₂ per year.

And of course, for some four decades the Kingdom’s Master Gas System has been capturing gas that was once flared and turning it into a valuable, clean fuel and feedstock and making it the foundation of an entirely new domestic industrial sector. The economic and environmental benefits have been enormous, and the Master Gas System continues to serve as proof-of-concept when it comes to integrating economic viability with environmental protection.

The Kingdom is also an active and responsible member of the international community in various climate change initiatives. In 2015, the Kingdom joined the ‘Mission Innovation’ and the Clean Energy Ministerial (CEM), co-leading the CCUS challenge with the United Kingdom and Mexico. That same year, the Kingdom joined the Clean Energy Ministerial (CEM), where the Kingdom co-led the CCUS initiative with United States, the United Kingdom and Norway.

Now, the time has come for all of us to redouble our efforts in the area of CCUS — which is what brings us together today. Without a doubt, technology development will play a pivotal role in finding effective solutions to the carbon emissions challenge, as well as supplying clean fuels and creating valuable feedstocks and ultimately useful products. But for those CCUS technologies and systems to be sustainable and quickly scalable, we must work together to create opportunities and remove barriers for private sector investment.

That means working together to drive down the costs and aggressively accelerate the pace of implementing CCUS at a global scale, including the construction of necessary infrastructure. At the same time, we need to look ahead to collectively identify new commercial models and strategies that will enable the research, development and deployment of the next generation of CCUS technology. And we need to encourage greater cooperation and collaboration among various countries, industries, R&D disciplines, and the public and private sectors.

None of that will be easy, none of that will be simple, and none of that is assured of ultimate success — but all of it is vital for our countries and our communities. Teddy Roosevelt once wrote, *“Nothing in the world is worth having or worth doing unless it means effort, pain, [and] difficulty.”*

There can be no doubt that CCUS is worth doing, and I strongly believe that collectively we have the clarity of vision, the technological capability, and the depth of determination required to meet the carbon emissions challenge, and to realize the full potential of Carbon Capture, Utilization and Storage.



Keynote address of Mohammad Sanusi Barkindo

Delivered by Mohammad Sanusi Barkindo, OPEC Secretary General, at the International Carbon Capture Utilization and Storage Conference, February 26, 2020, Riyadh, Saudi Arabia.



Mohammad Sanusi Barkindo, OPEC Secretary General.

It is a great pleasure to be here in Riyadh for this International Carbon Capture Utilization and Storage Conference, which is being held under the esteemed patronage of HRH Prince Abdul Aziz Bin Salman Al Saud, Minister of Energy of the Kingdom of Saudi Arabia and Shaikh Mohammed Bin Khalifa Al Khalifa, Minister of Oil of the Kingdom of Bahrain.

Allow me to thank you for the invitation to be part of this important event, which will tackle the theme of Carbon Capture Utilization and Storage in Climate and

Energy Strategies. I commend you both for organizing this Conference, the timing of which could not be more crucial and the content of which is of utmost importance for the future of the oil and gas industry.

As many of you are well aware, OPEC is dedicated to identifying balanced, equitable, inclusive and common sense solutions to the challenges posed by climate change.

We believe that the oil and gas industry can and must be part of the solution to climate change. The science

is clear on the gravity of this issue, and we are actively engaged in multilateral processes that aim to address this global challenge.

Yes, greenhouse gas emissions need to be reduced, but we must not place ourselves in a position where we are forced to choose one energy type over another. The fact is, with a global population estimated to increase by 1.6 billion — from 7.6 billion in 2018 to 9.2bn in 2040 — the world will require all energy types to meet rising energy demand in the long term.

With this in mind, the focus must be on developing and implementing cleaner energy technologies across the value chain, enabling us to meet the world's burgeoning energy needs in a sustainable and efficient manner.

An inclusive transition

In doing so, however, we must be inclusive and equitable in our decisions, and not forget our fellow citizens who, day in and day out, struggle for access to energy the rest of the world takes for granted. Here, I am referring to the serious scourge of energy poverty. The facts are sobering: there are more than 800 million people around the world who lack access to electricity and almost three billion who live without modern fuels for clean cooking.

Let me be clear: nobody should be left behind in the energy transition. Sustainable Development Goal number seven of the United Nations ensures access to affordable, reliable, sustainable and modern energy for all people — not just for a select group.

OPEC is a co-author of the UNFCCC, the Kyoto Protocol and the Paris Agreement and fully supports the multilateral approach to addressing climate change. The core elements of the UNFCCC, particularly equity, historical responsibility and national circumstances must be considered at all junctures moving forward.

Energy poverty and climate change are two sides of the same coin. Thus, it is our firm belief that a well-coordinated and balanced approach with the participation of global stakeholders across the value chain will be essential to effectively addressing the complex issue of climate change while also meeting the unique energy requirements of those in developing nations.

This Conference has brought together world energy leaders from both the public and private sectors as well as industry experts, policymakers and scientists to deliberate ways in which CCUS might contribute to the establishment of a circular carbon economy. This type of economy would enable this industry to combat climate

change through the recovery and recycling of carbon emissions. Engaging and informative discussions on this topic already took place in yesterday's dedicated session entitled 'CCUS and Circular Carbon Economy'.

I must commend the efforts of Saudi Arabia, which is a leading advocate for harnessing technology to address climate change. This was evident at last October's Future Investment Initiative here in Riyadh, when HRH Prince Abdul Aziz Bin Salman gave a prolific speech outlining Saudi Arabia's transformative efforts. We published this speech in the *OPEC Bulletin*. If I may, your Highness, I would like to share an excerpt: "For us, transformation begins from within. The Kingdom is putting its resources behind the Circular Carbon Economy by investing heavily in new energy and efficiency solutions for the world. In fact, Saudi Arabia is reforming its entire energy ecosystem."

This Conference on CCUS is just another indication of the pivotal role this technology will play in the years to come as an innovative and cost-effective solution to addressing climate change.

According to the Global CCS Institute, CCUS is one of the few technologies that is able to adequately displace CO₂ from coal and gas-fired power stations and the only technology capable of decreasing large-scale emissions from diverse industrial sources. It is also a technology that can be retrofitted to many existing facilities, enabling them to operate cleanly for the remainder of their lifecycles. CCUS is also beginning to prove itself as a commercially viable solution, and is thus seen as a win-win proposal for many industry players.

CCUS capacity soars

As of 2019, there were an estimated 51 large-scale CCUS facilities around the world. These include 19 that are operational, four that are under construction and 28 that in are various stages of development. Geographically, these facilities are located in the Americas, Europe, the Middle East, Central Asia and in the Asia Pacific region.

The total capture and storage capacity has risen by 34 per cent since 2017, which equals 97.5 million tonnes of CO₂ per year. To date, more than 260m t of

anthropogenic CO₂ have been safely captured and permanently stored globally.

According to the IEA's most recent report on CCUS, three-quarters of the CO₂ captured today in large-scale facilities comes from oil and gas operations, and the industry accounts for more than one-third of overall spending on CCUS projects.

OPEC and its Member Countries are joined by the IPCC, the IEA, international oil companies and many other industry leaders in highlighting the critical role that CCUS must play in meeting global emissions reduction goals.

Several OPEC Member Countries have been active in CCUS projects, and I would like to briefly highlight some of their impressive endeavours. Some of these country-specific projects will be further elaborated upon in various sessions today.

OPEC Member Countries lead the way forward

First of all, right here in Saudi Arabia, the Uthmaniyah demonstration project in the Eastern Province of the country was launched in 2015 with the goal of capturing 800,000 t per year of CO₂ at the Hawiyah natural gas processing plant and transporting it 85 kilometres by pipeline to the depleted Uthmaniyah area of the Ghawar field. The project is run by Saudi Aramco, which describes it as "one of the Middle East's largest CO₂ capture and storage demonstration projects." The plant has the capability to capture and process an impressive 45 million standard cubic feet of CO₂/day.

In the United Arab Emirates, the Abu Dhabi National Oil Company has ambitious plans to increase its carbon capture programme six-fold by using Enhanced Oil Recovery technology at its maturing fields. The company's commercial-scale Al Reyadah facility has the capacity to capture 800,000 t of CO₂ per year. ADNOC's goal is to increase this capacity six-fold to reach 5m t of CO₂ per year by 2030.

In the Islamic Republic of Iran, we also see great progress being made with CCUS. The massive AMAK project, which is the country's largest gas gathering and treatment project, averts the flaring of around 180 million cubic feet of gas/day, dehydrates it, injects into the pipeline and, finally, it is processed for further consumption.

Since 2004, Algeria has also been a pioneer in CCUS with its cutting-edge In Salah project. The Krechba gas treatment plant, located about 1,200 kilometres south of Algiers, successfully stores CO₂ in analogous carboniferous sandstone wells.

There are also significant opportunities for Angola and Equatorial Guinea to employ CCUS in their depleted oil and gas fields, and Angola has the added CCUS opportunities using its deep saline aquifers.

These are just a few of the examples of the excellent efforts being made in OPEC Countries to reduce their carbon footprints and increase their operational efficiencies while also diversifying their economies.

In the private sector, action is also being taken by international corporations, which have stepped up their efforts to address climate change.

At the beginning of this year, Microsoft announced its lofty aims to go carbon negative by 2030. This means the company would remove more CO₂ from the atmosphere than it emits. Over and above this, by 2050, it has pledged to reach an even higher target of removing from the environment all of the carbon the company has emitted either directly or by electrical consumption since it was founded in 1975.

As part of these ambitious plans, the company announced a new four-year, \$1 billion Climate Innovation Fund to help, as the company describes it, "stimulate and accelerate the development of carbon removal technology". A portion of these funds will be devoted to further developing and refining CCUS technologies, helping advance the overall CCUS industry and accelerate efforts towards reaching the broader climate goals.

International oil companies are also introducing proactive measures. Just two weeks ago, BP released its goals to become a net-zero company by 2050. These ambitious targets include net zero emissions across the company's operations, net zero carbon in its oil and gas production, as well as a 50 per cent cut in carbon intensity of its products. To achieve this, the company will fundamentally transform its organization and the way it does business.

On the policy front, CCUS is seen as an integral part of any strategy to limit global warming and meet the temperature target of well below 2° Celsius in line with the Paris Agreement's long-term goal.

CCUS technology gains momentum

Industrialized countries are putting this option on the table as a means of meeting their mitigation contributions. For example, the European Union has defined CCUS as one of seven technological tools to reach the goal on climate neutrality by 2050. And last week, the *New York Times* published an article entitled 'The Republican Climate Agenda' which elaborates the new US House Republican climate

agenda, which calls for tax breaks to encourage the development of technology for CCUS from coal and gas plants.

So, clearly, we are seeing positive momentum for the growth and support of CCUS, however there are still some hurdles to be overcome going forward.

Article 6 of the Paris Agreement remained an unresolved issue from COP24 in Katowice, and was then placed on the agenda for COP25 in Madrid. One of the concerns is in paragraph 4 of Article 6 on the transition of activities from the Kyoto Protocol and provisions for Clean Development Mechanism (CDM) activities. There is a need to ensure that CCUS projects would be eligible for the new mechanisms created under Article 6.4.

On the margins of COP25, discussions also took place on the governance, regulatory frameworks, technical aspects and socioeconomic value of CCUS and CO₂ removal.

Looking ahead to COP26 in November of this year to be held in Glasgow, what some are calling a “grand coalition” is being developed to help bring together stakeholders from across the industry to enhance synergies and build consensus on the importance of leveraging all viable technologies, especially CCUS, to help reduce greenhouse gas emissions.

These developments point to the dire need for ongoing promotion of CCUS in all multilateral platforms. Indeed, this will be crucial to securing the future growth of this technology.

Another challenge will be to ensure adequate financing of CCUS projects. Experts estimate that approximately 2,000 large-scale facilities are required to meet global emissions reduction targets by 2040. This equates to hundreds of billions of dollars in required investments.

According to the latest IEA study on CCUS, 35 per cent of overall CCUS capital expenditures, often backed by public funding, have been allocated to oil and gas companies. These include recent commissions for projects related to Chevron, CNPC, and Shell.

To date, the majority of funding comes from the public sector, so it will be crucial going forward for private sector financing to be significantly enhanced to ensure the large-scale deployment of CCUS. In this regard, members of the Oil and Gas Climate Initiative recently announced their plans to launch a new initiative to attract large-scale CCUS investment at industrial hubs around the world. This financing would logically extend to public-private partnerships aimed at the development of innovative solutions for CCUS.

Finally, a word on the Green Climate Fund, which

was set up in 2010 by the UNFCCC as the world’s largest dedicated fund helping developing countries reduce their greenhouse gas emissions; We hope this important Fund will make CCUS an integral part of their project portfolio for mitigation efforts in the years to come.

Celebrating the past, preparing for the future

OPEC is fully supportive of CCUS and any other technological solution that will help mitigate the effects of climate change. However, I do think it is important that we do not get caught up in the false narratives of the prophets of doom — those that say the oil industry is on its last lap, and that peak oil is upon us.

We need to understand that the scale and complexity of climate challenge means that no single energy source can solve the problem.

The fact is, the oil and gas industry — with its extensive know-how and deep technological expertise — is uniquely positioned to be a solutions-provider in our common goals of reducing the environmental footprint. And indeed, as I have touched on earlier, great steps are already being made to provide clean energy technologies and greatly improved fuel efficiency standards.

Of course, more can be done, and more will be done, but it will be key that our industry’s capacity for technological innovation be fully leveraged within this process.

OPEC, its non-OPEC partners of the ‘Declaration’ and ‘Charter of Cooperation’, along with the entire global oil industry, will have a role to play in providing viable and effective solutions for a sustainable energy future.

In September of this year, OPEC will celebrate its 60th Anniversary with a special commemorative ceremony to be held in Baghdad, Iraq, the sacred birthplace of the Organization.

In preparing for this landmark occasion, it has been a year of reflecting back on all that has been achieved. At the same time, we must continue to look forward and prepare for what lies ahead. In doing so, one main priority will be to successfully meet the world’s future energy needs in a sustainable and fair manner. This will be vitally important for the future we are building for our children and our children’s children.





Davos 2020:

Cohesion and sustainability

The World Economic Forum (WEF) Annual Meeting 2020 took place in Davos, Switzerland, from January 21–24. With the OPEC Secretary General, Mohammad Sanusi Barkindo, and a number of OPEC Ministers in attendance, the OPEC Bulletin reports on the four-day event that was held under the theme ‘Stakeholders for a cohesive and sustainable world’.

In the early 1970s, Professor Klaus Schwab pushed the idea of ‘stakeholder theory’, which in general terms means a company should serve all its stakeholders, not just its shareholders: employees, suppliers and the community it is part of. It was considered unconventional at the time, but it has since gained traction and has become the guiding principle of the WEF.

The WEF was founded by Schwab in 1971 and since that year, politicians, business leaders, academics, journalists and representatives of civil society have been travelling to Davos, which is the home of its annual meeting.

The town of Davos is immortalized in the novel ‘The Magic Mountain’ by Thomas Mann, which was first published in German in November 1924 and in 20th-century German literature it is considered to be one of the most influential works.

Over the last five decades, the Davos meeting has often reflected key events in world history, and the overarching challenges of the time. This was no different in 2020, with sustainability and climate change brought to the fore, as well as issues related to how to remove long-term debt burdens; avoid technology wars; empower a



L–r: Daniel Yergin, Vice-Chairman, IHS Markit; HRH Prince Abdul Aziz Bin Salman Al Saud, Minister of Energy of Saudi Arabia; Patrick Pouyanné, Chairman of the Board and Chief Executive Officer, Total; Maria Fernanda Suarez, Minister of Mines and Energy of Colombia; and Wan Zulkiflee Wan Ariffin, President and Group Chief Executive Officer, Petronas (Petroliam Nasional), Malaysia; speaking in the session on ‘Future of fossil fuels’ at the World Economic Forum Annual Meeting 2020 in Davos, Switzerland.

billion people with skills over the next decade; and how business can create the models necessary to drive enterprise in the Fourth Industrial Revolution.

Strategies and outlooks

The Secretary General participated in a number of sessions with a variety of related stakeholders. This included looking at the importance of collaborative frameworks that can enable the oil and gas industry to address the societal and economic challenges of the energy transition; strategies emerging as governments and businesses

adapt to a rapidly evolving energy landscape; and building the skills and talents to thrive in the Fourth Industrial Revolution.

This included sessions featuring the heads of some of the major international oil companies, among them the outgoing Chief Executive Officer (CEO) of BP, Bob Dudley, and the CEO of Shell, Ben van Beurden, and the heads of a number of international organizations, including Fatih Birol, Executive Director of the International Energy Agency (IEA).

Mohammad Sanusi Barkindo (c), OPEC Secretary General, attended the presentation of HRH Prince Abdul Aziz Bin Salman Al Saud.



HRH Prince Abdul Aziz Bin Salman Al Saud, Minister of Energy of Saudi Arabia, speaking at the WEF 2020.

Images unless otherwise credited courtesy World Economic Forum 2020.



R–l: Fatih Birol, Executive Director, International Energy Agency; Christiana Figueres, Founding Partner, Global Optimism; Joe Kaeser, President and Chief Executive Officer, Siemens; Amin H Nasser, President and Chief Executive Officer, Saudi Aramco; John Deferios, Editor and Anchor, Emerging Markets, CNN Business; speaking at the session on ‘The Global Energy Challenge’.

Bilaterals

The OPEC Secretary General undertook a number of bilateral meetings, including with the President of Azerbaijan, Ilham Aliyev. The President commended OPEC on establishing an effective and efficient working relationship with non-OPEC producers, including Azerbaijan, to help balance and stabilize markets. He stressed that the ‘Declaration of Cooperation’ (DoC) was “a really unique partnership format.”

In the meeting, Barkindo noted that President Aliyev was the first world leader to call on OPEC and non-OPEC to collaborate to rescue the oil market during the last downturn, at the WEF 2016 in Davos. He added that “you are far-sighted, very determined. You have called on all of us to use the global platform here for us to come together and work together.”

The President pledged his country’s backing for strengthening the DoC and the ‘Charter of Cooperation’, and stressed his continued support to sustain a stable oil market environment.

The OPEC Secretary General also met with Andrzej Duda, President of Poland, on the sidelines of the Forum. The two discussed a variety of energy-related issues, emphasizing that the energy transition is a challenge that requires global and comprehensive solutions.

Barkindo said that all sources of energy would be required in the future, stating that energy resources per se are not the challenge; the challenge is reducing emissions. In this regard, he underscored the importance of technological innovation.

Both Barkindo and Duda rejected the misleading narrative that the world should move away from one energy source to another, and iterated the importance of dialogue.

There was also a meeting between Barkindo and the Austrian Chancellor, Sebastian Kurz. The Secretary General congratulated the Chancellor on his new term in office and wished him every success with his comprehensive programme alongside his coalition team.

Saudi Arabia and the G20

Barkindo also attended a session that analyzed the strategic priorities for Saudi Arabia’s G20 presidency in 2020, with HRH Prince Abdul Aziz Bin Salman Al Saud, the Minister of Energy of Saudi Arabia, speaking alongside many other ministers from the government.

Saudi Arabia is the only country from the region, and from OPEC, that is a member of the G20. The session laid out an ambitious agenda for the country’s presidency, under the rubric of ‘Realizing opportunities of the 21st century for all’, with a three-pronged plan focusing on empowering people, safeguarding the planet and shaping new frontiers.

This was highlighted by Mohammad Al Tuwaijri, the country’s Minister of Economy and Planning, who stressed that all 17 of the United Nations Sustainable Development Goals (SDGs) are addressed “directly or indirectly.” He added: “Our objective with this presidency is to be as action-oriented and practical as possible toward the SDGs.”



