OPEC bulletin

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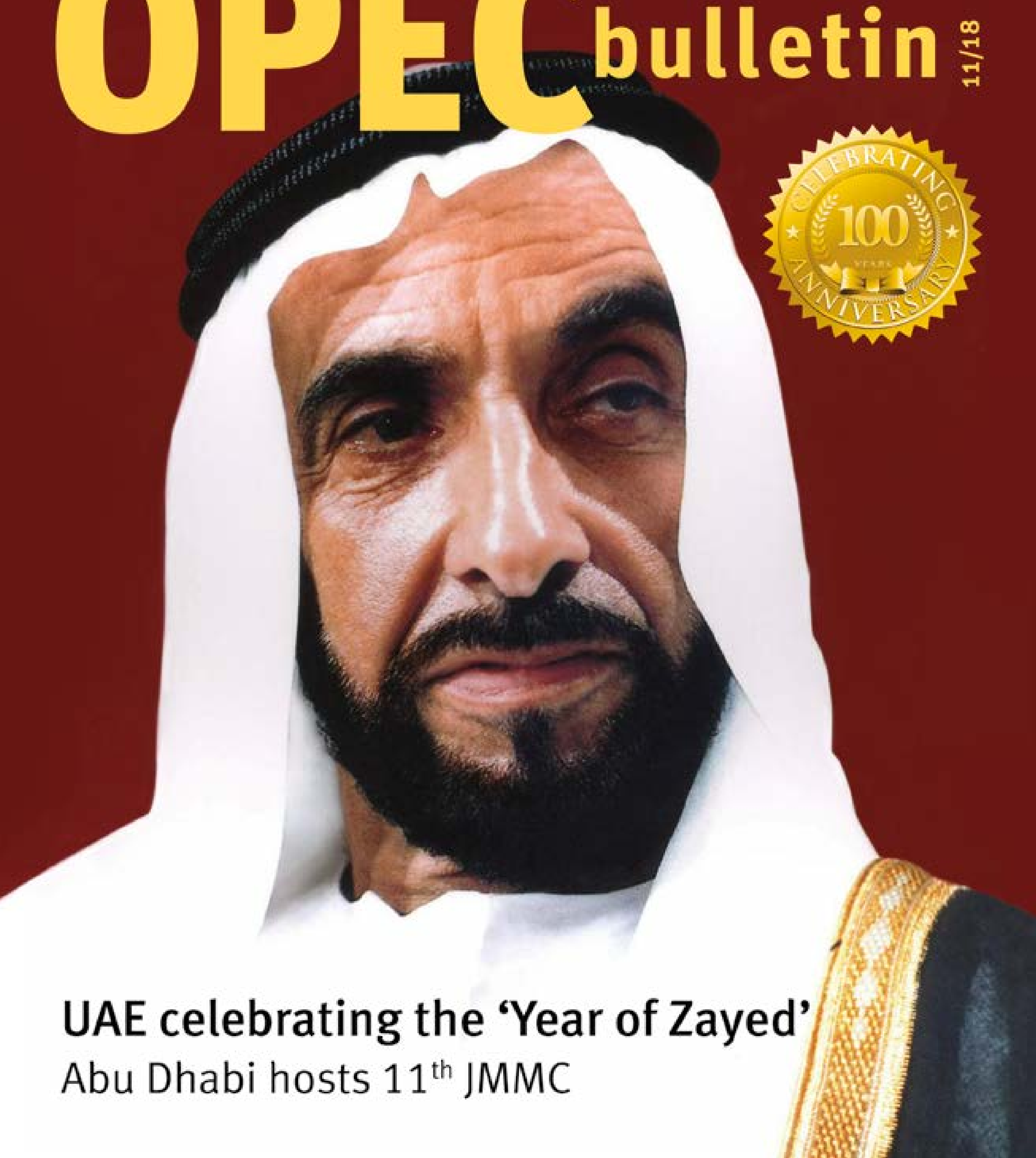

UAE celebrating the ‘Year of Zayed’

Abu Dhabi hosts 11th JMMC

Strengthening the bonds of friendship and trust

Learning more about one another is a wonderful way to deepen friendship and trust. Thus it is that the Joint Ministerial Monitoring Committee (JMMC) meetings, under the umbrella of the 'Declaration of Cooperation' have been frequently rotated in various participating countries, much to the excitement of those hosting the meetings.

Back when the 'Declaration of Cooperation' was first signed in December 2016 between 24 (now 25) OPEC and non-OPEC oil producing countries, nobody estimated the massive success it would achieve in rebalancing the oil markets. Throughout the nearly two years of this process, OPEC and non-OPEC signatories to the 'Declaration' — as well as the rest of the world — have been able to witness a shining example of the power and impact of international cooperation.

The 'Declaration of Cooperation' remains a living illustration of OPEC's dedication to a collaborative approach, centred on the principles of mutual respect, transparency and knowledge exchange. The world has become ever-more interconnected, thus the only way to overcome common challenges is through international cooperation and teamwork.

Pulling the global oil industry out of its blackest period in history, and bringing with it a rebirth of optimism and investment, the decision has had another — equally important — impact. OPEC and non-OPEC participating oil producing countries, along with new observers to OPEC Conference meetings, have had the chance to understand each other better. Aside from breaking bread and attending meetings together, they have undertaken joint technical meetings and generally had the opportunity to network. This mutual sharing of knowledge and information, along with deepening connections, will make it all the more easy to manage any future market imbalances quickly and efficiently.

The 'Declaration of Cooperation' represents an exciting new page turned in the industry's history — one which will live on. To this end, OPEC's hosting of the JMMC in different countries has had the effect of raising the profile of the meetings and allowing participants to get to know their partners on a deeper level.

The JMMC, along with the Joint Technical Committee (JTC) which supports it with technical information and data, has been essential to the success of the 'Declaration of Cooperation', providing a monitoring mechanism which has enabled the countries to achieve unheard-of conformity with the decision.

Every country that is a participant of the Declaration has something special to offer, and hosts get the chance to showcase themselves not only to JMMC participants, but also to the world.

So it is that the next meeting — the 11th — is to take place in Abu Dhabi, UAE on November 11, 2018, and the country is gearing up to entertain and impress its guests. As the United Arab Emirates is currently holding the rotating Presidency of the OPEC Conference, the meeting has even greater significance. Additionally, the country recently celebrated its 50th anniversary as an OPEC Member, having joined in 1967.

The country's Minister of Energy and Industry and President of the OPEC Conference, Suhail Mohamed Al Mazrouei, has been a regular voice over the year in the international arena, speaking on behalf of OPEC and playing a pivotal role in the ongoing 'Declaration of Cooperation' process. Al Mazrouei — always dedicated on a personal level to OPEC and its goals — has had the opportunity to let his remarkable attributes shine over 2018. He personifies the innovative spirit, hard work and resourcefulness which is mirrored in his countrymen, along with diplomacy, tact and statesmanship.

His unwavering commitment has contributed to unity among participants over the past year, and his remarkable technical skills and abilities have been a boon to all forums and arenas within which he has represented his country and the Organization.

The UAE's reputation within the Organization is unblemished. It has produced two OPEC Secretary Generals, hosted four OPEC conferences, and has been represented by some of the most outstanding diplomats in the Organization's history.

Other countries have also had the opportunity to conduct JMMC meetings over the past months, including Kuwait City, Kuwait (2nd meeting, March 26, 2017); St Petersburg, the Russian Federation (4th meeting, July 24, 2017); Muscat, the Sultanate of Oman (7th meeting, January 21, 2018); Jeddah, Kingdom of Saudi Arabia (8th meeting, April 20, 2018); and Algiers, Algeria (10th meeting, September 23, 2018). Each has left its own unique mark on the discussions and deliberations which have taken place.

There will no doubt be hard times to come in the oil industry: geopolitical storms, disruptive weather events, speculation, transportation issues, and the list goes on. However, the platform for dialogue created through the 'Declaration of Cooperation' can help calm stormy waters and provide the ship that is our industry safe passage. To that end, OPEC is committed to institutionalizing the dialogue and deepening the bonds of friendship.

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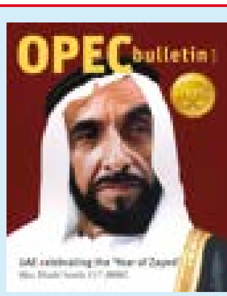

Cover
This month's cover depicts the late HH Sheikh Zayed bin Sultan Al Nahyan; 2018 has been declared the 'Year of Zayed' to commemorate 100th birthday of the Founding Father of the United Arab Emirates (see story on p6). Image courtesy Wikimedia Commons.

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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 15 Members: Qatar joined in 1961; Libya (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, and rejoined in 2007. 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 Joint Ministerial Monitoring Committee continues to evolve

The 10th Meeting of the JMMC was held in Algiers, Algeria, on September 23, 2018 (l–r): Suhail Mohamed Al Mazrouei, President of the OPEC Conference and Minister of Energy and Industry of the United Arab Emirates; Mohammad Sanusi Barkindo, OPEC Secretary General; Khalid A Al-Falih, Chairman of the JMMC and Minister of Energy, Industry and Mineral Resources of the Kingdom of Saudi Arabia; Alexander Novak, JMMC Co-Chairman and Minister of Energy of The Russian Federation; and Mustapha Guitouni, Algerian Minister of Energy.