Amin H Nasser (r), President and Chief Executive Officer, Saudi Aramco; with John Deferios.



Austrian Chancellor, Sebastian Kurz, during his presentation to the WEF 2020.



On the sidelines of the World Energy Forum 2020 Barkindo met with (l-r): Ilham Aliyev; President of Azerbaijan, Andrzej Duda, President of Poland; and (below) the Austrian Chancellor, Sebastian Kurz.



Mohammed Al-Jadaan, Saudi Arabia’s Minister of Finance, said that when it comes to safeguarding the planet, “at the centre, obviously, is climate change. We want to work with our partners to advance climate change mitigation and adaptation.”

The country has an aggressive environmental agenda, explained Prince Abdul Aziz. This includes “managing conditions for industries and the food value chain... and sustainable mobility.”



A decade of producer-consumer cooperation

Marking a significant milestone in cooperation, the International Energy Agency (IEA), International Energy Forum (IEF) and OPEC held their 10th Symposium on Energy Outlooks in Riyadh, Saudi Arabia, on February 19.



Dr Sun Xiansheng, IEF Secretary General (l); with HRH Prince Abdul Aziz bin Salman Al Saud, Minister of Energy of Saudi Arabia; and Dr Ayed S Al-Qahtani, Director, Research Division, OPEC.

The three leading organizations have been steadfast partners over the past decade in supporting fact-based analysis, knowledge-sharing, and fostering understanding of the energy markets.

HRH Prince Abdul Aziz bin Salman Al Saud, Minister of Energy of Saudi Arabia, welcomed participants to the Symposium, including senior government and energy industry representatives along with Francesco La Camera, Director-General of the International Renewable Energy Agency (IRENA), and the Gas Exporting Countries Forum (GECF), represented by Dmitry Sokolov, Head of Energy Economics and Forecasting.

During the Symposium, Dr Ayed S Al-Qahtani, Director of the Research Division at OPEC, recognized the importance of the strong relationship between the organizations in a speech delivered on behalf of Mohammad Sanusi Barkindo, OPEC Secretary General.

In his opening remarks, Dr Al-Qahtani thanked Prince Abdul Aziz “for his instrumental role in the creation of both the IEF and this symposium, which has become a prime and unique forum for consumer-producer dialogue.”

Dr Al-Qahtani also praised Dr Sun Xiansheng, Secretary General of the IEF, for hosting the event in Riyadh, the IEF’s home base. Noting that Sun will conclude his tenure as Secretary General of IEF later this year, Dr Al-Qahtani thanked him on behalf of the OPEC Secretariat for his close cooperation with the Organization.

In thanking the IEA for co-hosting the important event, Dr Al-Qahtani noted that Keisuke Sadamori, the Director

of Energy Markets and Security Directorate of the IEA, “has played a key role in monitoring global oil markets and responding to energy supply disruptions, tasks familiar to OPEC.” He further recognized the contributions of Dr Fatih Birol, Executive Director of the IEA, who worked at OPEC himself in his earlier years. Birol and his staff “are endowed with a deep understanding of our Organization, along with its role and goals, enabling deep and meaningful collaboration”, Dr Al-Qahtani added.

In his remarks, Dr Al-Qahtani noted that the ten-year anniversary marked a milestone for producer and consumer dialogue, which has brought the parties together to discuss the market and look for solutions to the problems that the whole world.

Trio of high-profile events

The Symposium on Energy Outlooks was part of a busy

three days of high-level energy-related events held in Riyadh from February 18–20.

In an event preceding the Symposium on Energy Outlooks, OPEC’s delegation was an observer during the Fourth IEF-EU Energy Day, which focused on the ‘Green New Deal and the Circular Economy.’

The event was held on February 18 to promote cooperation among government and industry in three regions — Europe, the Middle East and North Africa — to strengthen trade, investment as well as energy.

On February 20, the IEF and the International Renewable Energy Agency (IRENA) held their first Seminar on Renewable and Clean Energy Technology Outlooks. During a session titled ‘Stakeholder views on current pathways and sustainable energy market outlooks’, Dr Al-Qahtani presented OPEC’s views on the current pathways and sustainable energy outlooks.

Delegates gather at the first Seminar on Renewable and Clean Energy Technology Outlooks organized by the IEF and the International Renewable Energy Agency (IRENA).



IEA

OPEC bulletin 2-3/20

Supplying energy for a growing world

The Egypt Petroleum Show (EGYPS 2020) provides an opportune backdrop for highlighting OPEC's success in providing a sustainable energy supply going forward.



L–r: Dr Ayed Al-Qahtani, Director of the Research Division at OPEC; Eithne Treanor, CEO of E Treanor Media and regular broadcast moderator for OPEC Conferences; Steven Winberg, Assistant Secretary for Fossil Energy, US Department of Energy; Dr Amani Abou-Zeid, Commissioner of Infrastructure and Energy, African Union Commission; and Pál Ságvári, Ambassador-at-Large for Energy Security, Hungarian Ministry of Foreign Affairs and Trade.

OPEC's exhibition at the Egypt Petroleum Show (EGYPS 2020) gained prominent attention when Egyptian President Abdel Fattah El Sisi and Petroleum Minister Tareq El Mulla toured the exhibition, which also drew the attention of other senior officials from Egypt and other countries taking part in the event.

In addition, Dr Ayed S Al-Qahtani, Director of the Research Division at OPEC, participated in a timely panel discussion during a global business leaders session on February 12 titled 'Responding to the energy transition amidst market volatility: A threat or an opportunity? What does the future hold?'

In his remarks, Dr Al-Qahtani emphasized the fundamental importance of oil as part of the wider energy mix. He added that all energy streams will be required to meet the rising

demand for energy while also addressing energy access and the issue of climate change.

He further discounted the notion that oil demand will peak anytime soon, noting that the global population is expected to grow by 1.6 billion people, rising to 9.2bn within 20 years, with developing countries accounting for around 90 per cent of this growth. At the same time the world's GDP is expected to double between 2018 and 2040 to more than \$237 trillion, translating into average annual growth of 3.3 per cent. In leading oil importing nations like India, the pace of economic growth is projected to be even greater, averaging 6.3 per cent annually, while China and India alone will account for 40 per cent of global GDP within 20 years.

With overall energy demand projected to grow by 35 per cent between 2018 and 2040, Dr Al-Qahtani emphasized during the EGYP2020 discussion that oil will remain the leading energy source, accounting for around 28 per cent of demand in 2040, and be especially important to meeting the needs of key sectors like petrochemicals and transportation.

During the discussion, Al-Qahtani pointed out the important role that the 'Declaration of Cooperation' has played in stabilizing the oil market after the turmoil of 2014–16, and in restoring the investment climate that was battered during the market slump. OPEC projections, he noted, show that long-term investments for the oil sector at around \$10.6 trillion, the bulk of that (\$8.1tr) required in the upstream sector.

Tackling energy poverty

In his remarks at EGYP2020, he also addressed one of the world's leading development challenges: energy poverty. Many of the more than 800 million people without access to electricity and nearly three billion without clean cooking fuels live in Africa. Dr Al-Qahtani stressed



OPEC's booth at EGYP2020, with Dr Ayed Al-Qahtani (r), Director of the Research Division at OPEC; and Hasan Hafidh, Head of OPEC's PR & Information Department.

that expanding energy access will require all streams of energy, including oil and gas, going forward.

Turning to another topic closely linked to the energy transition, Dr Al-Qahtani said OPEC and its Member Countries fully support the Paris Agreement and its collective efforts to address climate change. He noted that OPEC Member Countries are working to achieve their Nationally Determined Contributions (NDCs) under the 2015 accord, which calls for keeping the global temperature rise in the 21st century to well below 2° Celsius above pre-industrial levels.

The panel was moderated by Eithne Treanor, CEO of E Treanor Media and regular broadcast moderator for OPEC Conferences, 'Declaration of Cooperation' Ministerial Meetings and other events. Besides Dr Al-Qahtani, the panellists were Dr Amani Abou-Zeid, Commissioner of Infrastructure and Energy, African Union Commission; Steven Winberg, Assistant Secretary for Fossil Energy, US Department of Energy; and Pál Ságvári, Ambassador-at-Large for Energy Security, Hungarian Ministry of Foreign Affairs and Trade. 

Chinese envoy provides update on virus outbreak

China's ambassador to the UN and international organizations in Vienna outlines the country's response to the coronavirus (COVID-19), and calls attention to the 'Declaration to Cooperation' for ensuring a stable energy supply.



Ambassador Wang Qun, Permanent Representative of the People's Republic of China to the United Nations and other International Organizations in Vienna,

Ambassador Wang Qun, Permanent Representative of the People's Republic of China to the United Nations and other International Organizations in Vienna, outlined measures taken by the government during the Joint Technical Committee (JTC) of 'Declaration of Cooperation' (DoC) on February 4.

The Ambassador updated the JTC on the COVID-19 outbreak in China and its potential impact on the economy and energy demand. The JTC, which met February 4–6, undertook a comprehensive review of oil market conditions and projections as the basis for its recommendations to the Joint Ministerial Marketing Committee (JMCC).

The meeting with Ambassador Wang represented a unique opportunity for a discussion about COVID-19. The outbreak originated in Wuhan, in China's central Hubei Province, with the first case identified at the end of December 2019.

'Important partner'

Wang opened his briefing by thanking OPEC for its support, calling the Organization "an important partner of China."

He further said the countries participating in the DoC have an important impact on the global energy market. As a major energy user, he said, "China is willing to work together with OPEC and partner countries to jointly maintain the stability and long-term supply of the energy market."

Prevention and control

The Ambassador explained that under the leadership of President Xi Jinping, China established a comprehensive

China's leadership made COVID-19 a priority and rapidly mobilized its national resources to address the outbreak, one of the country's senior diplomats in Vienna said in a briefing at the OPEC Secretariat in Vienna.

prevention and control mechanism to address COVID-19. The response also was taking place in a transparent, scientific, orderly manner that drew on the country's vast scientific, medical and technological know-how, and its enormous resources, he added.

"China is a huge economy with the resources and the resolve to effectively address the current epidemic," Wang said.

Besides mobilizing the country, the Chinese government put in place measures to contain the virus and treat those infected, and accelerated scientific and medical research. Moreover, Wang said, China took steps to support medical institutions and ensure sufficient supplies of medications and medical equipment.

China has worked closely with the World Health Organization (WHO) and WHO experts, and has collaborated with countries around the world to address concerns about COVID-19 on a timely basis, he added.

The WHO reported that the virus outbreak peaked and plateaued in China between January 23 and February 2, with the number of new cases in the country declining after that.

'Productive and fruitful relationship'

In welcoming remarks to Ambassador Wang, OPEC Secretary General, Mohammad Sanusi Barkindo, said China's response to COVID-19 demonstrated the value of dialogue, cooperation and transparency in addressing urgent matters of international importance.

He further said that WHO officials had noted China's



L-r: Mohammad Sanusi Barkindo, OPEC Secretary General; Ambassador Wang Qun, Permanent Representative of the People's Republic of China to the United Nations and other International Organizations in Vienna; and Eng Adeb Al-Aama, Saudi Arabia's Governor for OPEC and Chairman of the JTC.

strong collaboration, proactive public health measures, and the steady flow of data provided to the world at large.

China's central bank also moved quickly to reassure markets and stabilize the economy by ensuring ample liquidity in the banking system, the Secretary General said.

"OPEC values our extremely productive and fruitful relationship with China, which is also highlighted by regular high-level dialogues and producer-consumer cooperation. We fully support our dialogue partner's ongoing response efforts," Barkindo said. 

Delegates to the Special Meeting of the JTC take time out for a group photograph.



APPO: Expanding energy access and opportunity across Africa

Dr Omar Farouk Ibrahim, Nigeria's former Governor for OPEC, is the newly appointed Secretary General of the African Petroleum Producers Organization (APPO). He speaks to the OPEC Bulletin about the organization's goals and important ties to OPEC.



Dr Ibrahim succeeded Mahaman Laouan Gaya (pictured right) whose term ended in December 2019.



Dr Omar Farouk Ibrahim, former Governor for OPEC from Nigeria, has added a new position to his distinguished career by becoming the new Secretary General of the African Petroleum Producers' Organization (APPO).

Until his appointment to the position on December 12, 2019, Farouk was Adviser on International Energy Relations to the Honourable Minister of State for Petroleum Resources of the Federal Republic of Nigeria, and Nigeria's Governor for OPEC and Executive Board Member at Gas Exporting Countries' Forum (GECF) since 2015. Ibrahim's name is well known in and outside OPEC circles for his service as Head of the Public Relations and Information Department at the OPEC Secretariat from 2003 to 2010.

Farouk succeeded Mahaman Laouan Gaya as APPO Secretary General. APPO, with 15 active Member Countries and three observers, is a continental intergovernmental energy organization. Its mission is to promote cooperation in the field of hydrocarbons of its Member Countries and other global institutions to foster fruitful collaboration and partnerships while utilizing petroleum as a catalyst for energy security, sustainable development and economic diversification in Africa. APPO aspires to be the world's major institution of reference on Africa's hydrocarbon matters.

APPO has a long and close relationship with OPEC. Six of OPEC's 13 Member Countries — Algeria, Angola, Republic of Congo, Equatorial Guinea, Gabon and Libya — also belong to APPO and are founding members of APPO.

Farouk answered questions about APPO and his plans for the Organization on the side-lines of the 178th Extraordinary Meeting of the OPEC Conference, held in Vienna on March 5, 2020.

Question: Many APPO Member Countries are also OPEC Member Countries. How do these Organizations differ?

Answer: Many people have asked me this question. One difference is that OPEC is an intergovernmental organization that has membership and presence in four continents, namely Asia, Africa, the Americas and Europe. APPO, on the other hand, is a continental organization. All our members come from the African continent and our headquarters is also located in Africa.

Another difference is that OPEC focuses on stabilizing the global oil market for the good of all — producers, consumers and investors. It is doing a wonderful job. What APPO does is to focus on the peculiar challenges of the oil and gas industry on the African continent — challenges that are not necessarily global. We think that we should find solutions to our own problems. By stabilizing the market, yes, OPEC is helping us, but fighting continental energy poverty or poverty of technology and finance in Africa is outside the mandate of OPEC.

What are the key challenges that Africa faces in the oil and gas sector?

There are basically three challenges we have to address. The first one is infrastructure. We need to put in place energy infrastructure that cuts across the continent: pipelines, for crude as well as products and gas, refineries and petrochemicals to serve sub-regions or a cluster of countries.

The second is technology. Our oil and gas industry is unarguably the most dependent on foreign technology. We have generally bought into the misleading belief of technology transfer, that the developed world will transfer technology to us. While it is possible to have technology transferred, it is always the archaic technology that is transferred while the latest is kept by those who developed it, until a better one is developed. I am sure you are aware that Africa has some of the best scientists, technologists and innovators in Europe and the US. They excel when they go there. But when they are here, they are unable to excel. The challenge is to create the enabling environment for these people to excel in Africa. We will also create the enabling environment for Europeans and Americans to come and do their innovations here.

The third challenge is financing of energy projects. God has endowed us with natural resources and human resources. We need

to create an enabling environment that will support the growth of knowledge, technology and investment.

How do you plan to improve investment climate given the current market challenges?

A few years after APPO was founded in 1987, the APPO Fund for Technical Cooperation was created to support technical cooperation and mobilize finance for energy projects on the continent. This is similar to the OPEC Fund for International Development. Along with the reorganization of APPO, we have reorganized and reformed the APPO Fund and it is now called the African Energy Investment Corporation (AEICORP). For the first time, we are bringing private investors into the system and the contributing governments will hold a minority share.

This is all part of the major reforms that we are embarking on to change the whole mandate of the organization to be able to better focus on addressing the peculiar energy challenges facing the African continent.

More and more African countries are producing oil. And yet most countries in Africa have to import petroleum products from outside the continent. Why is that?

That is one of the biggest challenges we have on the continent. Nigeria for instance, produces something like 2.2 million b/d, yet imports about 30 to 40 million litres of petrol on a daily basis. It doesn't make sense. Nigeria has four refineries and none of them is working at 30 per cent of its nameplate capacity. You have the same problems in Côte d'Ivoire, Ghana and a number of other African countries.

These facilities are very capital intensive. We need to be able to come together and have refineries and pipelines that can transport products across borders. What we are trying to do at APPO is to ensure we have the cross-border infrastructure and to do this, we need to pool our resources.

Despite the need for energy in Africa, much of its petroleum is exported to non-African markets. Could that change?

This is a part of Africa's colonial legacy. When you go to many African countries, you see railways running from the hinterland to the coast. The railways take agricultural and mineral resources from where they are produced in the hinterland to the ports to be exported outside Africa. No one thought about doing a network of roads or rail lines across the countries so that food produced in one region can be sent to another region of the country or continent where there is a shortage of food. It is the same thing with minerals and our oil and gas.

When African countries make discoveries, nobody asks how much should be retained domestically so we can energize our people, and export the rest. We look at how much it will bring to the

national budget in foreign exchange. These are some of the challenges we are going to be looking at, and that is why the African Energy Investment Corporation, AEICORP, is going to be run as a business, a business but with a human face. Our objective is to expand access and reduce energy poverty to the barest minimum. AEICORP is to provide a platform for raising funds to execute major energy projects on the continent. We will strive to change the situation, and with the support and commitment of African leaders and the industry, we will get there.

Tell us more about what APPO is doing to alleviate energy poverty and achieve Sustainable Development Goal 7.

As a continental energy organization with huge challenges but very limited resources, we have decided that we need to optimize the benefits of the few resources we have. We therefore avoid duplication of activities. Where other organizations embark on projects we have on our work programme, or we find very useful to our cause, we approach them to partner with them. That way we are able to get the same result by spending much less. I was in Ouagadougou, Burkina Faso, last month where ECOWAS Ministers received the reports of three studies commissioned by ECOWAS, APPO and the African Refineries Association, ARA. The studies were on popularization of LPG as domestic energy. It aims to get rid of the use of firewood and other unhealthy forms of energy in the West African sub-region, and replace them with more environmentally friendly LPG. The second study was on the standardization of vehicle emission limits in the sub-region. And the last was a feasibility study on extending the West African Gas Pipeline Project from its current terminal point in Ghana to Côte d'Ivoire, Sierra Leone, Sénégal, Mali and Burkina Faso. APPO contributed finances to conduct these studies.

Furthermore, with AEICORP in place, we expect to be able to raise required financing for key energy projects on the continent, projects that would otherwise not get the huge financing to take off.

Don't you need to improve the energy infrastructure in order to make real progress on expanding energy access?

Absolutely. We need energy infrastructure to make any meaningful and positive impact on the lives of our people. The infrastructure should be intra-continental, not limited by boundaries. We should have infrastructure that will allow us to move energy from areas of abundance to areas of scarcity. I have already mentioned the West Africa Gas Pipeline project, whose contribution to alleviating energy scarcity in Ghana and Benin and Togo is legendary. In East Africa there is the Uganda-Kenya Crude Oil Pipeline (UKCOP), and there are others in North Africa.

The fight against energy poverty in Africa is a serious one. Average energy access in Africa is 43 per cent compared to the global average of 87 per cent. In other words, Africa is less than

half the global average. In the past, each African country attempted to address its energy challenges in isolation. But none of them has the required finances, technology or even the human resources. We have come to the realization that we can effectively tackle that challenge only if we pool resources.

What is APPO's view on the so-called energy transition?

The world is gradually telling us that the era of renewables has come and, by implication, the era of hydrocarbons is coming to an end. This is happening when a number of African countries are just beginning to find oil. Twenty years ago, five or six African countries had oil. Today, over 20 countries have oil and more are going to be producing in the next five years or so. If the world has decided to move on, it means that the technology for finding, processing and using oil is likely to go because those who have the resources, technology and science are not going to be investing in producing or finding crude oil anymore.