Seen during the 8th JMMC in Jeddah, Saudi Arabia (l–r): Suhail Mohamed Al Mazrouei, Minister of Energy and Industry of the UAE and President of the OPEC Conference; Mohammad Sanusi Barkindo, OPEC Secretary General; Khalid A Al-Falih, Minister of Energy, Industry and Mineral Resources of the Kingdom of Saudi Arabia, Chairman of the JMMC; Alexander Novak, Minister of Energy of The Russian Federation, Alternate Chairman of the JMMC; and Pavel Sorokin, Deputy Energy Minister, The Russian Federation.

Good intentions are nothing if not supported with action. And so the visionaries behind the 'Declaration of Cooperation', signed in December 2016, formed the Joint Ministerial Monitoring Committee (JMMC) to support their ideals.

After the Declaration was conceived, it quickly became clear that a mechanism to monitor the implementation and compliance with the adjustments would be necessary, and since then the JMMC has been continuing to go from strength to strength, evolving along the way.

It not only embodies the collaborative spirit that has accompanied the 'Declaration of Cooperation' process every step of the way, it has become a dynamic forum in its own right, representing the strength of the cooperation between OPEC and its non-OPEC partners.

The unique body, which comprises oil ministers from three OPEC Countries — Algeria, Kuwait and Venezuela — and two participating non-OPEC countries — the Russian Federation and the Sultanate of Oman — is chaired by Kuwait with the Russian Federation as alternate chair, and assisted by the OPEC Secretariat. The JMMC is supported in its work by the Joint Technical Committee (JTC), which provides a monthly report, including overall conformity levels of the countries participating in the Declaration, as well as the short-term prospects in the global oil market.

This tool has helped participants achieve unheard-of conformity levels, allowing for swift progress in stabilizing market fundamentals, and provided a platform for OPEC and non-OPEC partners to keep a close eye on new developments and discuss them as they arise.

At its most recent meeting, the JMMC ordered the JTC to, in addition to its usual tasks, continue to study the 2019 outlook and present options on 2019 production levels in order to head off the reemergence of a market imbalance.

The 10th meeting, held in Algiers, Algeria on September 23, coincided with the commemoration of the 2nd Anniversary of the 170th Extraordinary Meeting of the OPEC Conference, which led to the 'Declaration of Cooperation' a few months later.

The rotating nature of the JMMC meetings — six (including that held in Abu Dhabi on November 11) have been held outside of the OPEC headquarters — has allowed for the development of relationships among participants, and offered them a chance to learn more about each other.

The JMMC is a work in progress, a tool for sustainable stability in the oil market, the long-term benefits and influence of which can still only be imagined. The dedicated Ministers at the helm of this important body continue in their tireless, ongoing work in support of the unwavering commitment of the participants of the 'Declaration of Cooperation' in achieving their goal.

HH Sheikh Zayed bin Sultan Al Nahyan.

'Year of Zayed': UAE marks 100th birthday of its Founding Father

The unyielding vision of ***HH Sheikh Zayed bin Sultan Al Nahyan*** *is at the heart of the United Arab Emirate's spectacular achievements and growth. He propelled a sparsely populated desert settlement into a vibrant nation with a position of pre-eminence both in the region and internationally in record time. Sunday, May 6 was the 100th birthday of Sheikh Zayed, and 2018 has been declared the 'Year of Zayed' to mark 100 years since the birth of the Founding Father.*

Sheikh Zayed was known as a man of wisdom, hard work and high morals. Someone who gave to his nation without expecting something back, a man who turned ideals into actions.

Widely loved by his countrymen, he was also highly respected as a world statesman, who stood as a power for good. His agenda included compassion, unity, and the right to humanitarian assistance irregardless of sex, race, language or religion. This did not only apply to his own countrymen; he also turned his eyes outward and was a shining light world-wide for charity and philanthropy, assisting poorer countries around the world.

Zayed was determined to unite the Emirates into a federation and called for cooperation around the Gulf to do so, advocating dialogue as a means to settle disputes. As the principal driving force behind the formation of the United Arab Emirates, Sheikh Zayed ruled as Emir of Abu Dhabi for 38 years and was the UAE's first President, a post which he held for nearly 33 years until his death.

'Zayed the Great'

The Sheikh stems from a family of rulers — his father HH Sheikh Sultan bin Zayed bin Khalifa Al Nahyan was the ruler of Abu Dhabi from 1922 until 1926. His mother counselled her four sons — of which Sheikh Zayed is the youngest — against the use of violence. Sheikh Zayed was named after his grandfather, HH Sheikh Zayed bin Khalifa Al Nahyan ('Zayed the Great'), who ruled the Emirate from 1855 to 1909.

In his youth in Al Ain, there were no modern schools along the coast, and Sheikh Zayed was only educated in the basic principles of Islam, living in the desert with Bedouin tribesmen. He learned how to survive in the harsh climate and picked up their traditional skills.

When Sheikh Zayed was born, Abu Dhabi was one of seven Trucial States along the lower coast of the Gulf. Despite various regional difficulties, Zayed's statesmanship led to peace and stability in the region. He also took particular interest in the restoration of the *falaj* system, a traditional network of water channels which kept the plantations of the Buraimi Oasis irrigated and fertile.

Oil was discovered in the area in 1958 and exports started in 1962. The Sheikh took over rule in 1966 after a bloodless coup and hired a Japanese architect to design and plan Abu Dhabi.

In a seminal meeting on February 18, 1968, Sheikh Zayed shook hands with HH Sheikh Rashid bin Saeed Al Maktoum of Dubai on the idea of founding a federation and attempting to invite other trucial rulers to join together and create a viable nation following the British withdrawal.

The United Arab Emirates were formed in 1971, following negotiations with the six rulers of the other Trucial States, and Zayed was appointed to the Presidency the same year.

Zayed oversaw the establishment of the Abu Dhabi Fund for Arab Economic Development, which also channeled some of the country's large oil income to around 40 less fortunate Islamic nations in Africa and Asia in the following decades.

The Sheikh did not forget his own countrymen. He used the vast oil revenues to bring up the standard of living of the UAE, building hospitals, schools and universities, which offered free access to UAE citizens. Land was also often granted for free.

"It is our deep conviction that Allah has created free people, and has prescribed that each individual must enjoy freedom of choice. No one should act as if they own others," stated Sheikh Zayed in a 1997 interview. "Those in the position of leadership should deal with their subjects with compassion and understanding, because this is the duty enjoined upon them by Allah, who enjoins upon us to treat all living creatures with dignity."

This embracing of the essential principle of freedom led the Sheikh to open his *majlis* (consultation council) to the public, allow non-Muslim religious buildings and support women's access to education and labour rights.

Sheikh Zayed Mosque

The great leader, loved and respected by his people, died at the age of 86 and was buried in the courtyard of the new Sheikh Zayed Mosque in Abu Dhabi. His name, however, lives on not only in the ongoing success of the country he formed, but in memory and in name around the world, where airports, mosques, streets, theatres, universities, schools, dams, hospitals, towns and cities are named in his honour, as well as several prizes.

The 'Year of Zayed' features a series of events and initiatives both in the UAE and around the world designed to commemorate the memory of Sheikh Zayed, showcase his legacy, and ensure that his values of tolerance, peace and progress continue to be upheld among future generations.


Shutterstock

The world's tallest building, the Burj Khalifa in Dubai, UAE, was re-named after Sheikh Khalifa.

Carrying on the family legacy

***HH Sheikh Khalifa bin Zayed bin Sultan Al Nahyan** (pictured right) — the eldest son of Founding Father HH Sheikh Zayed bin Sultan Al Nahyan — is the current ruler of the United Arab Emirates, the Emir of Abu Dhabi and the Supreme Commander of the Union Defence Force.*

Sheikh Khalifa officially took over the reins of the country from his father's able hands in 2004, though he had been involved in managing the affairs of Abu Dhabi, since his father became ruler of the Emirate in 1966. At that time the young Sheikh Khalifa — only 18 at the time — became his father's representative in the Eastern Province and the President of its legal system.

This was the beginning of a long career in public service, during which Sheikh Khalifa held a number of major posts. He oversaw the implementation of all major projects at both the local and federal levels. His successes led him to be nominated as Crown Prince of Abu Dhabi in 1969, and head of the Department of Defence in Abu Dhabi.

Other accolades to be added to his list of achievements include Ruler of Abu Dhabi and Minister of Defence and Finance in 1971, Deputy Prime Minister in the second Cabinet in 1973 and Chairman of the Abu Dhabi Executive Council in 1974, which saw the modernization of Abu Dhabi through extensive infrastructure development programmes. In 1976, he was in charge of establishing the Abu Dhabi Investment Authority, to manage the Emirates financial investments and ensure a stable income. In the same year he was nominated Deputy Supreme Commander of the UAE Armed Forces. Sheikh Khalifa held several other top posts in the Abu Dhabi government.

As ruler of the UAE, Sheikh Khalifa has ensured that the country pursue an active foreign policy and he is a strong supporter of the Gulf Cooperation Council. He continued in his father's footsteps in providing assistance to those in need internationally, helping people in over 70 countries around the world. In addition to his regular duties, he is chairman of the Abu Dhabi Investment Authority, managing $875 billion in assets, the greatest amount managed by a head of state in the world.

His key objective as President of the UAE was to continue on the path put forth by his father, whose legacy he states, "will continue to be the beacon guiding us into the future, a prosperous future where security and stability will reign."

Born in Al Ain, Sheikh Khalifa was able to benefit from a good education at the city's first school, built by his father, who was a powerful influence in his life. Accompanying his father in his difficult task to improve tribal lives in the area and establish state authority, he accordingly was instilled with his father's principle values of responsibility, trust, justice and rights.