Africa is rich in petroleum resources and renewable energy potential. Are you also looking at using solar energy, for example, in the petroleum production process?

One reason we changed the name of APPO Fund to AEICORP is that we want to have all forms of energy. We can do a lot with solar, hydro, wind, etc.

But our fear is that the world is moving on with the Paris Agreement and we are not really ready. We don't have what it takes to make the quick switch from the resources that God has endowed us with to renewables. For now, climate change comes secondary to the lives of the people of Africa. We need to first provide them with the energy with which to make a better life. We are finding more and more oil in Africa, but at the same time we are being told that we cannot use that oil.

The world is against oil and gas, it is against emissions. We believe that where there is a will there will always be a way. If the world has the will to eliminate emissions from oil and gas, it can do so. Technology is being developed to address emissions. We should not throw away the baby with the bathwater.

How does the new APPO intend to intensify cooperation and collaboration with OPEC?

The first concrete action we are working on is the signing of a memorandum of understanding (MoU) in common interest action areas such as information and data management, global oil market trends, project funding, etc. At the technical level, we are planning with the Data Services Department of OPEC a series of working sessions to design a new information system for APPO in line with international best practices. Also, we will take advantage of the experience of OPEC, to periodically publish an APPO Bulletin of information on the African energy market. 

More about APPO

Founded in Lagos, Nigeria, in 1987 as the African Petroleum Producers Association, the organization changed its name — replacing ‘association’ with ‘Organization’ — in 2017. APPO's headquarters are in Brazzaville, Republic of Congo.

Shortly after the organization's founding, participating governments created the APPO Fund for Technical Cooperation with headquarters in Cotonou, Benin. It has now been renamed the African Energy Investment Corporation, AEICORP, and converted into a public-private fund whereby governments hold a minority share.

According to its mission statement, APPO seeks to “promote cooperation in the field of hydrocarbons of its Member Countries and other global institutions to foster fruitful collaboration and partnerships while utilizing petroleum as a catalyst for energy security, sustainable development and economic diversification in Africa. APPO aspires to be the world's reference and lead institution on Africa's hydrocarbon matters.”

Saudi Aramco: A global energy giant



In 1933 the Kingdom of Saudi Arabia established its national oil company, Saudi Aramco, a decision that led to a major transformation in its energy and economic landscape. Now in its 87th year, Saudi Aramco enjoys a business portfolio that includes oil, gas and petrochemicals, and is one of the world's most successful firms. The OPEC Bulletin's Ayman Almusallam looks at the history of Saudi Aramco.



Saudi Aramco was founded in 1933, when Saudi Arabia agreed to award the Standard Oil Company of California (Socal) a concession to operate in the Kingdom's oil sector. The agreement led to the founding of the joint venture 'California Arabian Standard Oil Company (Casoc)', which was later named Aramco, then Saudi Aramco.

The newly established firm immediately began surveying and exploring the desert.

By 1938, commercial production of crude oil in the historic 'Dammam No 7' field ramped up. The Kingdom of Saudi Arabia's meteoric rise as an energy provider had begun.



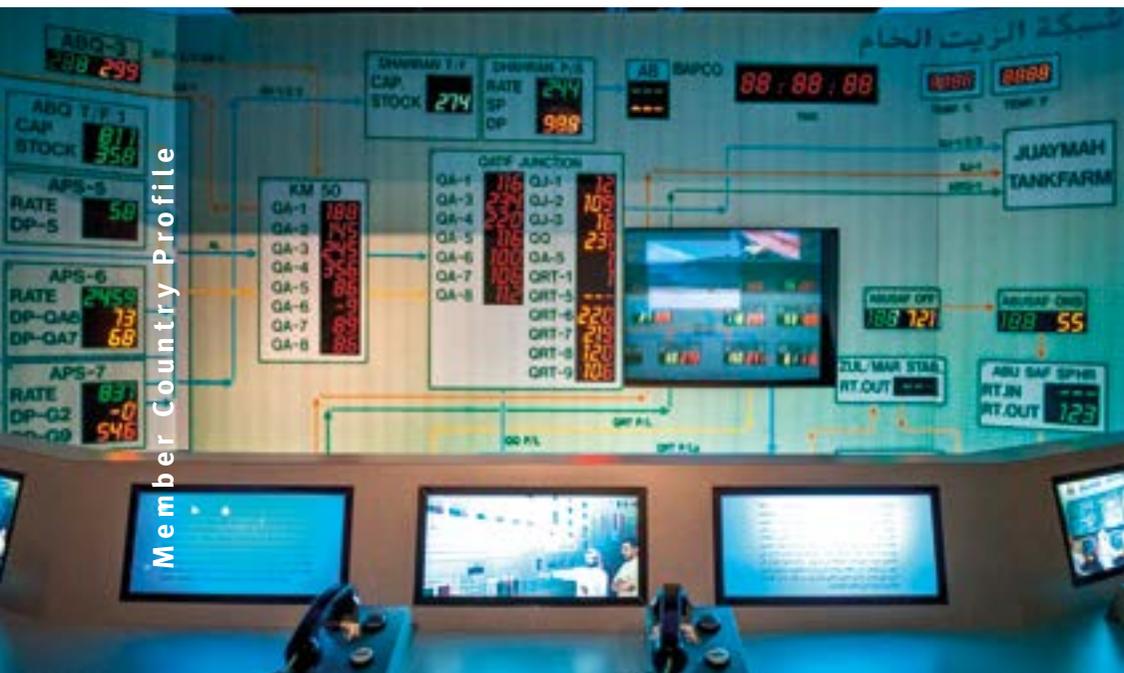
Amin Nasser.

“Saudi Aramco’s trading debut on Tadawul marks the completion of the world’s largest IPO and the beginning of an important, new chapter in our history.”

*— Amin Nasser, Saudi Aramco’s
President and CEO*

Saudi Aramco’s Tanajib plant.





The Aramco exhibition centre in Dammam, Saudi Arabia.

In the 1940s, the oil company continued to flourish as its production of crude oil reached 500,000 b/d in 1949.

The growth in the oil production led the country to further expand its distribution network. In 1950, it completed the 1,212-km Trans-Arabian Pipeline. The new 'Taplne' also enhanced the company's efficiency.

In 1951, Aramco discovered the landmark Safaniyah field, following two years of intensive exploration efforts in the waters of the Gulf. The discovery of the offshore oil field marked an important moment in the history of Saudi Arabia's energy industry.

Aramco continued writing new chapters in the history of the Kingdom's energy industry, as its aggregated production of crude oil reached five billion barrels by 1962. The shipments of crude and petroleum products, transported through the Ras Tanura Marine Terminal, exceeded 1bn b/yr for the first time in 1971.

Key milestones

The 1970s and 1980s witnessed important moments in the history of Aramco, as the Kingdom focused on nationalising the oil firm. In 1980, Saudi Arabia increased its

stake to 100 per cent. The respected oilman, industry veteran and former Minister of Petroleum and Mineral Resources, Ali I Naimi, in 1984 became the first Saudi Arabian to serve as President. Four years later, he also became the chief executive officer (CEO).

The following years saw a substantial transformation in the status of Aramco, as it continued widening its operations and entrepreneurial orientation, including co-founding Motiva in the US, and investing in South Korea's Ssangyong Oil Refining Company and the Philippines's Petron Corporation.

In the 2000s, Aramco continued its diversification efforts with the aim to become a leading integrated energy and chemicals enterprise with global reach.

Recent projects

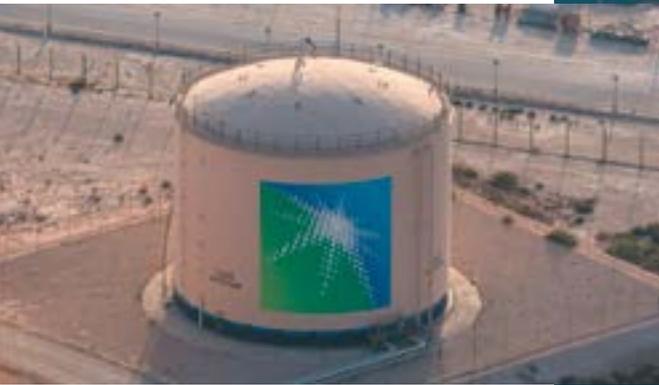
Saudi Aramco recently announced that it purchased 17 per cent of Hyundai Oilbank of South Korea for an estimated value of \$1.2bn, resulting in the expansion of its Asian market.

To expand its refining capacity further, Aramco also acquired a stake in the SASREF joint refining venture in the industrial city of Jubail. The acquisition was valued at \$631 million.

In March 2019, the Kingdom's energy giant agreed to purchase a controlling stake of 70 per cent in the Saudi Basic Industries Corporation (SABIC). The acquisition was valued at \$69.1bn.

SABIC's headquarters in Riyadh, Saudi Arabia.





The Saudi Aramco plant in Ras Tanura.

Historic IPO

Saudi Arabia has continuously strengthened the global position of Aramco since its establishment. These notable efforts led to the historic initial public offering (IPO) of Aramco in December 2019, with the shares debuting on the Kingdom's financial market, the Tadawul.

Saudi Aramco listed 1.5 per cent of its shares at a value of 32 Saudi Riyals (\$8.53) per share on December 11, 2019, according to *Reuters*.

The historic IPO forms an integral part of the Kingdom's aspiring 'Vision 2030' roadmap, which was launched in April 2016 by HRH Prince Mohammed bin Salman bin Abdulaziz Al Saud, Saudi Arabia's Crown Prince, Deputy Prime Minister and Minister of Defence, under the guidance of the Custodian of the two Holy Mosques, King Salman Bin Abdulaziz Al Saud.

The vision aims to maximize the Kingdom's

investment opportunities and diversify revenue sources to boost economic stability and competitiveness.

Bright prospect

With its massive reserves, notable advancement and ambitious vision, Aramco is set to play a key role in the energy industry for decades to come, with an aim to enhance the firm's value for the Kingdom and its people, while maintaining its global position as a reliable supplier of energy. 

Images unless otherwise credited courtesy of Saudi Aramco.

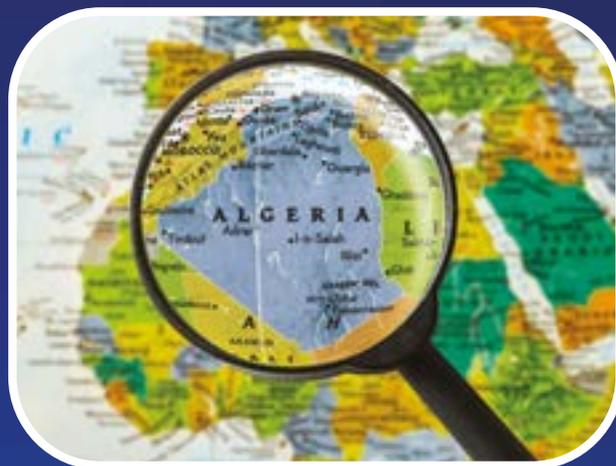
Left: Saudi Aramco's Houston office; and right: Aramco's headquarters in Dhahran, Saudi Arabia.



Algeria:



Land of prosperity and cultural heritage



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Spread out over an area of around 2.3 million square kilometres, with a population estimated at around 41 million, the Republic of Algeria is a land of superlatives. It is the 10th largest nation worldwide and the largest OPEC Member Country in size. In this feature, the OPEC's Ayman Almusallam profiles this North African jewel.



OPEC bulletin 2-3/20



Abdelmadjid Tebboune was sworn in as President of Algeria on December 19, 2019.



60 Martyrs' Memorial in Algiers was dedicated in 1982 to mark the 20th anniversary of Algerian independence.

Bordered by the Mediterranean Sea to the north, Morocco to the west, Niger to the south-east, Libya to the east, Tunisia to the north-east, and Mali, Mauritania and the Western Sahara to the south-west, Algeria is uniquely located in the heart of the Maghreb and the north of the African continent.

The dynamics of its history underscore its importance through the centuries.

Algeria has witnessed the rise and fall of many dynasties that ruled the area throughout its history — including the Numidians, Phoenicians, Romans, Byzantines, Umayyad, Abbasids and Ottomans. While it remains unclear when humans began to inhabit Algeria, many artefacts have been found over the decades suggesting that a number of ancient civilizations once thrived in the area.



Algeria is rich in history, beauty and architecture.



For example, there is evidence of what scholars call the Aterian civilization of the Middle Stone Age that disappeared around 30,000 BCE. The Neolithic civilization began to emerge in the area a few years later. The civilization largely relied on agriculture and domesticated animals. The Phoenicians were also present in the region by 600 BCE.

These civilizations notably enriched the robust development of trade, agriculture, manufacturing and other sectors in the region.

The Romans also gained control of the area for a notable period of time, which led to the establishment of many small territories across the region, such as Tipaza, Timgad, Lambaesis, Tiddis and Djémila. To date, a number of ruins from that era remain well-preserved and protected. They are historic testaments to the rich and exceptional history of the region.



Mohamed Arkab is Algeria's Minister of Energy and President of the OPEC Conference in 2020.



Algeria's archaeological heritage is exemplified by the ruins of the Roman city of Timgad. The country is also known for its varied and colourful pottery.

conflicts. Algeria was thereafter named 'the Land of a Million Martyrs'.

Years of conflict and unrest were eventually followed by a period of peace and stability. With the Évian Agreement of 1962, Algeria gained independence and became a sovereign nation in the same year.

Since then, Algeria has begun a historic journey toward solid growth and notable prosperity. It soon started to play active, important roles in a number of key regional and international organizations, including the Organization of African Unity (now the African Union), the Arab League, OPEC, the OPEC Fund for International Development, the World Bank, the International Monetary Fund, the United Nations and the Arab Maghreb Union.

The Republic of Algeria comprises 48 provinces, 553 districts and more than 1,500 municipalities. Abdelmadjid Tebboune is Algeria's President, who was elected in 2019.

“Algeria’s location gives it a distinctive competitive edge, ... as it overlooks the Mediterranean Sea.”

In the 7th century, Algeria became a territory of the Islamic Umayyad Caliphate. Upon its dissolution, other dynasties gained power — such as the Fatimids and Hammadids — until the Ottomans rose to power in North Africa in the 16th century.

In 1830, France gained control over Algeria. Colonial rule marked a critical chapter in the region's history, as it witnessed unfortunate, and at times acrimonious,

Oil: key driver for progress

Algeria's location gives it a distinctive competitive edge, particularly in regard to its national economy, as it overlooks the Mediterranean Sea. The Republic of Algeria is wealthy in natural resources and minerals. Hydrocarbons, tourism and agriculture are some of the main industries



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Sonatrach is Algeria's oil and gas giant. The company was established in 1963.



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Algeria in nutshell

Country: Republic of Algeria
President: Abdelmadjid Tebboune
Head of Delegation: Mohamed Arkab
Capital city: Algiers
Currency: Algerian Dinar
Official language: Arabic
GDP (\$): 178.25 billion
Proven crude reserves (barrels): 12.20 billion
Crude oil production (b/d): 1.04 million



*Coppersmith
— an Algerian
traditional
artisan.*

that have driven its economy. But the country's hydrocarbons give it a clear advantage.

The oil and gas sector serves as the pillar of Algeria's economy. The history of the industry dates to 1956, when the first commercial oil well — Edjelleh — was discovered. This discovery was followed by a number of other successful attempts to identify new fields and wells that revealed a great wealth of crude oil reserves. Such robust and successful efforts soon led to the discovery of the Hassi Messaoud oil field in the same year, which began to produce crude oil in 1958.

Over the years, the country's dynamic oil industry kept growing, providing Algeria and its people with a solid financial cushion. The petroleum sector today continues to play an important role in the betterment of living standards of all Algerians.

Sonatrach is Algeria's national oil company and its oil and gas giant. Established in 1963, the company manages the country's hydrocarbon resources, including exploration, extraction, refining, marketing and transportation. The state-owned firm also oversees the crude oil and LPG pipeline networks in the country. It additionally possesses an extensive business portfolio that features several joint ventures and subsidiaries operating worldwide.

Over the years, Sonatrach has become a leading regional and global oil company.

In 1969, Algeria joined OPEC as a Full Member. From its first day, the African oil producer has played

an influential and active role in the affairs of the Organization in particular and the oil industry in general. It has demonstrated how a Member Country can remain a true leader through dedication and commitment toward the Organization's mission and objectives.

It has also generously provided OPEC with some outstanding leaders and dignitaries over the years. These individuals have helped lead the Organization to a brighter and more promising future.

The current President of the OPEC Conference, which is the highest decision-making body in the Organization, is Mohamed Arkab, Algeria's Minister of Energy.

'Declaration of Cooperation'

Algeria played a pivotal role in the 'Declaration of Cooperation'. Meeting in Algiers, the 170th (Extraordinary) Meeting of the OPEC Conference opted for a production target for OPEC Member Countries ranging from between 32.5 and 33m b/d. Through what became known as the Algiers Accord, OPEC Members made a collective decision for the good of the market, the industry, producers and consumers.

In addition, the Algiers Accord initiated a process of consultations between OPEC and non-OPEC oil-producing countries to establish a platform to take proactive measures to ensure a balanced oil market on a sustainable basis.

These formative developments led to the 'Declaration



Sonatrach manages Algeria's hydrocarbon resources, including exploration, extraction, refining, marketing and transportation.

of Cooperation' by OPEC Member Countries and participating non-OPEC countries on December 10, 2016, in Vienna, and the initial production adjustments aimed at restoring market stability.

OPEC Fund for International Development

Algiers was also the setting, in March 1975, for the Summit of the Sovereigns and Heads of State of the OPEC Member Countries that would lead to the founding of the OPEC Fund and its establishment in Vienna one year later.

The declaration issued by the Algiers Summit “reaffirmed the natural solidarity which unites OPEC Member Countries with other developing countries in their struggle to overcome under-development, and called for measures to strengthen cooperation with these countries.”



Dr Herman Franssen: a renowned industry diplomat

It was with great sadness that OPEC learnt of the passing of Herman Franssen, who had enjoyed a long and distinguished career in the oil and energy industry stretching back almost five decades. The OPEC family extends its deepest condolences to his family, his friends and all at the Energy Intelligence Group, where he was its long-serving Executive Director.

Mohammad Sanusi Barkindo, OPEC Secretary General, said: “I had known Herman for over 30 years; an oil industry veteran like me, a true professional and a friend to so many in our industry. He was renowned for his diplomacy skills, having helped broker initial talks between OPEC and non-OPEC during his time in Oman in the 1980s and ‘90s. I remember him originating the Independent Petroleum Exporting Countries, an informal grouping of 14 oil-exporting non-OPEC countries and provinces.”

Barkindo added: “He was a good friend to OPEC and had a great appreciation and understanding of OPEC’s history. I know he exchanged many stories and anecdotes with ministers, former ministers and OPEC delegates. He was always willing to engage, as was exhibited in recent times through the Oil & Money conference, now renamed the Energy Intelligence Forum.”

Dr Franssen was an eminent scholar, known for his research, analysis, advisory and speaking roles over many decades with the International Energy Agency, the US Department of Energy, the Center for Strategic and International Studies, the Middle East Institute, the Centre for Global Energy Studies among others. He had a long list of affiliations, which underscores the richness and diversity of his work.

In its obituary, *Energy Intelligence* said: “He was an essential member of the Energy Intelligence family, as he was directly involved in the growth and development of the company since 1996.”

It added: “Herman famously participated in every one of the Oil & Money conferences dating back to 1980, first as a speaker and then, from 1987, as an organizer. He was also the heart and soul of the industry’s most



Herman Franssen, Executive Director, Energy Intelligence, and Conference Chairman, of the 40th anniversary of the Oil & Money Conference in London in 2019.