Through his education with the public *majlis*, he was able to learn about various tribes, helping him to understand their aspirations.

Sheikh Khalifa declared 2018 the 'Year of Zayed' to mark the 100th anniversary of this father, the Founding President of the United Arab Emirates.

In honour of Sheikh Khalifa, the world's tallest man-made structure was renamed after him in 2010.

Reuters

Focusing on the leaders of tomorrow

*The youth have been placed it the spotlight in the United Arab Emirates, with the country devoting enormous energy and investment in its young people and making them a top priority, a brainchild of **HH Sheikh Mohammed bin Zayed bin Sultan Al Nahyan**.*

In keeping with the UAE's efforts to promote the country's youth, the following group accompanied Suhail Mohamed Al Mazrouei, President of the OPEC Conference, and the UAE's Minister of Energy and Industry, to the 7th OPEC Seminar and the 174th OPEC Conference in Vienna: (seated) Eng Ahmed Mohamed Alkaabi (c), UAE Governor for OPEC; Hamad Ali Mohammed AlKaabi (l), UAE Ambassador to Austria; Abdulla Salem Al Dhaheri (r), Director, Marketing, Sales & Trading Directorate, ADNOC; (standing, l–r): Paul Taylor, ADNOC; Hanan Balalaa, Mubadala; Salem Hareb Al Mehairi, UAE's National Representative to OPEC; and Zaida Abdulla, ADNOC.

In a government website, called 'Government of the Future' one can see just how seriously this ambition is taken. Information is provided on initiatives to preserve the national identity of the UAE such as the Youth Empowerment Strategy, Best Youth Initiative for Community Development Award and more.

"The UAE Government attaches great importance to the role of the youth and their empowerment in order to enable them to shoulder responsibilities, innovate and contribute to the welfare of the UAE's community," according to the website. "Achievement of Vision 2021 requires the skills, energy, enthusiasm and commitment of the country's young people. To emphasize this, the UAE made several steps to ensure that the voice of the youth is heard and their views are shared."

The UAE seeks to promote the values of a tolerant and moderate society, along with a sense of patriotism and devotion to country among its youth. To this end, HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai in 2016 called on UAE universities to nominate three young men and three young women near or at completion of their studies for the post of Minister of State for Youth Affairs.

As a result, 22-year old Shamma bint Sohail Faris Al Mazrui was appointed as the Minister of State for Youth Affairs in a newly restructured Cabinet. The new government, which was restructured in February 2016, includes eight new ministers, five of which are women. The average age of the new ministers fell significantly, with the youngest being 22-year-old Al Mazrui. The youngest member of Federal National Council of 2015 became 33-year old Saeed Saleh Mezar Saeed Al Rumaithi from Abu Dhabi.

In addition to these moves, Sheikh Mohammed established an Emirates Youth Council in order to showcase youth ideas, aspirations and solutions to the government, with Al Mazrui as its head. The Council is further responsible for starting a youth strategy to keep pace with the government's direction and plans. Seven Local Youth Councils were also established in each of the seven Emirates. There are also ministerial youth councils, corporate youth councils and global youth councils.

The UAE government approved the formation of the Federal Youth Authority in April 2018, which will coordinate local youth councils across the country and ensure that their objectives, plans and activities are in line with the UAE's youth empowerment agenda. This includes the establishment and management of youth centres and clubs; events and workshops; a youth council database and programme proposals.

Also in 2016, the Emirates Foundation launched a nationwide 'Youth development and wellbeing index survey' to help the country design policies and investments which will improve opportunities for the young. This will gauge the extent to which youth in the UAE are engaged with achieving their fullest potential, as well as contributing to their Emirate and their country.

The same year, Sheikh Mohammed launched the Mohammed bin Rashid Global Centre for Endowment Consultancy to fulfill the social needs of people and serve humanity.

For years, the UAE has been making strong efforts to provide educational opportunities to its young people, including scholarships to study both at home and abroad at higher educational institutions. Other programmes include support for young entrepreneurs and career support programmes and awards.

All of these efforts have led to the UAE being a first choice to live in for Arab youth in the region. In fact, the 'Arab Youth Survey 2017' found that one in three young Arabs would like to live in the UAE, a huge increase over 2016, making the UAE more than twice as popular as the US.

Big plans for the future: Vision 2021

HH Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai.

The transformative power of the UAE — reflected in its quick rise from a poor desert economy to a booming economic powerhouse — leaves no doubt that the government and its people will be able to achieve the goals of its far-reaching UAE Vision 2021.

The vision was launched by HH Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, laying out a clear path to reach the country's national priorities.

Decided at the closing of a Cabinet meeting in 2010, the Vision has mapped out six national priorities,

Suhail Mohamed Al Mazrouei, President of the OPEC Conference, and the UAE's Minister of Energy and Industry, is strongly behind the UAE Energy Strategy 2050.

representing the key focus sectors of government action in the coming years.

Included in this are world-class health care; competitive knowledge economy; safe public and fair judiciary; cohesive society and preserved identity; first-rate education system; sustainable environment and infrastructure with a competitive-knowledge economy as the bedrock for the six priorities.

The Vision is driven by the idea that: "The global economy will witness significant economic changes in the coming years and the UAE Vision 2021 National Agenda aims for the UAE to be at its heart."

The UAE, as a result of the Vision, is focused on becoming an economic, tourism and commercial capital by transitioning to a knowledge-based economy, promoting innovation and research and development, strengthening regulatory frameworks for key sectors and encouraging high value-added sectors. These efforts will have the knock-on effect of improving the country's business environment and attracting foreign investment.

Technology is an integral part of this development agenda and its vision for the transformation of the country. To this end the UAE aims to be among the best in the world in entrepreneurship, instilling this culture in schools and universities to encourage leadership, creativity, responsibility and ambition.

Nearly one per cent of the country's GDP is dedicated to research and development in the public, academic and private sector.

Energy Strategy 2050

The UAE's Energy Strategy 2050 — considered to be the first unified energy strategy in the country — is essential to achieving the Vision and transitioning of the country into a regional powerhouse. It aims to increase the contribution of clean energy in the total energy mix from 25 per cent to 50 per cent by 2050 and reduce the carbon footprint of power generation by 70 per cent.

The strategy targets an energy mix combining renewable, nuclear and clean energy sources to meet the UAE's economic requirements, and plans to invest AED 600 billion by 2050 to meet growing energy demand and ensure sustainable growth for the country's economy.

Suhail Mohamed Al Mazrouei, President of the OPEC Conference, and the UAE's Minister of Energy and Industry.

President of the OPEC Conference discusses international cooperation

The convening of the OPEC and non-OPEC Joint Technical Committee (JTC) and Joint Ministerial Monitoring Committee (JMMC) meetings in Abu Dhabi on November 10 and 11 offers an opportunity to reflect on a year when the United Arab Emirates (UAE) has held the Presidency of the OPEC Conference. This body, which consists of 15 Ministers and Heads of Delegation representing each OPEC Member Country, is responsible for determining the general policy of the Organization and running of its affairs.

In his capacity as President of the OPEC Conference, Suhail Mohamed Al Mazrouei, UAE's Minister of Energy and Industry, has played a pivotal role in the ongoing 'Declaration of Cooperation' process. Al Mazrouei personifies the best features of the OPEC and non-OPEC partnership, namely, a strong belief in team work, respect among nations and a commitment to achieve results. During his Presidency, the Minister has showcased extraordinary abilities and skills, particularly in regard to shuttle diplomacy, in addition to his extensive technical skills, continuing the legacy of his accomplished predecessors Dr Mohammed Bin Saleh Al-Sada, Qatar's Minister of Energy and Industry and President of the OPEC Conference in 2016, and Eng Khalid A Al-Falih, Saudi Arabia's Minister of Energy, Industry and Mineral Resources and President of the OPEC Conference in 2017.

The *OPEC Bulletin's Ayman Almusallam* interviews Al Mazrouei, who reflected on his term as President of OPEC's top authority and organ.

Question: The oil industry is in a very different place compared to where it was when you assumed the position of President at the start of the year. What are your personal reflections on this journey?

Yes, the determined efforts of many nations and individuals under the 'Declaration of Cooperation' have certainly helped to bring greater balance to the oil market over the past year. One important personal reflection is that this is not a journey that any single country or organization could have travelled alone. It has required the collective will and resolve of many nations and of many individuals. Alignment and collaboration were key to our success.

As President of the Conference, I heard a rich variety of expert views and opinions during the year, and, in particular, I would like to highlight the excellent work of the OPEC Secretariat, the Joint Technical Committee (JTC) and the Joint Ministerial Monitoring Committee (JMMC) in providing regular, high-quality market reports. Having a credible and transparent reporting mechanism has been extremely important.

As we have seen historically, and of late, there are many factors that influence the oil price — some of which are within our direct control, and others which are not. It is clear to me that although we have made good progress in the past year, it is important that we secure a longer-term agreement for continued future engagement.

One of the major highlights of 2018 was the '7th OPEC International Seminar'. Why was this event so important and how would you regard its legacy?

The 7th OPEC International Seminar brought together an unprecedented number of senior industry policy makers, leaders and practitioners, and enabled important discussions about our industry's future. The timing of the Seminar coincided with the return of more positive sentiment to our industry. For me, it marked a pivotal moment where there was, once more, recognition of the important role of hydrocarbons, both now and for many years to come, in delivering energy security.

I was also proud to see so many young, future industry leaders at the Seminar. I am confident that our industry has many exciting decades ahead of it, and it is essential that we attract and retain the smartest young minds who can drive greater safety and efficiency, lower the environmental footprint and extract greater value from our operations.