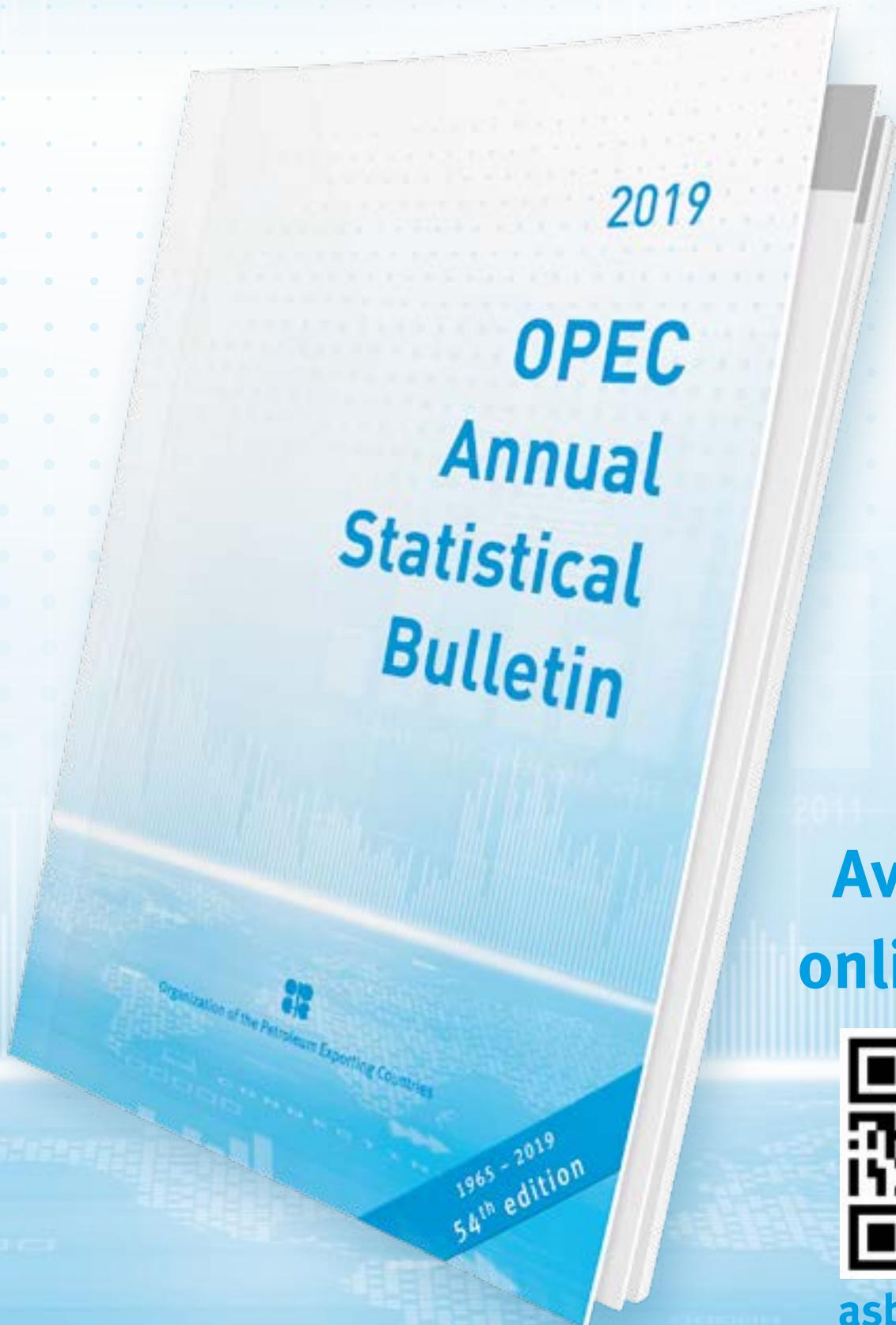
prestigious award — the Petroleum Executive of the Year/ Energy Executive of the Year, which he presented to the winner each year.”

Energy Intelligence Chairman and CEO Raja Sidawi, said: “Herman touched many of our lives here at *Energy Intelligence* over the decades, through his work on the Oil & Money conference and on the International Advisory Committee, but also simply through the abiding passion for international energy issues that he communicated to all who met him.

“He was a generous and considerate colleague, but also a dear friend. He had a peerless network of contacts and friends in government and industry, which he nurtured through his regular attendance at energy conferences around the world.”

Dr Franssen was born in the Netherlands, and educated both there, attending the University of Amsterdam, and in the US, where he received a BA from Macalester College in Minnesota and an MA, MALD and PhD from the Fletcher School of Law and Diplomacy at Tufts University in Massachusetts.





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Dr Deyaa Alkhateeb: A veteran of OPEC and the OPEC Fund

Dr Deyaa Alkhateeb, who dedicated 26 years of his career to OPEC and the OPEC Fund for International Development, passed away on February 16, 2020, in Vienna.



Dr Alkhateeb, who was 68, joined OPEC in 1992 as Head of the Data Services Department (DSD). During his eight years in the post, the OPEC Secretariat took a major leap forward through the expanded use of computers and technology. He also oversaw major advances in the timeliness and quality of data and information sharing.

Highly respected at the OPEC Secretariat and by Member Countries, Dr Alkhateeb was instrumental in improving direct data collection with Member Countries while expanding dialogue with other international and intergovernmental organizations.

“I am deeply saddened to hear that our dear brother Dr Deyaa Alkhateeb, former Head of DSD, has



passed away,” said Mohammad Sanusi Barkindo, OPEC Secretary General. “Dr Alkhatib was a man of integrity who helped revolutionize OPEC’s data-collection and technological capacity that continues to benefit our Member Countries and the industry at large.”

“Dr Alkhatib began his extraordinary career in academia, at King Saud University, and we were very fortunate that he would bring his vast knowledge and skills to OPEC and later our sister organization, the OPEC Fund,” Barkindo added. “Our thoughts are with Dr Alkhatib’s wife and sons in this time of great personal loss.”

Moves to OPEC Fund in 2001

After leaving OPEC, Dr Alkhatib joined the OPEC Fund as Director of the IT Unit in February 2001. He held the position until he was redeployed as the Director of the Information Department in January 2015.

Dr Alkhatib retired from the OPEC Fund on May 1, 2016, though he continued to work as an advisor to the Director General on Communication Strategies and Special Duties until October 31, 2018.

During his career at the OPEC Fund, Dr Alkhatib also chaired the Organization’s 40th Anniversary Committee in 2016.

Dr Alkhatib was active in the Viennese community through OPEC Fund-sponsored programmes, including side events for disadvantaged children held during the annual Vienna City Marathon. “Children have the right to play and enjoy leisure time,” he told Vienna’s leading daily newspaper, the *Kronen Zeitung*, on March 16, 2016, regarding activities organized for 100 schoolchildren. Many of the children were refugees who had recently arrived in Austria.



Dr Alkhatib at the OPEC Secretariat in 2000.

Started career at King Saud University

Dr Alkhatib was born in Cairo, Egypt, on April 8, 1951. He did his undergraduate studies in electronics and communications at Cairo University, Egypt, and earned his doctorate in Computer Science/IT at the University of Illinois at Urbana-Champaign in the US.

A Saudi national, Dr Alkhatib started his career in 1973 as a teaching assistant at the King Saud University and later became the Director of the prestigious university’s Research Centre.

Dr Alkhatib was buried in Saudi Arabia and prayers took place in Vienna on February 17 at the Islamischer Friedhof (Islamic cemetery). He is survived by his wife, Laila Zeidan and sons Abdulrahman and Abdulaziz. ❖❖



Dr Abdulhamid Alkhalifa (l), the OPEC Fund's Director-General, meets with Viet Nam's Prime Minister, Nguyen Xuan Phuc, who said: "I very much appreciate what the OPEC Fund has done in Viet Nam. We should continue this fruitful cooperation."





Viet Nam turnaround

On a recent high-level mission to the Southeast Asian country, the OPEC Fund's delegation draws praise from Viet Nam's Prime Minister.

Viet Nam, once one of the poorest countries in the world, has experienced a dramatic transformation over the last three decades. Following successful reforms begun in the 1980s, Viet Nam — now well known as a popular tourist destination for its beautiful beaches and bustling cities — has become a middle-income country, experiencing average annual GDP growth of six per cent in the last decade.

The OPEC Fund's cooperation with Viet Nam dates back to 1978 and the organization has since approved 21 public sector loans to the Southeast Asian country, totaling \$283 million. The OPEC Fund's most recent loan for \$45m — signed by Director-General, Dr Abdulhamid Alkhalifa, and Viet Nam's Minister of Finance, Dinh Tien Dung — will support the Da Nang City Transport Project.

The loan was signed on the OPEC Fund's recent high-level mission to Viet Nam (documented over the

following pages) and will help complete construction of the city's crucial ring road, which will improve the connectivity of south-east and western rural regions to the city centre. The project will boost access to employment opportunities and social amenities, ultimately supporting socioeconomic development and benefitting over one million people directly.

OPEC Fund-financed development projects in Viet Nam have primarily supported the country's agriculture, education, energy, health and transport sectors.



The OPEC Fund's delegation visited a number of co-financed development project sites, including the Tuong Son Commune healthcare centre, Ha Tinh, Viet Nam.



The OPEC Fund's Director-General, Dr Abdulhamid Alkhalifa, is presented with a gift by Viet Nam's Chairman of Ha Tinh Province People's Committee, Dr Tran Tien Hung.



The OPEC Fund's Director-General, Dr Abdulhamid Alkhalifa – pictured above with Viet Nam's Minister of Finance, Dinh Tien Dung – said: "We are proud to see the people of Viet Nam benefitting from the OPEC Fund's co-financed projects and we are eager to further grow our partnership with Viet Nam, which is already well established. We would be honoured to be thought of by the country's people as Viet Nam's development partner."

Ministry of Finance, Viet Nam

OPEC Fund for International Development



The OPEC Fund's Viet Nam Country Officer, Dr Jaafar Al-Mahdi, with some of the children that have benefitted from the OPEC Fund co-financed Mai Phu Commune Kindergarten in Loc Ha District.



The OPEC Fund's delegation visits the Co Lan reservoir, Ky Bac Commune, Ky Anh District.

Under its Trade Finance Facility, the OPEC Fund has approved 19 unfunded operations to Viet Nam as part of existing programmes, totalling US

\$230m

The OPEC Fund has also extended nine regional and five national grants to the country, totaling more than US

\$10m



Angola, BP expand partnership



The signing ceremony was attended by (l-r): Dr Diamantino Pedro Azevedo, Angola's Minister of Mineral Resources and Petroleum; Bob Dudley, BP's then-CEO; and his successor, Bernard Looney.

Angola finalized a new agreement with BP to grant the oil major additional exploration rights as the country seeks to expand its oil industry.

The deal, signed by Angola's National Agency for Oil, Gas and Biofuels (ANPG) and BP, focuses on further developing the offshore oil Block 18/15.

"This is a Principles Agreement that will allow us to have a contract and the consequent prospecting activity in an area with a lot of oil potential and where we already have some oil discoveries," said Paulino Jerónimo, President of the Board of Directors of ANPG.

He added: "BP, as the current operator of Block 18, is highly engaged, which increases the conviction that we will have an ambitious work programme."

Stephen Willis, President of BP Angola, highlighted the company's readiness to continue with the exploration efforts, adding: "The Cretaceous formations in

Block 18/15 present good opportunities for exploration and potential developments."

Signing ceremony

The signing ceremony was attended by Angola's Minister of Mineral Resources and Petroleum, Dr Diamantino Pedro Azevedo, and BP's then-CEO, Bob Dudley, and his successor, Bernard Looney. It took place on the margins of the UK-Africa Investment Summit in London.

Angola has been an OPEC Member Country since 2007 and a leader in the historic 'Declaration of Cooperation' and 'Charter of Cooperation'. The country produces 1.47 million barrels of crude oil per day and possesses impressive reserves of 8.16 billion barrels. 

Nigeria holds a bidding round for several oil blocks



Nigeria announced that it is finalizing the bidding process for a number of oil blocks, as part of its continuous efforts to further its oil industry,

Timipre Sylva, Nigeria's Minister of State for Petroleum Resources, confirmed that the bidding would take place this year. He told a press conference that the process would kick off with smaller bidding rounds for marginal fields. Major bids will be held afterwards.

Petroleum Industry Bill

Sylva also commended the new Petroleum Industry Bill (PIB), which he expects to be approved by mid-2020, and its importance in facilitating the bidding process. He added: "We are aiming at conducting bid round

for marginal fields to ensure settlement in the upcoming PIB. It is, therefore, highly desirable that the bill is passed before any bid round. We will aim at the marginal fields round earlier and a major bid round after the passage of the bill."

Sylva also reiterated the current government's intention to develop the hydrocarbons sector and maximize its benefits through enhancing the sustainability and affordability of its products. He highlighted that private investments are set to play a key role in the process, particularly in regard to managing profits and efficiency.

According to OPEC's *Annual Statistical Bulletin*, Nigeria produces 1.60m b/d of crude oil, and possesses impressive proven reserves estimated at 36.97bn b.



Timipre Sylva, Nigeria's Minister of State for Petroleum Resources.



ADNOC expands commitment to CCUS



The UAE's energy giant, Abu Dhabi National Oil Company (ADNOC), has announced plans to increase the capacity of its pioneering carbon capture, utilization and storage (CCUS) facility by 2030, as part of the OPEC Member Country's recently launched sustainability strategy.

Abu Dhabi Sustainable Finance Forum

Ahmed Jasim Al-Zaabi, ADNOC's chief financial officer, underscored the significance of the project in a speech to the Abu Dhabi Sustainable Finance Forum in January.

"By capturing CO₂ from its own gas plants, ADNOC aims to reach five million tonnes of CO₂ every

year by 2030 — the equivalent of the annual carbon capture capacity of over five million acres of forest, over twice the size of the UAE," the company said in a statement.

The new initiative will be carried out by Al-Reyadah, a commercial-scale venture owned by ADNOC and focused on CCUS, *Energy Intelligence* reported. The venture was launched in 2016, with an impressive capacity of 800,000 tonnes of gas a year.

The company's push to alleviate the emissions of greenhouse gases and use enhanced oil recovery (EOR) technologies are part of ADNOC's landmark 2030 Sustainability Strategy. The CCUS programme is set to further support its efforts in this regard.



Ahmed Jasim Al-Zaabi, ADNOC's chief financial officer.



The Russian Federation reappoints Alexander Novak as Minister of Energy



Alexander Novak, Minister of Energy of The Russian Federation at the 1st OPEC non-OPEC Ministerial Meeting, Vienna, Austria, December 10, 2016.

Alexander Novak was reappointed as the Minister of Energy of The Russian Federation in January 2020 under the new Prime Minister, Mikhail Mishustin. Novak began to direct Russia’s energy portfolio in 2012, after serving as a Deputy Minister of Finance for four years. The Minister also played a critical and leading role in the consultation and implementation processes that culminated in the landmark ‘Declaration of Cooperation’ of 2016. He was also a strong advocate of the pioneering ‘Charter of Cooperation’, which was endorsed in July 2019.

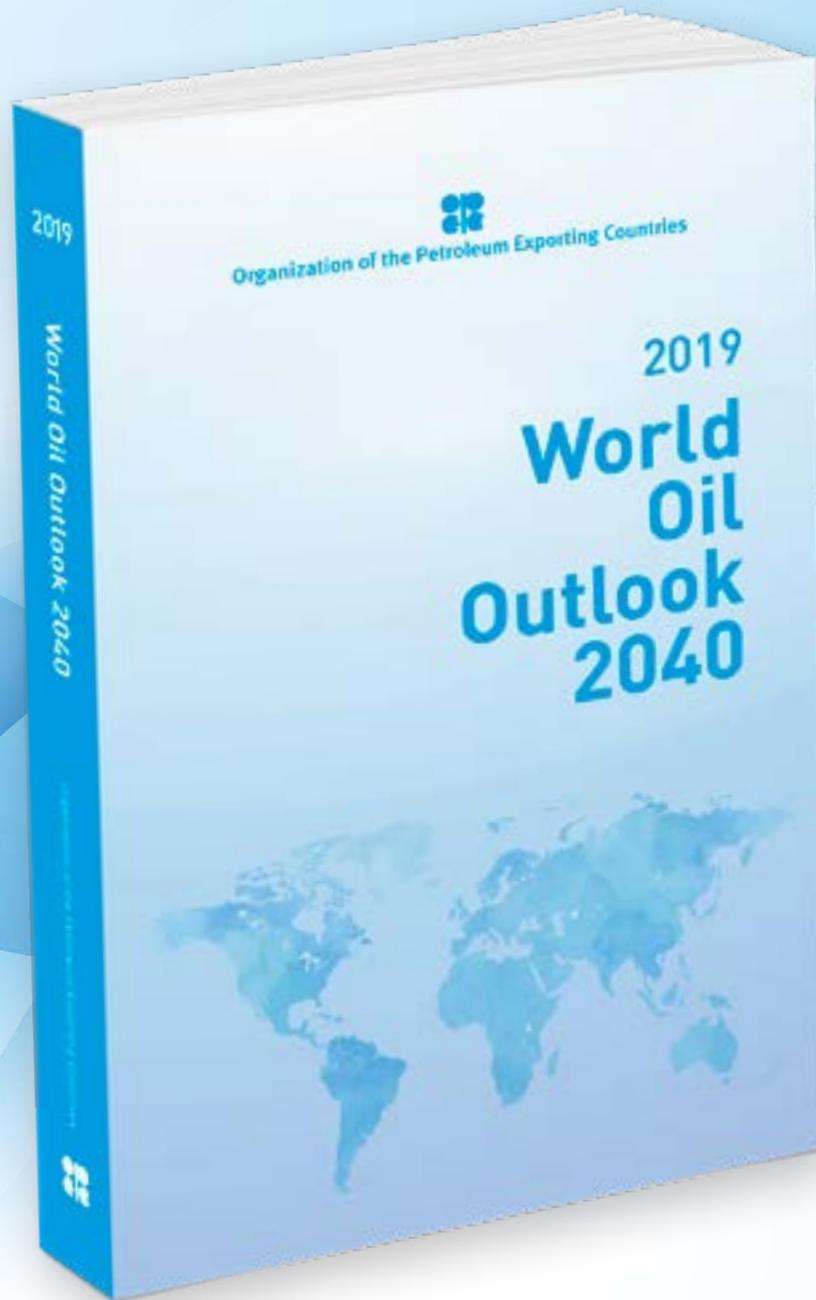
OPEC Secretary General, Mohammad Sanusi Barkindo, congratulated Novak following his reappointment, saying: “Alexander Novak has emerged as the reliable and dependable bridge between OPEC and non-OPEC in the ‘Declaration of Cooperation’.

“He has earned the respect and admiration of all participating countries in the OPEC+ group. His reappointment as Russia’s Energy Minister at this crucial juncture will further strengthen the collaboration with OPEC in our noble course to maintain oil market stability in the interest of producers, consumers and the global economy.”

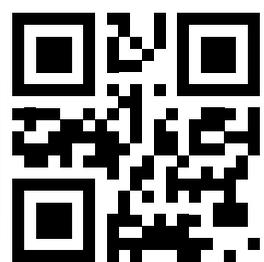


Minister Novak (c) with Vladimir Putin (r), President of The Russian Federation; and Mohammad Sanusi Barkindo (l), OPEC Secretary General; at the Russian Energy Week 2019.





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OMV invests in a greener future for oil and gas

Austria's leading oil and gas company invites staff of the OPEC Secretariat to visit its upstream and downstream operations for a day. The OPEC Bulletin reports.