The historic 'Declaration of Cooperation' formed a tremendous part of your term as President. What are your thoughts on this cooperation and its benefits to the international oil market?

The 'Declaration of Cooperation' has returned balance and brought greater stability to the oil market, which is in the interests of all producers and consumers. Throughout the year, as the market started to become more balanced, our attention turned to ensuring that the stability is sustainable, and that the necessary investments are made to meet future demand needs.

For me, this is a very important issue and one that has been central to many of the addresses that I have made throughout the year. We need to see the return of more long-cycle investment; there have been more than a trillion dollars of capex cuts in recent years and, as we have learned from previous market cycles, such pronounced investment declines are a serious threat to future supply. I am pleased to see that some significant new investments have been announced, but I believe this is an area that needs continued focus and attention.

During 2018, the JMMC has been held in Muscat, Oman; Jeddah, Saudi Arabia; Algiers, Algeria and now in Abu Dhabi, the UAE. Last year, meetings were held in Kuwait City, Kuwait and St Petersburg, the Russian Federation. What have been the advantages of rotating the location in this manner?

One of the most important factors behind our success in the past two years is the close working relationships and rapport that OPEC and non-OPEC members have built. When discussions are, at times, difficult, this really helps.

The rotation of the JMMC meetings also ensures a positive meeting dynamic and offered excellent opportunities to learn more about the host nation and meet and engage with our colleagues from that country.

Suhail Mohamed Al Mazrouei, President of the OPEC Conference, and the UAE's Minister of Energy and Industry.

Since you became Minister of Energy and Industry in April 2013, you have played a key role in developing the petroleum industry in the United Arab Emirates. What is your reflection on this progress?

The UAE has, for many years, been a responsible and reliable producer of crude oil and refined products and a key player in the global energy industry. We recognise that all energy sources will be needed to meet the world's future energy needs and have a bold and comprehensive strategy to grow and diversify our energy resources, through nuclear and renewable energy, as well as a continued focus on hydrocarbons.

Much of the significant progress we have made was delivered in partnership with others. Abu Dhabi National Oil Company (ADNOC), for example, has almost 50 years' experience working with local and international entities. This, in my opinion, is a unique strength and competitive advantage of the UAE. We are forming similar partnerships in other sectors and I use this opportunity to encourage potential partners to engage with the UAE energy sector. We've made significant achievements in the past, but I'm confident that our best years are ahead of us.

Are there any key projects being developed at the moment in the petroleum industry of the UAE that you would like to mention?

The UAE has entered a period of unprecedented growth and development in its petroleum industry. ADNOC, by far our largest energy producer, is in the midst of a major transformation. Under the stewardship of Dr Sultan Al Jaber, ADNOC is becoming a more performance-driven and commercially minded company, as it delivers on its 2030 smart growth strategy. As well as increasing its oil production capacity to 3.5 million barrels/day by the end of 2018, ADNOC has embarked on a major expansion of its downstream business. The company will invest in, and significantly expand, its assets, capabilities and product range at Ruwais, transforming it into the world's largest, fully integrated refining and petrochemicals complex — underpinned by a $45 billion investment programme.

Partnership and co-investment continue to sit at the

The Marina Mall in Abu Dhabi, illuminated at dusk.

heart of the ADNOC strategy. In 2018 alone, the company has awarded new offshore concessions to seven international partners, and ADNOC Drilling formed a strategic partnership with Baker Hughes (BHGE), with BHGE acquiring a five per cent stake in the company. It has also launched Abu Dhabi's first competitive exploration bidding round for six geographical blocks across the emirate.

Abu Dhabi is renowned throughout the world as a unique and beautiful city. For first-time visitors to this magnificent city, are there any sites or places you would particularly recommend they see and experience?

Abu Dhabi is a modern and vibrant capital city with lots for visitors to do and see. The Sheikh Zayed Grand Mosque, for example, is a beautiful example of modern Islamic architecture and design and is very popular with both residents and visitors to Abu Dhabi. It accommodates around 50,000 worshippers and is also open to non-Muslim visitors.

Abu Dhabi is also home to a rich array of shops and restaurants, as well as museums, such as the Louvre. There is plenty for visitors to do in their spare time and I can assure you that Abu Dhabi is a very welcoming and hospitable city to visit.

Interior of the Louvre Museum, Abu Dhabi.

Company strategy moves ADNOC into the future

The United Arab Emirates state oil company, Abu Dhabi National Oil Company (ADNOC), is undergoing a significant transformation, which will see it improve value generation across the entire business. This includes adopting more creative strategies and flexible business models, as well as a greater focus on partnerships. Dr Sultan Ahmed Al Jaber, UAE Minister of State and CEO of the ADNOC Group, discusses the company's plans with the OPEC Bulletin.