Surrounded by farm fields and vineyards in one of Austria's most fertile regions, the town of Gänserndorf does not look like the home of a growing international oil and gas company.

Gänserndorf is at the centre of the upstream operation of Austria's OMV, which has been producing oil and gas for more than 60 years. Behind the quiet rural backdrop is a company that is investing in technology to

maximize production while minimizing its environmental impact.

OMV's downstream business is concentrated in Central and Southeast Europe, with petrol stations giving it a high-profile presence around the region. The firm's exploration and production operations stretch across Europe, North Africa and the Asia-Pacific region, including OPEC Member Countries Iraq, Libya and the United Arab Emirates (UAE).

“We firmly believe there is a future for oil and gas because they are valuable products”, said Reinhard Oswald, OMV Austria General Manager, adding that the company’s vision is to be “a sustainable energy supplier.”

Oswald outlined the company’s history and ambitions to staff from the OPEC Secretariat on February 28 during a visit to its upstream office in Gänserndorf, about 20 km north-east of Vienna.

OMV was founded in 1956, one year after Austria became an independent republic. Today, its upstream division is leveraging technology and innovation in its home market to sustain domestic production levels in established wells. The company is also working with Vienna’s main energy supplier, Wien Energie, to explore geothermal reserves trapped in the Alpine country’s geologic formations, including resources that may exist below the city of Vienna itself.

“We use technology to the utmost,” said Oswald, noting that OMV has high operational excellence across its value chain. In April, the company will open its new Innovation and Technology Centre in Gänserndorf for its oil and gas division, even as the firm shifts to renewable sources to support energy-intensive extraction and production operations.

“We want to show the world that the oil and gas industry is not dirty, it is high-tech,” he said.

A growth leader

From its beginning, OMV has capitalized on innovation and cooperation to expand production. In 1968, Austria was the first European country to sign a long-term gas supply contract with the then-Soviet Union.

Three years later, OMV established its first international upstream contract with Tunisia, and in 1985, signed an upstream deal with Libya.

Meantime, the company established Europe’s first underground gas storage facility in 1974 in Gänserndorf, and continues to use depleted wells for storage. OMV was also the first sour gas producer in Austria to supply the all-important chemicals sector.



Otmar Schneider (c), Site Manager of OMV’s Schwechat refinery.

Reinhard Oswald (r), OMV Austria General Manager; with Dr Abderrezak Benyoucef, Head of the Energy Studies Department.



Like its upstream counterpart, the company’s downstream division also embraces innovation and partnerships.

From waste to oil

Otmar Schneider, Site Manager of the firm’s Schwechat refinery, told visiting OPEC employees that the company is working across its downstream operations

to squeeze out waste and inefficiency and foster innovation.

OMV operates three refineries in the European Union, in the Vienna suburb of Schwechat, in Burghausen, Germany, and Petrobrazi, Romania, giving it a combined refining capacity of nearly 18 million tonnes annually. It operates 2,100 petrol stations in ten European countries, serving 1.3 million retail customers a day.

The Schwechat refinery, covering 1.4-square-km,

is readily visible to those travelling to and from Vienna International Airport. In fact, the refinery supplies jet fuel directly to the airport, which handled more than 31 million passengers last year.

A model of operational and environmental efficiency, OMV's Schwechat refinery has its own water-pretreatment system and extracts the gases produced in the refining process to generate electricity for the refinery. The refinery provides district heating to the airport and nearby communities.

The company has also launched an experimental project, called 'ReOil', to convert plastic waste back into oil, a process that Schneider described as the "perfect circular economy". ReOil is OMV's proprietary technology development.

According to OMV, the 'ReOil' project can process up to 100 kg of plastic per hour and extract about 100 litres of crude. Although a drop in the barrel compared to the 9.6 million tonnes of crude oil processed at the Schwechat refinery every year, the company sees great potential in turning waste into liquid fuels and petrochemicals while correspondingly addressing a growing environmental and waste-management concern about single-use plastics.



OMV

OMV's refinery in Schwechat, Austria.

Austria's greening ambitions

Promising technological developments like ReOil and OMV's efforts to reduce its carbon footprint help raise the company's environmental profile in a country that is in the fast lane of the energy transition.

In 2019, for the first time, Austria's Green party joined with the conservative People's party to form a governing coalition. Even before the new government took power, the country had a long history of environmental action. For instance, public opposition forced the government to ban nuclear energy in 1978 and to abandon a nearly completed nuclear power plant along the River Danube near the town Zwentendorf.

Today, renewables provide about one-third of the energy consumed in Austria, the fifth highest in the EU and well ahead of the bloc's 20 per cent target for 2020, according to the EU's statistics agency.

'Nearly invisible'

In Gänserndorf, Oswald explained the importance of the company's environmental profile to the OPEC staff. Its extraction operations are "nearly invisible" and the



OMV

company prides itself on being a good neighbour, he said at OMV's unassuming Gänserndorf office building.

"We really need to take a great deal of care with the environment because we are producing in the middle of an agricultural area, and not only an agricultural area, but an organic-wine producing region", he explained. Further afield, windmills loom across the horizon, turning steadily on a breezy late-winter day.

Oswald is positive about the future for a number of reasons. First, he says oil and gas will remain an important part of the energy mix in Central Europe, where wind and solar are susceptible to weather conditions. Without major advances in storage capacity, renewables cannot address the surge in energy demand experienced during the long, grey and cold autumn and winter months and, with the use of air conditioning on the rise, increasingly during the summer.

At the same time, Austria's leading oil and gas company isn't standing still. OMV is building the biggest photovoltaic plant in Austria to supply energy to its production operations, and sees great potential in using old oil and gas wells for storing hydrogen. Oswald and his colleagues are harnessing 3-D seismic technology to maximise existing wells and go ever deeper.

"We want to be part of the future energy mix and want to use renewables as part of our production process," Oswald said.

OPEC-OMV cooperation

Dr Abderrezak Benyoucef, Head of the Energy Studies Department, praised OPEC's cooperation with OMV during visits to the upstream and downstream facilities.

"OMV is a leading innovator with historic links to OPEC Member Countries. We are also very grateful to OMV for sponsoring the launch of our *World Oil Outlook 2019* last November in Vienna."



OMV *in brief*

The energy company was founded in 1956 as the Österreichische Mineralölverwaltung (ÖMV), and in 1995 became OMV. Today, it is a leading producer and marketer of oil and gas, as well as high-end petrochemicals. As one of Austria's largest companies, OMV employs more than 20,000 people and had sales of €23 billion in 2018.

OMV has strong business ties to OPEC Member Countries Iraq, Libya and the United Arab Emirates, as well as 'Declaration of Cooperation' countries Kazakhstan and The Russian Federation.

In 2019, OMV signed an agreement to take a 15 per cent stake in the Abu Dhabi National Oil Company (ADNOC) Refining, giving it a further foothold in the Gulf region.

Benyoucef said he was very pleased with both the OMV presentations and production facilities.

"It is clear that OMV and OPEC recognize that oil and gas will remain an indispensable part of the global energy mix. We also share many of the same visions, including the importance of technology to the oil and gas industry, and the need to improve our environmental performance", he said.

"It is also impressive to see how their field operations blend with the landscape in Gänserndorf, almost invisible from the surrounding farms and green areas. We are very grateful for the cooperation with OMV, and have much to learn from each other through dialogue and cooperation."



Moving with the times: Webster University

The OPEC Bulletin visited Webster Vienna Private University (WVPU) in the heart of Vienna to uncover the changes the oldest private university in the city has undergone and its historical link to OPEC. By Maureen MacNeill

Dr Samuel R Schubert's office looks like a typical professor's room. Papers and books cover every surface. A coffee machine is placed prominently on the coffee table. Home to great thoughts and ideas.

Schubert, the Associate Director of Webster Vienna Private University (WVPU) fits right in. A man who has accomplished a lot during his tenure at the university, he is friendly with a ready smile and natty clothes befitting his position.

The building itself — neoclassical Palais Wenkheim, on Praterstrasse — is reminiscent of the Vienna's cultural glory days, including old-style grace and charm with spectacular architecture and a beautiful, brightly lit central glassed-in courtyard. The university moved to this site in 2014 and opened its first dormitory in Vienna after outgrowing its old campus on Morocannergasse, in Vienna's 3rd district.

Long history

The Vienna branch of the American-based university was the 'new kid in town', alone in its status as a non-state-funded university when it arrived. It has called Vienna home since 1981, after being invited by the mayor at the time to move into town.

Chancellor Bruno Kreisky, Austria's foreign minister from 1959 to 1966 and chancellor from 1970 to 1983, was determined to develop an international community in the sleepy city, and his efforts were backed by the mayor at the time, Leopold Gratz. This was supported by many people from the Austrian community, including international Western-educated diplomats

Dr Samuel R Schubert (l), Associate Director of Webster Vienna Private University (WVPU); with Prof Dr Johannes Pollak, Director.







*Dr Samuel R Schubert,
Associate Director of WVPU.*

who were looking for the opportunity to bring institutions to the city.

“This was the big drive, and I believe it was, interestingly enough, across party lines,” says Schubert.

There were a lot of things evolving at that time, not just in Vienna but in the rest of the world. There is a correlation in time when the UN was invited and opened up, when OPEC was operating in the country, and when Vienna was becoming an international city.

“The UN and OPEC were the most important

organizations in that vein and highly relevant to that development ... these two brought an intriguing and exciting international community which found a good location in Central Europe at the height of the Cold War.”

Austria’s neutrality meant it had very good relations with the East as well as the West at that time, he adds.

With the arrival of international organizations and universities like Webster, Vienna became a truly international cosmopolitan hub for the international civil service, for non-governmental organizations (NGOs), for intergovernmental organizations (IGOs), for politics and for meetings, he says.

“It became a venue and the city adapted and changed and grew younger and younger with time.

“I don’t know that it was ready for a big international community, and I don’t know that it ever really fully adapted or accepted to having that,” states Schubert, “However, it transformed accordingly.”

He adds the city of 1.9 million now has more than 350,000 residents who are not citizens of Austria.

The arrival of international organizations and international NGOs led to the creation of an international cosmopolitan community foundation that included the opening of international schools.

“So I think that all of this together, what happened to Webster University was very much part of that first wave which came in and opened up Vienna. Austria was already doing quite well by the 80s.”

Vienna campus

The Vienna campus is one of Webster’s oldest, with Geneva being the oldest, and it is the only fully accredited private university in Webster’s network in Europe.

“A degree from Webster Vienna is accredited in both the USA and Austria, and recognized everywhere in the world,” according to the Webster website.

At that time it was not the norm for American universities to branch out all over the world, says Schubert. Webster was one of the pioneers. It started in Geneva and Vienna was the next UN city and so it made perfect sense to expand to Vienna, he adds.

“It was quite a thing,” states Schubert. “The first non-state-funded university opened up. It was highly innovative for Vienna in 1981, quite a highlight!”

Schubert says that at that time the US concept of an MBA (Masters of Business Administration) programme was a highly innovative idea in a city where history and tradition play a massive role. The university offered the first accredited MBA programme in Austria in 1985.

Interest grew over time not just from the ex-pat community, but also from the Austrians, as Vienna was becoming an international city.

“There’s a lot of history here,” says Schubert. Austria changed dramatically from 1981, when Webster set up shop, to the late ‘90s. “Not only did we have the collapse of the Soviet Union, there was also Mayor Helmut Zilk (1984–94) who refurbished the whole city.”

The Bologna Process — a series of ministerial meetings and agreements among European countries meant to ensure comparable standards and quality in higher education — was taking place and led to the signing of the Bologna Declaration by education ministers from 29 European countries in 1999. Europe was transforming. Austria was part of that; it joined the EU in 1995 and developments were underway within the country which moved to open up the academic system and other institutions.

The problem with breaking new ground is that there are always legal implications, says Schubert. Allowing privatized education or applied science education meant it had to be regulated, and thus began a series of processes to set up legal systems and frameworks for the accreditation of universities that were not classic public institutions.

“And in that very first scenario, Webster University was part of that process. It is one of first institutions that fell under this domain,” he says.

As the private university legal framework was established, distinctions started to form between universities of applied sciences, full-fledged, research-led universities and various other types of institutes. Webster received full accreditation as a private university at the very first moment it was allowed in 2001, says Schubert, and again most recently in 2016.

He adds the laws have been tightened and changed,

making accreditation more difficult. Over time the Austrian authorities have required more and more research-oriented focus and output.

The most recent accreditation in 2016 was preceded by questions by authorities, which led current director Prof Dr Johannes Pollak and Schubert, the associate director, to implement key upgrades required under the regulatory framework.

“More specifically, making sure there is integration of research in teaching, and guaranteeing there is research output, guaranteeing students are engaged in the entire process, that there is an autonomous governance structure, that faculty are involved deeply, all the things you would expect from a fully accredited university,” he says.

In fact, the university has made its biggest transformation since 2016, when Pollak became director and Schubert became associate director. The new team, which included a new supervisory board in the form of a University Council and key hires made throughout the organization, implemented a series of reforms, which constituted a massive change in institutional culture.

It has gone from being a very casual and familiar environment, which fit at the time it was set up — to meeting the demands of a highly growing competitive market, which required professional research output, professional partners and management of significant resources in an Austrian legal environment, he says.

“I feel that the most important thing we’ve done is professionalize this institution to account for the larger number of students,” adds Schubert.

“There’s a very different team of people than we had here before and a very different idea of what they want to do and how. And this has made all the difference. So we now have a true research-led environment, which brings research into the classroom that expects and challenges students to understand where we are in the world, the problems we are going to deal with.”

This philosophy recognizes that only a very small percentage of students will head to a future of PhD laboratory work and most will go into business or international civil service.

“We balance the research and the theoretical, if you like, with the folks in the methodological skills, fungible skills that are necessary in real world to succeed. Sometimes that means very practical things, sometimes that means state-of-the-art things that are not yet practical from data analysis and coding, which are skills that can later be used in a number of fields, to writing, speaking, learning how to communicate.

“This has been a big transformation. The university has been changing throughout the years. It’s had to evolve greatly and it continues to evolve, this is our strength to develop and evolve.

“It is no longer a study abroad location, but a true cosmopolitan university. Every classroom has multiple nationalities and multiple religions. All the classes are really a microcosm of the global community, and that is very relevant.”

Programmes and development

The university has seen steady growth over the years, says Schubert, expanding from about 120 students in 1981 to about 600 today.

The origin of students has also been changing. The percentage of Austrian students has gone up and down over the years, with it being higher at the beginning and now than in the middle, he says.

Today the student body is about 18 per cent Austrian, another 28 per cent are European Union citizens, with a further 21 per cent from the ‘European neighbourhood’.

“Basically what that means is two-thirds of the student body is European in some way or Eurasian, excluding the Middle East,” says Schubert. The number of Middle Eastern students has also grown somewhat in recent years, and there is a Latin American group, but it is very small.

Statistically, there is on average students from about 70 countries (currently 77) speaking about 50 mother tongues.

“The diversity of nationalities is fantastic and the university prides itself on creating the global citizen, which more or less means the cosmopolitan, internationally educated individual that understands and can adapt around the world,” he says, including understanding social responsibility and how to solve problems in the context of an international environment.

“They are basically tomorrow’s leaders and do it with a social conscience.”

Originally the university offered an MBA, then expanded to include undergraduate degrees for educating people in the 18–22-year-old range in the first cycle of their tertiary education, says Schubert.

In 1981 all professors were external lecturers coming from various parts of industry. Today, there are 27 full-time faculty members working in four primary academic departments and a centre for liberal arts, which together provide not only teaching and personal advising

to students, but run their own research projects, sometimes with students, he says.

Currently the university has an International Relations Department; Business and Management Department; Psychology Department; and Media and Communications Department. The latter offers two undergraduate programmes: traditional media communications and a new programme which was recently accredited called strategic communication.

“This is one of the most innovative programmes to be seen in the Austrian market,” states Schubert. “It focuses on how you package and put together programmes to strategically develop ideas and put them out to the world, something that could be of great value to all our corporate partners.

“If it succeeds, which we expect it to, then we would look at a graduate direction and various levels of executive training in that area.”

International relations and business have been the two core areas which have been stable over time, says Schubert, though they are not the only degree programmes the university offers.

The psychology programme has been growing, and offers an undergraduate degree in psychology and graduate degree in counselling. The cash cow are business and management programmes, as in any university, he adds.

Meanwhile, the international relations programme is the single biggest programme and has been a typical mainstay of Webster University, establishing a grand reputation in areas where universities in Austria and Central Europe have not yet cornered the market.

“It’s looking at international diplomacy, security matters, energy regional issues, it brings in a lot of expertise from both academics and scholars but also diplomats and people from IOs.”

Their approach includes students working one-on-one with industry and NGOs to solve critical problems.

“Today we had a discussion with one member of the petroleum sector about their own needs to deal with sustainability issues, as the market is demanding it ... They have issues about waste, use, sustainability and so we were talking about approaches to that and what the university can do to help,” says Schubert.

There are many ways to do this, not just straight-out education in the classic sense of the term, but in terms of bringing national and international corporate problems into the classrooms and letting students try to tackle them with faculty, says Schubert.

Local companies and NGOs bring in problems for

the students to try and solve. This includes an NGO day, at which heads of seven major NGOs come and listen to presentations by students who have been working on specific problems provided to them.

Energy issues have taken on an intensified focus within the international relations programme. It is an area in which both Pollak and Schubert are very engaged. In fact, the duo recently wrote a book on European Union energy policy.

And the energy angle is a main reason Webster has been interested in collaborating with OPEC.

Webster and OPEC

“Back then we reached out to OPEC and that’s something we’ve been very interested in,” says Schubert. “Johannes (Pollak) from the standpoint of EU and EU policy and myself as a question of resource wars and international security.”

The Webster-OPEC story is about a decade old. Prior to 2009 or 2010, the university came under pressure to hire research faculty to fulfil new laws. Pollak was senior professor of research in the international relations programme and Schubert was hired as a researcher and became chair of the department in 2010.

“We turned a programme that had on average 60–70 students up to well over 100 and have sustained it at that level ever since.”

The new team at Webster did a lot of reforming, changing faculty and applying stricter rigours, with the understanding that students who went to the university needed to have a reputation as being competent and rigorous.

“Working in the energy area and familiar with this environment, we reached out to OPEC to work out a relationship where we could get our students internships at OPEC,” says Schubert. “This was difficult because OPEC had standard operating procedures where only members of OPEC could come in as interns, so this required discussions inside OPEC and justifications and we explained we had a focal point of research on energy.

“This was very important for us, we wanted our students to be tackling the big issues around energy and there are a lot of issues around energy. Many of them are data intensive and many require a good understanding of politics and economics and notions of business and how things work, as well as modelling and media.”

They found a keen interest in OPEC at certain times of the year to have interns. Thus a programme was set up,

defined together with OPEC’s leadership, setting standards which would be followed and creating a process by which students could be nominated and elected.

The university makes recommendations and OPEC chooses individuals for internships, says Schubert. Although interns don’t come to OPEC every year and all the time, the collaboration remains active.

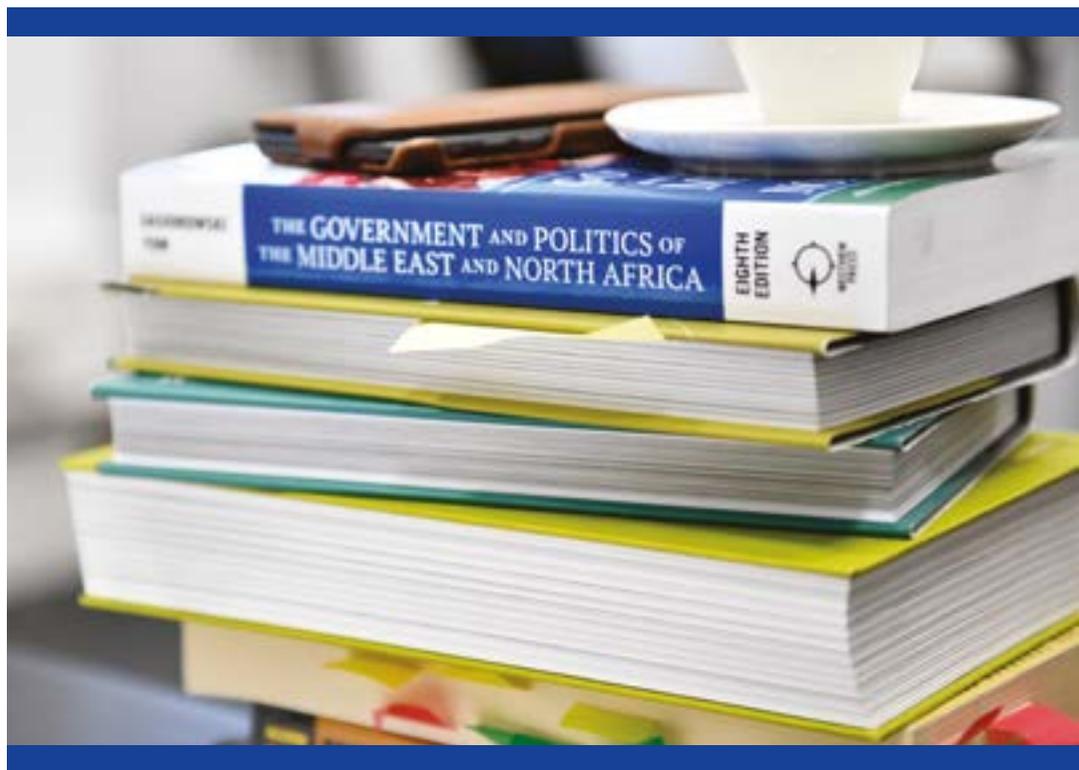
“We can point to really good results. OPEC has responded to us with wow, how great these students are. This has led to three or four of them being directly employed by OPEC and has also led to an offer for one to go, but she went to her own country to work in the energy ministry, which is even better.

“So our people gain from it, our students gain from it, our students converted it into quality performance which OPEC recognized and rewarded down the line to those individuals and that is exactly what we would have always wanted.”

The relationship between OPEC and Webster has been built up over time by sitting together and discussing, he says. The primary goal is to find the best balance for both students and partners.

OPEC Secretary General, Mohammad Sanusi Barkindo, also sits on the Advisory Board of Webster, deepening this relationship even more.

“OPEC is a very relevant player in the recent history of Vienna and we are part of that history and so for us, there is a very strong, reasonable marriage of common interest,” Schubert said. ❖❖



Waltzing into spring

The OPEC Secretariat will mark its 55th year in Vienna on September 1, 2020 — less than two weeks before the Organization’s Diamond Anniversary. The OPEC Bulletin looks at a Viennese tradition that celebrates the city’s guilds and professions.

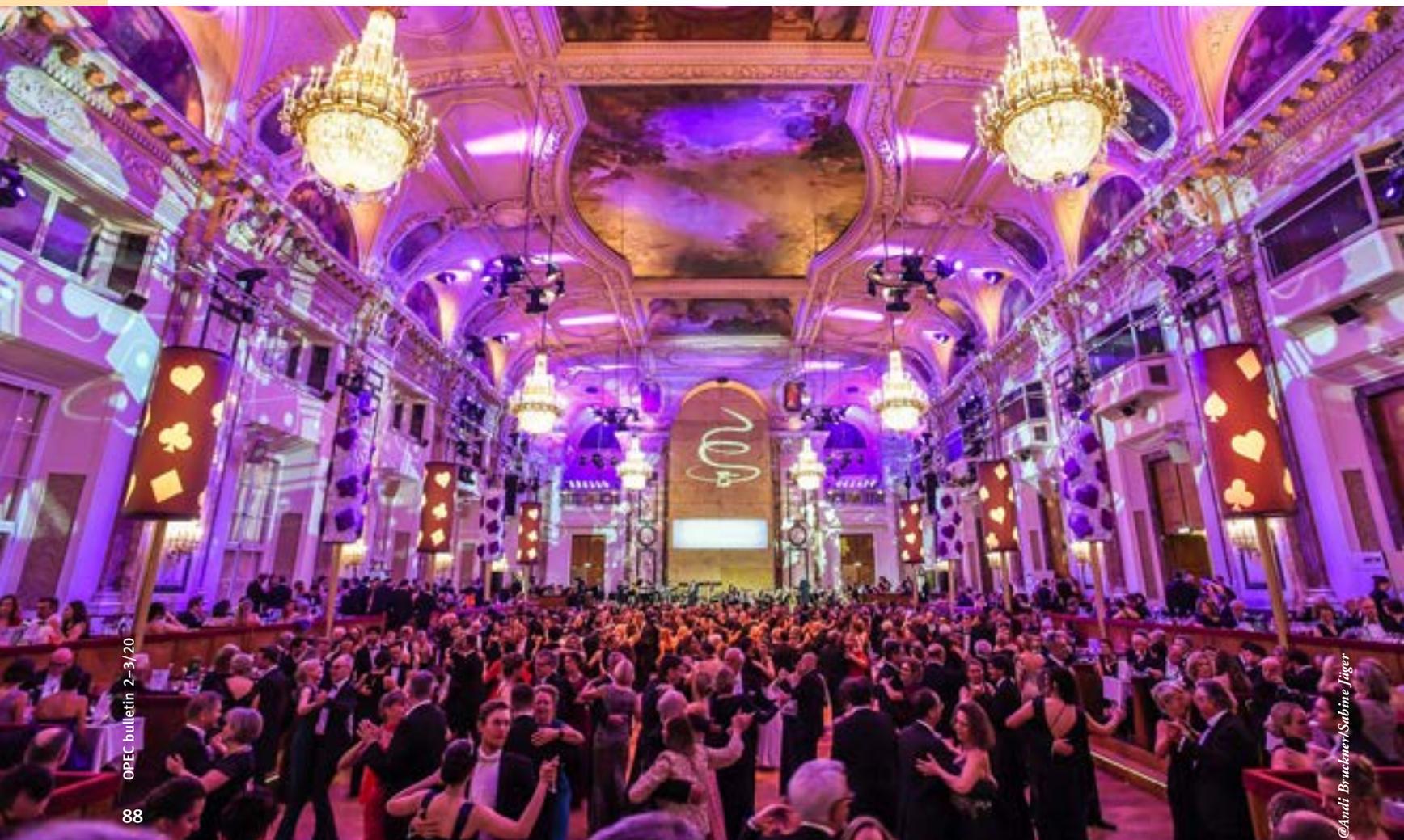
Whether dancing to celebrate science or sweets, Vienna’s glamorous balls have become as iconic as the city’s coffeehouses, music and architecture.

Seen today by millions of television viewers, the balls trace their origin to the Congress of Vienna. In 1814–15, European monarchs and ambassadors from across Europe gathered in Austria’s imperial capital in a push to restore peace and rebalance the continent’s power following the devastating Napoleonic wars. Vienna’s lively ballroom waltzes offered a break from the demands of statecraft and were a contrast to the more sombre dance traditions of royal courts.

Historians credit the Congress of Vienna with achieving a century of relative stability in Europe. The gathering also helped spread the popularity of festive ballroom dancing.

More than 200 years later, Vienna’s winter season features an estimated 450 balls that attract around 300,000 visitors each year, according to the city’s tourism authority.

Many of these events take place in January, February and early March in grand venues near the OPEC Secretariat, including the Vienna City Hall, the Vienna State Opera House and Hofburg.





Left and right: The 119th Zuckerbäckerball (confectioner's ball) was held at the Vienna Hofburg in January 2020.

Celebrating professions

The glamorous costumes, courtly manners and imperial music that were once the privilege of nobility are on display today at events celebrating chimney sweeps, bakers and candy makers, hunters, coffeehouse owners and many other guilds.

Doctors, lawyers, scientists, firefighters and international organizations based in Vienna, including the International Atomic Energy Agency, also waltz away the nights at their own balls.

“Many of the Viennese balls are now organized by groups of professional persons,” according to the tourism authority. The events also coincide with the carnival season, a time of festivity and celebration for Roman Catholics.

Imperial and musical heritage

The best-known Vienna balls reflect Austria's imperial and musical history.

The New Year's Ball marks the season's glamorous debut at the Hofburg, the baroque palace and seat of power of the Habsburg Empire until 1918. Today the palace houses museums and collections from the National Library, and its elaborate ceremonial hall serves as a venue for diplomatic events, as well as balls.

The Vienna Philharmonic Ball, first held in 1924, attracts renowned conductors and musicians. The German-born musician Richard Strauss composed a fanfare for the first ball that has been a fixture of performances ever since.

One of the most famous balls, held for

the first time in 1935, attracts 5,100 guests to the stately Opera House. A single ticket for the famous Vienna Opera Ball costs €315 (without a seat) while a circle box accommodating 12 people, is €23,600. An estimated 320 catering staff are on hand for this gala event. Crowds gather around the Opera House to catch a glimpse of Hollywood stars and other personalities.

“Music and dance all over the opera building, sumptuous floral decorations, ladies in elaborate gowns, gentlemen in elegant tailcoats, celebrating with friends, and unexpected encounters make the Vienna Opera Ball an unforgettable event each year,” according to the Vienna State Opera.

Not all of Vienna's balls focus on glamour and celebration. Proceeds from ticket sales at benevolent dances, such as the Diplomatic Academy Charity Ball, support aid organizations, medical research and other causes.



View of the 'Wiener Opernball 2019' (Vienna Opera Ball 2019). The 'Vienna Opera Ball' has been held at the Vienna State Opera since 1935.

Reuters

Briefings

Students and professional groups wanting to know more about OPEC visit the Secretariat regularly in order to receive briefings from the Public Relations and Information Department (PRID). PRID also visits schools under the Secretariat's outreach programme to give them presentations on the Organization and the oil industry. Here we feature some snapshots of such visits.

Visits to the Secretariat



October 8

Student from the Europäische Akademie Nordrhein-Westfalen e.V, Bonn, Germany.



October 9

Officials from the Arbeitsgemeinschaft Staat und Gesellschaft, Regionalleitung West, Stuttgart, Germany.



October 10

Delegates from the Kebbi State of Nigeria.



October 10

Students from the Karl-Theodor-Molinari-Stiftung, Berlin, Germany.



October 10

Representatives from the Europäische Akademie Bayern, Munich, Germany.



October 15

Officials from the University of South Carolina, Columbia, South Carolina, US.



October 15

Students from ECS Diplomacy, Izhevsk, The Russian Federation.



October 31

Students from Dis Abroad, Copenhagen, Denmark.



November 6 Students from the University of Economics, Bratislava, Slovakia.



November 7 Students from the Vienna University of Economics and Business, Vienna, Austria.



November 14 Students from the University of Debrecen, Hungary.



Head, Public Relations and Information Department

The Department is responsible for presenting OPEC objectives, decisions and actions in their true and most desirable perspective; disseminating news of general interest regarding the Organization and the Member Countries on energy and related matters; and carrying out a central information programme and identifying suitable areas for the promotion of the Organization's aims and image.

Objective of position:

Plans, organizes, coordinates, manages and evaluates the work of the Public Relations and Information Department in accordance with the work programme and budget of the Department so as to optimize its support to the Secretariat in achieving its objectives. The work aims at creating and maintaining a positive image of the Organization and at ensuring the dissemination of publications and journals at highest professional standard.

Main responsibilities:

- Plans, organizes, coordinates, manages and evaluates the work in the Public Relations & Information Department by: Suggesting ways and means of promoting the image of the Organization; regularly dispatching information to the broad public through the media and disseminating information and news on OPEC; informing and seeking dialogues with targeted policy making bodies, institutions and organizations; identifying and strengthening avenues for dialogue between OPEC, other institutions and the general public; monitoring the media to evaluate public perception about the Organization, and recommending, where necessary, any disinformation about the Organization through the Director, Support Services Division to the Secretary General; ensuring that publications and public relations activities are fully consistent with the pursuit of OPEC aims and objectives, and policies, and of highest professional standard in terms of language, format and layout; and updating and sustaining the OPEC website.
- Establishes and maintains close contacts with the media and arranges print, radio, TV and internet interviews to promote objective presentation of OPEC, its aims and objectives as well as the work of the Secretariat.
- Ensures full responses to requests by the Conference, BOG and standing committees for studies and special reports relevant to the work program of the Department.
- Arranges presentations at relevant OPEC meetings and international forums representing the Secretariat as required.

- Develops and maintains networks with external experts and institutions in fields relating to the work of the Department.
- Keeps the Director, Support Services Division fully informed on all aspects of the work of the Department, and draws his attention to important analyses performed by it.
- Evaluates the performance of the staff of the Department, and recommends to the Director, Support Services Division of staff development, salary increase, promotion and separations as appropriate.
- Ensures that the staff of the Department receive the supervision and guidance necessary to broaden and deepen their skills and continuously improve their performance.
- Prepares the annual budget for the Department.
- Carries out any other tasks assigned to him/her by the Director, Support Services Division.

Required competencies and qualifications:

Education: Advanced university degree in Media Studies, Journalism, Public Relations, International Relations or relevant Social Sciences; PhD preferred.

Work experience: 12 years in journalism, information management and/or public relations in the media or in an energy-related establishment with a minimum of four years in a managerial position, preferably at large national, regional, or international institutions. PhD: ten years.

Training specializations: Knowledge of modern information practice and techniques; Professional Management & Leadership; Membership of a professional body (Public Relations or Journalism) is an advantage; Knowledge of energy development issues an asset.

Competencies: Managerial & leadership skills; Communication skills; Decision making skills; Strategic orientation; Analytical skills; Presentation skills; Interpersonal skills; Customer service orientation; Negotiation skills; Initiative and integrity.

Language: English.

Status and benefits:

Members of the Secretariat are international employees whose responsibilities are not national but exclusively international. In carrying out their functions they have to demonstrate the personal qualities expected of international employees such as integrity, independence and impartiality.

The post is at Grade B reporting to the Director, Support Services Division. The compensation package, including expatriate benefits, is commensurate with the level of the post. 

Applications:

Applicants must be nationals of Member Countries of OPEC and should not be older than 58 years.

Applicants are requested to fill in an application form which can be downloaded from the OPEC website.

In order for applications to be considered, they must reach the OPEC Secretariat through the relevant Governor not later than **March 28, 2020**, quoting the job code: **8.1.01** (see www.opec.org — Employment).



IT Development Coordinator

The Data Services Department collects, retrieves and provides statistical data as support to the research and analytical studies in the other Research Division Departments and other activities of the Secretariat. It also develops up-to-date IT applications and database systems, and provides specialized relevant documents and references. The Department has the responsibility of a central, timely provider of reliable up-to-date data, documentation and information pertaining to oil markets in particular and energy markets and related issues in general as well as rendering IT development services.

Objective of position:

To supervise the IT development group and its staff, delegate and coordinate tasks and to ensure effective teamwork. To ensure reliability and availability of the OPEC Database, the OPEC Intranet and related applications.

Main responsibilities:

- Plans, develops, organizes, coordinate, and supervises the activities of the IT Development Group.
- Carries out system analysis and feasibility studies for new applications.
- Determines system specification and provides outlines for system design.
- Develops standard procedures for implementation of new systems and provides guidelines for system development and standard system development procedures.
- Develops new applications and provides reviews on related technology.
- Provides reviews and analysis on various subjects and carries out other assignments as required.
- Provides user support.
- Administers and provides software packages, licenses, and subscriptions of data publications.

- Carries out any other tasks assigned by the relevant superiors as pertain to his/her background, qualifications and position.

Required competencies and qualifications:

Education: University degree in Computer Science, Information Technology or other subject related to Information Technology; Advanced degree preferred.

Work experience:

University degree: ten years; advanced degree: eight years.

Training specializations:

System Analysis and Design: Relational Database, System Thinking, Feasibility Studies, Information Architecture; Document and Records Management Systems; Web Content Management (CMS) Systems; Web Technologies; Oracle RDBMS; Modeling; Energy/Oil Statistics; Energy Information System; Familiarity with a variety of software packages.

Competencies:

Managerial & leadership skills; communication skills; analytical skills; presentation skills; interpersonal skills; customer service orientation; team-building skills; initiative and integrity.

Language: English

Status and benefits:

Members of the Secretariat are international employees whose responsibilities are not national but exclusively international. In carrying out their functions they have to demonstrate the personal qualities expected of international employees such as integrity, independence and impartiality.

The post is at Grade D reporting to the Head, Data Studies Department. The compensation package, including expatriate benefits, is commensurate with the level of the post.



Applications:

Applicants must be nationals of Member Countries of OPEC and should not be older than 58 years. Applicants are requested to fill in an application form which can be downloaded from the OPEC website. In order for applications to be considered, they must reach the OPEC Secretariat through the relevant Governor not later than **March 28, 2020**, quoting the job code: **3.3.01** (see www.opec.org – Employment).

Visit our website

www.opec.org



Review of the global oil demand trend

February 2020

World oil demand in 2020 is forecast to grow by 990,000 million barrels/day y-o-y, a downward revision of 200,000 b/d from the assessment in January 2020. This follows a downward revision to global economic growth, which was lowered by 0.1 percentage points to 3.0 per cent for 2020. OECD oil demand is projected to grow by 10,000 b/d, while the non-OECD is anticipated to add 980,000 b/d. Within OECD, in OECD Americas, oil demand is expected to increase, supported mainly by the petrochemical sector in the US. Transportation fuel demand is also expected to grow y-o-y, despite ongoing efficiency gains and vehicle electrification programmes. Oil demand in OECD Europe is forecast to contract this year. Meanwhile, in OECD Asia Pacific, substitution programmes and efficiency gains in Japan will only partly be offset by increases in South Korea and Australia, with the region seeing a contraction. Overall, petrochemical and also the transportation sectors in the OECD region are expected to lend some support to oil demand growth in 2020.

In the non-OECD, oil demand growth in both Latin America and the Middle East is forecast higher y-o-y, mainly due to improved economic developments, while in Other Asia and particularly in India, steady economic activity in the region is forecast to support oil demand growth amid healthy transportation and industrial sectors. Oil demand growth in China in 2020 is forecast to slow down, y-o-y, reflecting lower economic activities. The recent outbreak of the coronavirus (COVID-19) in China necessitated a further downward revision to the country's oil demand growth forecast compared to last month, as transportation fuels, notably aviation fuels, are expected to be impacted in 1H20. Evidently, the timing of the outbreak exacerbated the impact on transportation fuel demand in China, as it coincided with the Chinese Lunar New Year holidays, as millions of Chinese return home to celebrate with family members and friends, or travel abroad.

It is worth noting that, in recent years, transportation fuels, particularly jet fuel and gasoline, have been major sources of oil demand growth in China. Since 2003, the share of Chinese jet fuel consumption to global jet fuel demand has almost tripled, standing at around ten per cent in 2019.

Similarly, the share of China's gasoline consumption in global gasoline demand increased from 4.7 per cent to 12 per cent. In fact, in 2019, jet fuel was the largest growing petroleum product in the transportation sector in percentage terms, not just in China, but also globally. In fact, growth in jet fuel demand in China is mainly due to the significant expansions to existing, and additions of new domestic airports, as well as a general increase in air travel activity. The COVID-19 outbreak has also affected the industrial sector.

All in all, Chinese oil demand is now revised down by 200,000 b/d in 1H20 from the previous monthly assessment, resulting in an overall downward revision of 400,000 b/d in global oil demand growth in 1H20 and hence a downward revision of 200,000 b/d for the whole year. This is in line with a downward revision to China's economic growth for 2020 by 0.5 pp to now stand at 5.4 per cent.

The impact of the COVID-19 outbreak on China's economy has added to the uncertainties surrounding global economic growth in 2020, and by extension global oil demand growth in 2020. Clearly, the ongoing developments in China require continuous monitoring and assessment to gauge the implications on the oil market in 2020.



MOMR ... oil market highlights

February 2020

Crude oil price movements – The January OPEC Reference Basket (ORB) value ended \$1.38, or 2.1 per cent, lower, month-on-month (m-o-m), averaging \$65.10/b. In January, ICE Brent averaged \$1.50, or 2.3 per cent, m-o-m lower at \$63.67/b, while NYMEX WTI dropped \$2.28, or 3.8 per cent, averaging \$57.53/b. Year-to-date (y-t-d), ICE Brent was \$3.43, or 5.7 per cent, higher at \$63.67/b, while NYMEX WTI was up by \$5.98, or 11.6 per cent, at \$57.53/b, compared to a year earlier. The market structure of both ICE Brent and DME Oman remained in backwardation in January, despite the sharp decline in oil prices due to expectations of slowing global oil demand, while NYMEX WTI slipped to contango in late January. However, by early February Brent switched to contango as well. Hedge funds and other money managers reduced their net long positions in January as geopolitical tensions receded and focus turned to concerns about the impact of the coronavirus (COVID-19) on global economy and oil demand growth.

World economy – Slowing 2H19 output led to a downward economic growth revision for 2019 to 2.9 per cent. The COVID-19-related impact, in combination with a weakening economy in the Euro-zone and India, triggered the 2020 GDP growth downward revision by 0.1 pp, reaching 3.0 per cent. US growth remains at 2.3 per cent for 2019 and at 1.9 per cent for 2020. Euro-zone growth remains at 1.2 per cent for 2019, but was lowered by 0.1 pp to 0.9 per cent for 2020. Similarly, Japan's growth is unchanged at 1.1 per cent for 2019, but was revised down by 0.1 pp to reach 0.6 per cent for 2020. China's growth was revised down by 0.1 pp to 6.1 per cent for 2019 and by 0.5 pp to 5.4 per cent for 2020. Also, India's growth was revised down by 0.3 pp to 5.2 per cent for 2019 and down by 0.3 pp to 6.1 per cent for 2020. Brazil's growth remains unchanged at 1.0 per cent for 2019 and at 2.0 per cent for 2020. Russia's growth remains unchanged at 1.1 per cent for 2019 and at 1.5 per cent for 2020. While the magnitude of the COVID-19-related impact remains to be seen, ongoing solid economic performance in the US and other important OECD economies, improving global trade relations in combination with stimulus measures in China and continuing accommodative monetary policies are expected to support global growth.

World oil demand – In 2019, world oil demand growth is revised down by 20,000 b/d, from last

month's assessment; amid weaker-than-expected oil demand growth data from OECD America in most parts of the year. Now, world oil demand is estimated to have grown by 910,000 b/d and average 99.74m b/d in 2019. Oil demand growth in 2020 is revised down by 230,000 b/d from the previous month's assessment. With this, global oil demand is now forecast to grow by 990,000 b/d and average 100.73m b/d for 2020, with OECD oil demand growing by 10,000 b/d in 2020, while non-OECD oil demand is growing by 980,000 b/d. The outbreak of the COVID-19 in China during 1H20 is the major factor behind this downward revision.

World oil supply – The non-OPEC liquids production growth for 2019 is revised up by 20,000 b/d from the previous month's assessment and is now estimated at 1.88m b/d, to average 64.36m b/d. With this, US liquids production growth y-o-y is revised up by 11,000 b/d to average 1.68m b/d. In contrast, the non-OPEC liquids production growth forecast for 2020 is revised down by 100,000 b/d from last month's assessment and is projected to grow by 2.25m b/d to average 66.60m b/d. The large downward revisions to the US liquids production forecast are partially offset by other regions' upward adjustments. The US liquids production growth forecast for 2020 is revised down by 166,000 b/d, to grow by 1.26m b/d y-o-y. The US is expected to remain the main growth driver in 2020, along with Norway, Brazil, Canada, Guyana and Australia. OPEC NGLs production in 2019 is estimated to have grown by 40,000 b/d to average 4.80m b/d and for 2020 is forecast to grow by 30,000 b/d to average 4.83m b/d. In January, OPEC crude oil production has fallen by 509,000 b/d m-o-m to average 28.86m b/d, according to secondary sources.

Product markets and refining operations – Product markets in January showed mixed results. In the USGC, high product inventory levels – particularly for gasoline – and poor heating oil demand continued to weigh on US refining economics. In Europe, product markets witness considerable gains, as all products – except for gasoil – were supported by firm exports to the Middle East on the back of heavy turnarounds in that region. Meanwhile in Asia, product markets witnessed a mild upside, driven by solid high sulphur fuel oil (HSFO) gains although all other product crack spreads experienced losses. High sulphur fuel oil markets continued the upward

trend for the second consecutive month, supported by increasingly tighter supplies from refineries amid lower feedstock prices and stronger import requirements from the Middle East.

Tanker market – Dirty tanker spot freight rates in January continued the roller coast movement seen since September, this time giving back almost half the gains seen the month before. However, rates remained some 50 per cent higher than the same month last year, as the market remained optimistic about an improvement in rates in 2020. Seasonal factors were a key contributor to the decline. The outbreak and rapid spread of the COVID-19 temporarily upended the tanker market starting at the end of January, disrupting trade with China, the world's largest crude importer. It remains to be seen when and how this health challenge will be resolved, but is certain to weigh on rates in February. After rising steadily since September 2019, clean tanker rates fell back in January, but remain slightly higher than the same month last year. Rates benefited from a strong start to the year, but have fallen in recent weeks driven by seasonal factors.

Stock movements – Preliminary data for December showed that total OECD commercial oil stocks rose by 6.8m b m-o-m to stand at 2,918m b, which was 45m b higher than the same time one year ago, and around 30m b above the latest five-year average. Within the components, crude stocks fell by 15m b m-o-m to stand at 38m b above the latest five-year average, while product stocks rose by 22m b, m-o-m to remain 9m b below the latest five-year average. In terms of days of forward cover, OECD commercial stocks rose by 0.6 days m-o-m in December to stand at 61 days, which was 0.8 days above the same period in 2018, but 0.1 days below the latest five-year average.

Balance of supply and demand – Demand for OPEC crude in 2019 remained unchanged from the previous report to stand at 30.6m b/d, 1.0m b/d lower than the 2018 level. Demand for OPEC crude in 2020 was revised down by 200,000 b/d from the previous report, to stand at 29.3m b/d, around 1.3m b/d lower than the 2019 level. The main reason behind the oil demand growth revision and hence the demand for OPEC crude, is the outbreak of the COVID-19 and its expected impact on China's oil demand and, by extension, global oil demand.

The feature article and oil market highlights are taken from OPEC's Monthly Oil Market Report (MOMR) for February 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.

Assessment of the global economy in 2020

March 2020

Despite tender signs of improvement at the beginning of the year, the current expectation for global economic growth is being dragged down by the carry-over of weak 4Q19 data in several key economies, along with the strong impact of the rapidly spreading outbreak of Covid-19. Previously forecast growth of 3.0 per cent for 2020 global GDP is now, therefore, revised down to 2.4 per cent. Furthermore, the impact of Covid-19 is exacerbated by high global debt levels, the ongoing general slowdown in world trade as well as challenges in manufacturing, which is impacted by slowing capital expenditure in various key economies and by a globally decelerating automotive industry. The underlying key assumption for the forecast is that while China will see a sharp deceleration in 1Q20 and to a lesser extent in 2Q20, a recovery in the country is projected to take hold in 2H20, supported by government-led stimulus measures. However, the impact of Covid-19 related developments outside China will continue well into 2Q20, especially in Asia, the Euro-zone, US and Middle East. Therefore, all these regions are forecast to see a slowdown through 2Q20, recovering only towards the second half of 3Q20. By 4Q20 global activity is assumed to have normalized. Depending on future developments, further downside risk remains.

While the Covid-19 related news dominates markets, additional challenges such as Brexit, geopolitical tensions, and significant fiscal challenges in selective economies continue. On the other hand, economic performance in the US, improving global trade relations in combination with fiscal stimulus measures in China, Japan, Italy and other economies, as well as ongoing accommodative monetary policies, may offset some of the current downside.

While most OECD economies were revised down over the past weeks to now show growth of 1.2 per cent for the region in 2020, the US economy is still holding up better at a forecast 1.6 per cent. Monetary policies by major OECD central banks are also expected to remain

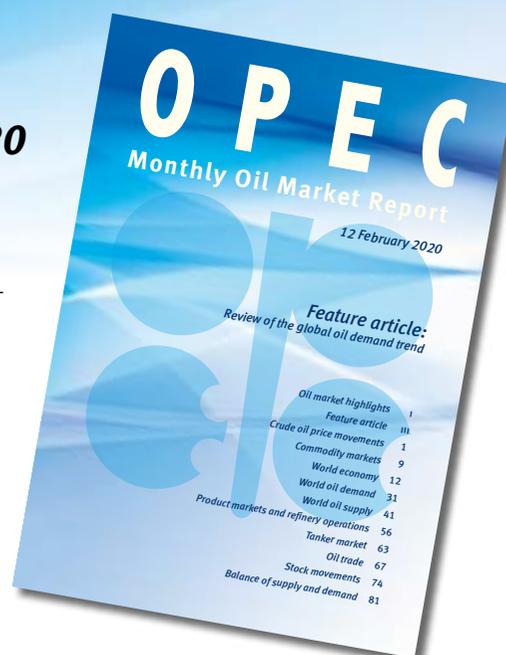
accommodative to counterbalance some of the downside momentum. Nevertheless, Euro-zone growth levels will come down more significantly to 0.6 per cent. This assumes that Italy will face a recession in 2020, after drastic measures to fight Covid-19

were implemented most. Japan's 2020 growth was revised down to -0.2 per cent, following weak 4Q19 growth and Covid-19 contagion.

In the emerging economies, China is forecast to be further impacted by the ongoing Covid-19-related developments in 1H20, leading to 5.0 per cent growth for the year. India's 2020 GDP growth was revised down to 5.2 per cent, compared to forecasts of more than six per cent in the previous months, mainly due to ongoing domestic challenges and a worsening external environment. Brazil's 2020 GDP growth is forecast at 1.6 per cent, impacted by expected slowing external trade. Russia's 2020 growth is forecast at 0.8 per cent for 2020, due to the decline in commodity export markets.

The tremendous impact that the Covid-19 outbreak had so far on economic growth has significantly impacted oil demand growth in 1Q20 and therefore led to a downward revision to show less than 100,000 b/d growth for the entire year 2020. Non-OPEC supply is now forecast to grow by 1.8m b/d in 2020, a downward revision of 500,000 b/d, mainly reflecting a further slowdown in US tight oil.

The impact of the Covid-19 related developments on an already fragile global economic situation is quite challenging and requires coordinated global policy action of all market participants.



MOMR ... oil market highlights

March 2020

Crude oil price movements – The OPEC Reference Basket (ORB) value fell sharply in February, tumbling by about \$10, or 15 per cent, month-on-month (m-o-m), to settle at an average of \$55.49/b, its lowest since September 2017. The ORB dropped further in March, to close at \$34.71/b on March 9. Similarly, ICE Brent fell in February by \$8.20, or 12.9 per cent, to average \$55.48/b, while NYMEX WTI declined by \$6.99, or 12.1 per cent, to average \$50.54/b. In March, futures prices tumbled about 25 per cent in one trading session on March 9, recording their biggest daily decline in nearly 30 years, with ICE Brent and NYMEX WTI settling respectively at \$34.36/b and \$31.13/b. Year-to-date (y-t-d), ICE Brent price was down \$2.47, or 4.0 per cent, at \$59.77/b, while NYMEX WTI was higher by \$1.03, or 1.9 per cent, at \$54.21/b, compared to a year earlier. The backwardation market structure of both ICE Brent and DME Oman flattened in February, before the M1/M3 spread flipped on March 9 to a deep contango of \$1.42/b and \$1.48/b, respectively. Meanwhile, NYMEX WTI moved deeper into contango, to stand at 81¢/b on March 9. Hedge funds and other money managers continued to reduce their net long positions in February in response to the significant decline of more than 12 per cent in crude oil prices over the month.

World economy – Following considerably weaker economic growth for 2H19 in Japan, Euro-zone and in India, the Covid-19 related developments necessitated a further downward revision of the 2020 GDP growth forecast to 2.4 per cent from 3.0 per cent forecast in the previous month. This compares to a 2019 GDP growth estimate of 2.9 per cent. US growth remains at 2.3 per cent for 2019 but is revised down to 1.6 per cent for 2020 due to an anticipated slowdown in consumption amid rising uncertainties, triggered by declining asset markets. Euro-zone growth remains at 1.2 per cent for 2019, but is lowered to 0.6 per cent for 2020, mainly due to the expectation of reduced exports, slowing consumption in select Euro-zone economies and the drastic development seen in Italy. Japan's 2019 GDP growth is revised down to 0.7 per cent on the back of much lower-than-estimated 4Q19 growth, which, in combination with Covid-19 related effects also led to a downward revision for 2020 GDP growth to -0.2 per cent. Following growth of 6.1 per cent in 2019, the 2020 economic growth forecast for China is revised down to 5.0 per cent, considering the latest Covid-19 impacts. India's 2019 growth is revised up to 5.3 per cent, based on India's latest actual GDP growth numbers, but is revised down to 5.2 per cent for 2020, mainly due to ongoing domestic challenges, as well as a deteriorating external environment. Brazil's growth

remains unchanged at 1.0 per cent for 2019, but is revised down to 1.6 per cent for 2020, impacted by slowing external trade. Russia's growth remains unchanged at 1.1 per cent for 2019 and is revised down to 0.8 per cent for 2020, impacted by the decline in commodity export markets. Further downside risks to the world economy remains given the uncertainty regarding the magnitude of Covid-19 related impacts.

World oil demand – World oil demand growth in 2019 is revised down by 80,000 b/d to 830,000 b/d from the previous month's assessment. The downward adjustment mainly reflects weaker-than-expected data from OECD Americas. World oil demand growth in 2020 is also adjusted lower by 920,000 b/d to 60,000 b/d, reflecting slower global economic growth associated with a wider spread of Covid-19 beyond China. The impact of the Covid-19 outbreak in China and its adverse impacts on transportation and industrial fuels were the main causes of this downward revision. In addition, the outbreak is also assumed to severely affect oil demand growth in various other countries and regions outside China, such as Japan, South Korea, OECD Europe and the Middle East, which has led to a downward revision in those regions as well. Total global oil demand is now assumed at 99.73m b/d in 2020, with 2H20 forecast to see higher consumption than 1H20. Considering the latest developments, downward risks currently outweigh any positive indicators and suggest further likely downward revisions in oil demand growth, should the current status persist.

World oil supply – Non-OPEC oil supply growth for 2019 is revised up by 90,000m b/d to 1.99m b/d from the previous month's assessment. It should be noted that Ecuador is included in this group as of this month's *MOMR* issue. For 2020, the non-OPEC oil supply growth forecast is revised down by 490,000 b/d to 1.76m b/d. Production is revised up mainly for Russia, Thailand, Indonesia and Oman, while the US, China, Mexico, Colombia, Norway, Azerbaijan and Malaysia are revised lower. US liquids production growth in 2020 is revised down by 360,000 b/d to 900,000 b/d, y-o-y. However, the US is forecast to drive growth throughout the year, along with Brazil, Norway, Canada, Guyana and Australia, while Mexico, Colombia, Egypt and China are forecast to see the largest oil market highlights declines. OPEC NGL production in 2019 is estimated to have grown by 40,000 b/d to average 4.80m b/d and for 2020 will grow by 30,000 b/d to average 4.83m b/d. In February, OPEC crude oil production dropped

by 546,000 b/d m-o-m to average 27.77m b/d, according to secondary sources.

Product markets and refining operations – Product markets in February lost ground in the Atlantic Basin. In the US and in Europe, the middle of the barrel weakened, in particular the jet fuel segment, caused by aviation transportation disruptions as Covid-19 spread beyond China. In Asia, hefty refinery intake cuts and robust product exports provided support, offsetting demand-side pressure as Covid-19 strongly affected fuel consumption. High sulphur fuel oil crack spreads jumped in Europe and Asia, and increased to reach positive levels in the US, after remaining in negative territory in the previous four consecutive months.

Tanker market – Dirty tanker spot freight rates were negatively impacted by the unexpected developments in February, undermining the optimistic outlook that began the year. Disruptions caused by measures to stem the outbreak of Covid-19 in China led to a sharp drop in economic activities, including refinery runs, which weighed on crude import demand and freight rates. At the same time, tanker availability was further increased by the unexpected lifting of sanctions on a subsidiary of China's Cosco at the end of January, which dampened dirty tanker spot rates, particularly for VLCCs. The market appeared to be looking for a bottom by the end of February, but considerable uncertainties remain for March, given the widening disruptions brought about by the ongoing spread of Covid-19.

Stock movements – Preliminary data for January showed that total OECD commercial oil stocks rose by 37.8m b m-o-m to stand at 2,940m b. This was 56.9m b higher than the same time one year ago and 12.9m b above the latest five-year average. Within the components, crude stocks fell slightly by 800,000 b, while products stocks rose by 38.6m b m-o-m. OECD crude stocks stood at 9.1m b below the latest five-year average, while product stocks exhibited a surplus of 21.9m b. In terms of days of forward cover, OECD commercial stocks rose m-o-m by 0.8 days to stand at 62.2 days, which was 1.6 days above the same month in 2018, and 0.4 days above the latest five-year average. Given the expected growing imbalance in the coming months, oil stocks, including floating storage, are likely to increase.

Balance of supply and demand – Demand for OPEC crude in 2019 stood at 29.9m b/d, 1.2m b/d lower than the 2018 level. Demand for OPEC crude in 2020 is expected at 28.2m b/d, around 1.7m b/d lower than the 2019 level.

The feature article and oil market highlights are taken from OPEC's Monthly Oil Market Report (MOMR) for March 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												2019					Weeks 5-9/2020 (week ending)				
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Jan 31	Feb 7	Feb 14	Feb 21	Feb 28				
Arab Light – Saudi Arabia	64.85	67.40	71.88	70.78	63.45	65.61	60.84	62.74	60.99	64.01	67.45	66.56	56.84	61.90	56.78	56.70	59.04	54.82				
Basrah Light – Iraq	63.25	66.05	70.45	69.77	62.74	64.39	59.20	61.85	59.52	62.54	65.83	64.06	54.75	59.33	54.42	54.58	57.16	52.83				
Bonny Light – Nigeria	65.19	67.71	72.81	72.24	65.59	65.95	60.46	64.02	61.45	63.69	68.18	65.89	57.77	60.87	56.37	57.43	61.00	56.28				
Djeno – Congo*	61.40	63.48	68.55	68.25	61.43	61.31	56.23	59.97	57.13	61.40	66.05	62.95	54.37	58.04	53.44	54.35	57.41	52.28				
Es Sider – Libya	63.15	65.38	70.45	70.25	63.58	63.36	58.38	62.32	59.78	63.51	67.60	63.63	54.65	58.61	53.25	54.31	57.88	53.16				
Girassol – Angola	65.30	67.16	72.88	72.95	65.69	65.98	61.64	65.36	61.34	65.65	69.69	65.41	57.25	60.24	55.67	56.35	60.52	56.46				
Iran Heavy – IR Iran	61.39	64.17	68.52	67.86	60.88	62.65	57.77	60.32	57.94	60.73	63.80	62.61	52.87	58.00	52.81	52.67	55.09	50.90				
Kuwait Export – Kuwait	63.93	66.78	71.20	70.07	62.58	64.90	60.35	62.16	60.52	63.72	66.26	65.37	55.90	60.76	55.91	55.76	58.05	53.87				
Merey – Venezuela	55.85	57.75	58.95	59.15	53.98	61.84	49.17	61.79	45.69	43.44	49.94	55.89	35.99	50.95	36.04	35.84	37.90	34.18				
Murban – UAE	65.64	68.01	71.51	69.70	62.75	64.86	60.19	62.39	60.88	63.48	66.66	66.09	57.06	61.30	57.58	57.05	58.75	54.84				
Oriente – Ecuador	60.42	63.66	67.61	65.60	58.57	61.46	56.09	57.47	54.60	63.02	67.54	64.40	49.76	55.74	49.41	49.81	52.09	47.71				
Rabi Light – Gabon	63.25	65.33	70.40	70.10	63.28	63.16	58.08	61.82	58.98	61.24	64.08	60.80	53.27	56.17	51.58	52.40	56.29	52.82				
Saharan Blend – Algeria	64.30	66.38	71.15	71.20	64.83	63.92	58.23	62.47	60.48	63.86	68.10	65.28	57.91	60.26	56.51	57.57	61.14	56.42				
Zafiro – Equatorial Guinea	64.92	67.15	72.65	72.10	65.48	65.58	60.81	64.47	60.86	65.36	69.74	65.31	56.65	59.74	55.25	56.31	59.88	55.16				
OPEC Reference Basket	63.83	66.37	70.78	69.97	62.92	64.71	59.62	62.36	59.91	62.94	66.48	65.09	55.49	60.21	55.18	55.29	57.88	53.61				

Table 2: Selected spot crude prices
\$/b

Crude/country	2019												2019					Weeks 5-9/2020 (week ending)				
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Jan 31	Feb 7	Feb 14	Feb 21	Feb 28				
Arab Heavy – Saudi Arabia	63.57	66.31	70.60	69.59	61.81	64.29	60.19	62.19	60.22	63.32	65.63	64.41	54.98	59.85	55.04	54.82	57.11	52.97				
Brega – Libya	63.49	65.63	70.60	70.35	63.68	63.31	58.23	62.07	59.48	62.86	66.95	63.33	55.25	58.31	53.85	54.91	58.48	53.76				
Brent Dtd – North Sea	64.00	66.08	71.15	70.85	64.03	63.91	58.83	62.57	59.73	63.11	66.90	63.38	55.45	58.36	54.05	55.11	58.68	53.96				
Dubai – UAE	64.42	66.91	70.93	69.64	61.59	63.21	58.88	61.11	59.46	61.91	64.86	64.10	54.25	59.11	54.40	54.17	56.24	52.17				
Ekofisk – North Sea	64.93	66.73	72.06	72.09	65.48	64.41	59.16	63.76	61.06	65.07	69.17	65.42	58.45	61.09	57.05	58.11	61.68	56.96				
Iran Light – IR Iran	62.53	64.64	70.34	70.19	60.90	62.16	58.39	60.08	57.71	62.87	65.49	61.29	53.54	56.76	52.75	53.44	57.35	50.60				
Isthmus – Mexico	63.81	66.53	70.34	69.04	62.95	63.58	58.71	62.07	59.13	61.69	60.28	55.93	47.50	51.11	46.87	47.63	50.12	45.40				
Oman – Oman	64.62	67.01	71.17	70.04	61.72	63.87	59.79	61.97	60.27	62.81	65.49	65.01	54.61	60.89	54.57	54.35	56.87	52.66				
Suez Mix – Egypt	62.40	64.51	70.21	70.06	60.77	62.03	58.26	59.95	57.58	62.74	65.36	61.16	53.41	56.63	52.62	53.31	57.22	50.47				
Minas – Indonesia*	56.94	59.63	67.64	67.52	59.83	61.56	57.40	60.18	57.36	60.30	62.78	62.10	53.39	57.68	52.98	52.81	55.72	52.04				
Urals – Russia	64.10	66.21	71.90	71.68	62.47	63.73	59.95	61.65	59.28	64.44	67.09	62.86	55.11	58.33	54.32	55.01	58.92	52.17				
WTI – North America	54.98	58.16	63.87	60.73	54.68	57.51	54.84	56.86	53.98	57.25	59.81	57.56	50.60	52.73	50.35	50.83	52.89	48.34				

Notes:

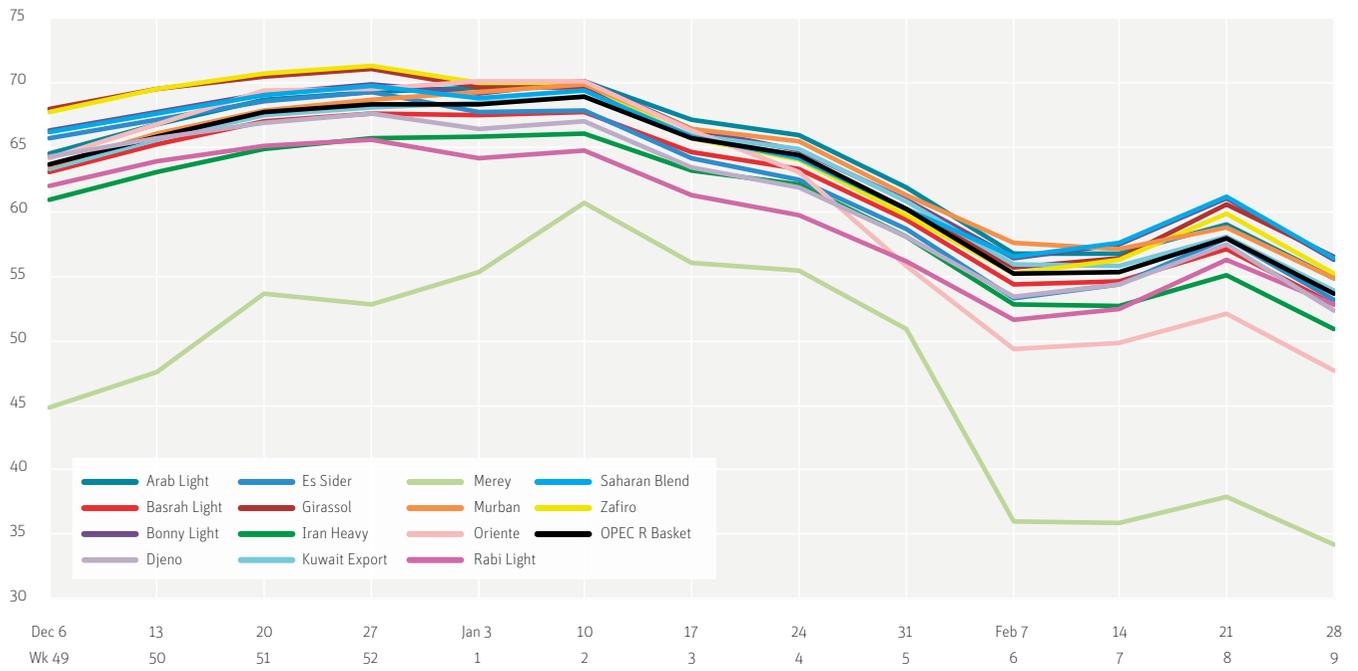
Brent for dated cargoes; Urals cif Mediterranean. All others fob loading port.

* 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

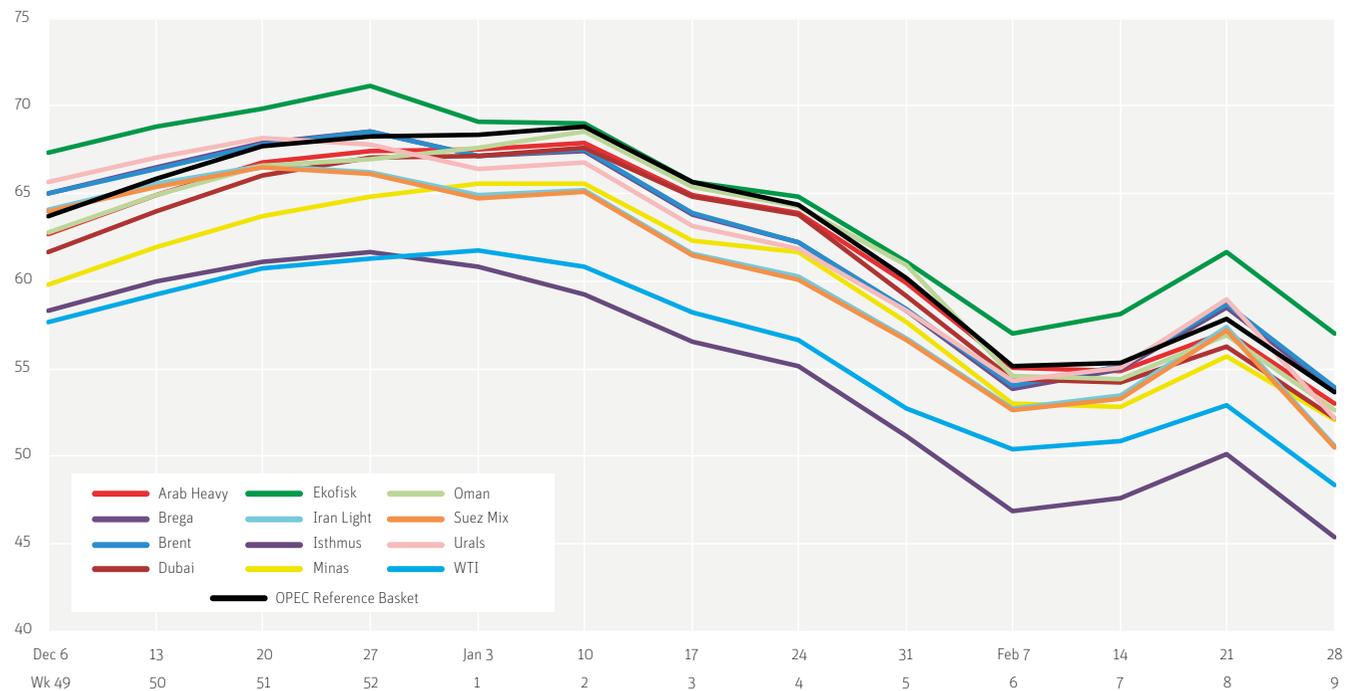


Table and Graph 3: North European market – spot barges, fob Rotterdam

\$/b

		naphtha	regular gasoline unleaded	diesel ultra light	jet kero	fuel oil 1 per cent S	fuel oil 3.5 per cent S
2019	February	55.14	74.43	80.75	80.16	61.41	56.66
	March	58.80	81.08	81.82	81.57	62.98	59.73
	April	62.12	92.99	84.47	83.87	64.94	61.99
	May	60.11	90.26	84.87	84.35	61.69	58.79
	June	52.08	78.29	76.13	77.65	56.94	54.03
	July	55.48	82.33	78.54	81.10	59.18	56.19
	August	49.20	77.64	75.44	77.06	55.69	43.42
	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
February		51.30	69.65	66.45	65.67	54.82	38.21

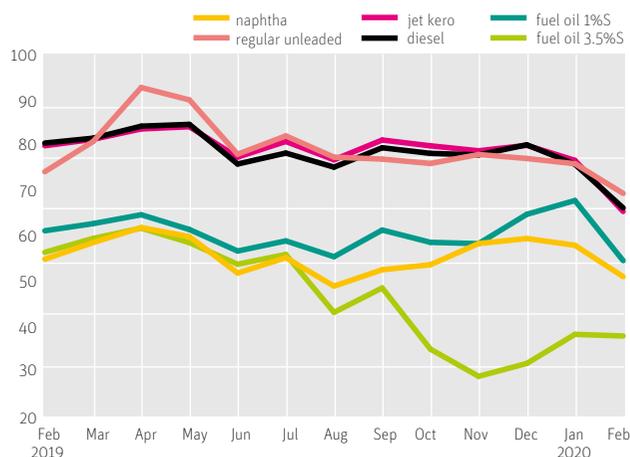


Table and Graph 4: South European market – spot cargoes, fob Italy

\$/b

		naphtha	premium gasoline 50ppm	diesel ultra light	fuel oil 1 per cent S	fuel oil 3.5 per cent S
2019	February	53.98	65.62	82.24	64.13	58.69
	March	57.61	73.78	83.12	64.50	61.11
	April	60.84	83.23	85.03	65.71	63.04
	May	59.16	81.30	85.43	65.23	59.72
	June	51.15	71.63	76.83	62.53	54.99
	July	54.42	76.62	79.41	64.77	57.84
	August	48.74	70.42	76.19	57.78	44.98
	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
February		49.46	64.69	67.60	58.81	40.47

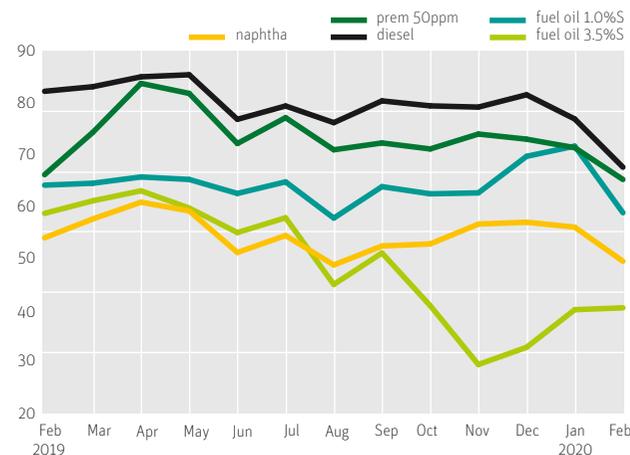
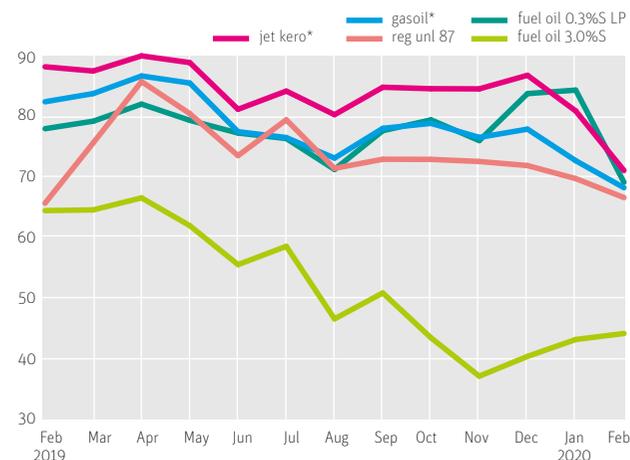


Table and Graph 5: US East Coast market – spot cargoes, New York

\$/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	February	65.58	82.29	88.05	77.85	64.36
	March	75.53	83.64	87.35	79.09	64.48
	April	85.61	86.54	89.85	81.90	66.46
	May	80.34	85.37	88.74	79.23	61.88
	June	73.41	77.36	81.05	77.14	55.47
	July	79.32	76.39	84.05	76.23	58.48
	August	71.32	73.01	80.16	71.14	46.53
	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
February		66.51	68.13	70.97	69.02	44.12



* 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							
February	56.54	66.27	64.36	77.78	77.93	69.07	63.79
March	60.24	74.42	72.83	80.31	79.82	71.61	65.56
April	63.47	80.72	78.77	82.68	82.61	71.79	65.80
May	60.14	76.25	74.45	82.19	81.55	69.82	62.71
June	51.79	67.49	65.88	74.35	74.67	64.85	58.25
July	55.68	73.61	71.11	78.10	78.43	74.51	65.49
August	50.70	70.08	66.55	74.37	74.57	63.99	53.70
September	54.21	74.40	69.55	77.11	77.75	74.58	61.34
October	57.14	74.19	68.04	75.55	75.38	60.62	46.25
November	59.76	76.11	71.39	75.22	74.89	55.62	38.19
December	63.62	74.82	71.34	78.24	77.75	55.42	41.20
2020							
January	61.06	71.13	69.08	76.03	75.34	59.77	49.41
February	52.56	64.34	62.62	64.66	63.05	52.17	44.34

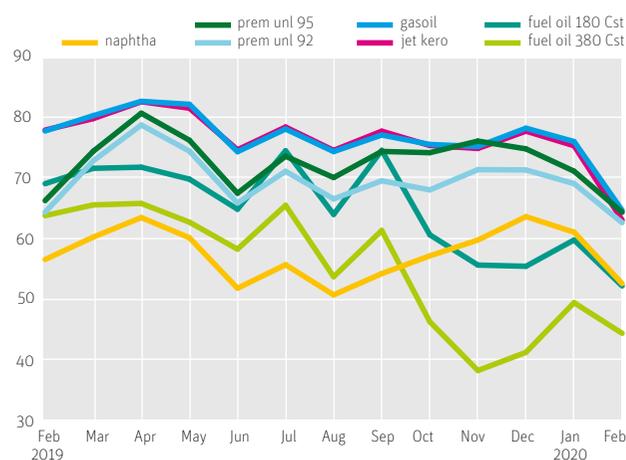
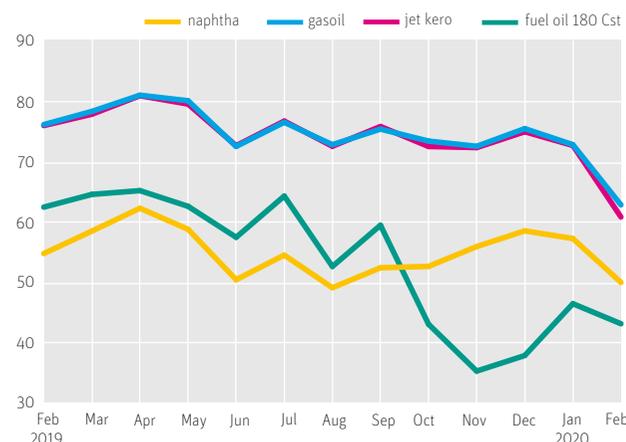


Table and Graph 7: Middle East Gulf market – spot cargoes, fob

\$/b

	naphtha	gasoil	jet kero	fuel oil 180 Cst
2019				
February	54.81	76.02	75.86	62.44
March	58.50	78.19	77.73	64.54
April	62.26	80.86	80.78	65.16
May	58.80	79.95	79.40	62.58
June	50.51	72.43	72.55	57.48
July	54.56	76.40	76.60	64.27
August	49.19	72.72	72.46	52.68
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

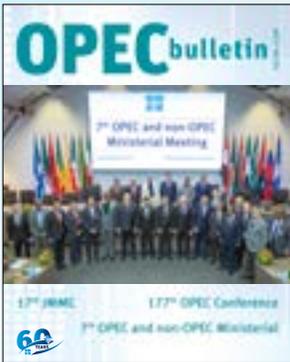


Source: Argus. Prices are average of available days.

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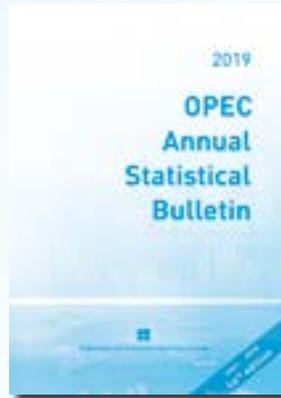
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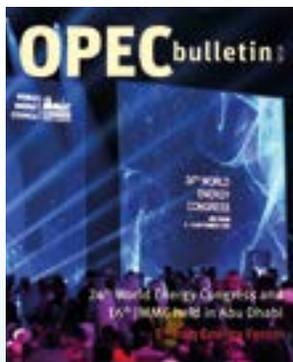
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