Question: The energy landscape is evolving rapidly. How is ADNOC responding to the changing market dynamics and what steps are you taking to ensure the company's future growth and resilience?

Answer: There are a number of external factors that we cannot control, chief among them price. Hence we focus on what we can control, namely our costs. As you may be aware, ADNOC is undergoing a significant transformation, in which we have been consolidating operations, optimizing our performance and committing to smart growth. We have significantly reduced our operating expenditures and are maximizing the value of every barrel we produce. We are deploying our capital more efficiently, leveraging debt and the capital markets where it makes sense. We have also evolved our partnership model to attract long-term strategic investors, who share our values and can contribute know-how, technology and market access. Ultimately we are dedicated to generating much more value across the entire business by creating an integrated model that balances our upstream capabilities with significant downstream expansion. While we

Aerial view of the Al Yasat platform.

ADNOC

ADNOC

Dr Sultan Ahmed Al Jaber, United Arab Emirates Minister of State and CEO of the ADNOC Group.

are bringing a more commercial mind-set and an agile, performance-led culture to ADNOC, our vision remains the same as it has always been: being a responsible and reliable energy provider dedicated to maximizing the value of Abu Dhabi's hydrocarbon resources, for the benefit of our country and our customers.

ADNOC has announced several new partnership and co-investment agreements in the past 12 months. Please explain ADNOC's approach to partnerships and co-investment opportunities and why you believe this is the way forward.

Shifting global trends are creating an energy landscape where new rules of engagement are required. In this new energy era, we need to adopt more creative strategies and more flexible business models to unlock and maximize value and invest in growth.

At ADNOC we have developed a new and expanded approach to partnerships and created several highly compelling investment opportunities across our entire value chain — from the upstream to the downstream. This more open partnership model will also enable us to more proactively and efficiently manage our asset portfolio and capital structure. Crucially, these new types of partnerships will also help optimize our operational and financial performance at both the ADNOC Group and asset levels and they will help secure access to target markets and new centres of global demand.

A good example of this new approach is the recently announced partnership with Baker Hughes, that will enable and support the growth and development of ADNOC Drilling into a fully integrated drilling and well construction provider and allow it to capitalize on new business opportunities. The partnership with Baker Hughes represents the first time that ADNOC has allowed an international strategic partner to acquire a direct equity stake in one of our existing service businesses. This alternative and tailored approach to value creation aims to capitalize on the key trends in the industry as well as leverage the unique competitive advantages that we possess. These include our flexible and open operating model, our 45 years of successful energy partnering and industry experience, our robust financial strength and stability, and the UAE's investor-friendly environment and reputation.

In May, you announced your new downstream strategy. What are the key points of the strategy?

While ADNOC's upstream will always remain a core component of our business, we intend to become a major

ADNOC's gas processing plant at Bu Hasa.

global downstream player, through an unprecedented domestic investment programme. We will invest significantly in our Ruwais refining and petrochemicals complex and open up attractive partnership and co-investment opportunities to create a powerful new downstream engine and springboard for growth that will benefit our country, our company and our partners. We are focused on increasing the value of what we produce, as well as creating new products and revenue streams with strategic investments in new projects. Plans are well advanced to expand the complex's refining capacity. A new refinery, coupled with other projects underway within the Ruwais complex, will significantly increase the capability, flexibility and output of Abu Dhabi's refining operations by adding to the range of crudes that can be processed, and that in turn enables the export of increased volumes of the UAE's high-value Murban crude.

The $45-billion investment programme will also see the entire Ruwais complex upgraded to dramatically increase its flexibility and integrated capabilities to produce greater volumes of higher-value petrochemicals and derivative products. It includes a plan to build one of the world's largest mixed-feed crackers, as part of our intention to treble petrochemical production capacity from 4.5 million tonnes/yr in 2016 to 14.4m t/yr by 2025. Finally, we are exploring opportunities to secure additional captive crude processing capacity in growth markets, as part of our overseas expansion strategy.

What are ADNOC's plans to invest in its exploration, development and production business?

Of the CAPEX spending planned for the next five years, upstream investment spending will account for nearly two-thirds of the total. However, as our upstream business priorities evolve, so too will our investment options. This flexibility will allow us to respond to long-term trends in the energy market by enabling smart investments that will deliver maximum value from our assets, in line with our 2030 growth strategy. At the same time, we are also taking steps to optimize our operations and strictly manage costs. These greater efficiencies and performance gains have enabled us to reduce the operating cost per barrel from an already industry-leading low level.

Key to our upstream strategy are partnerships that give us access to technology and capabilities, markets and capital, and drive solutions to maximize recovery from our mature reservoirs and to identify and explore untapped oil and gas potential. This year alone we have announced new partnerships with major Chinese, Indian, Italian, Spanish and Austrian energy companies that will further enable us to maximize the value of our upstream resources and assets. Looking ahead, a particular focus will be on developing our giant gas caps, appraising unconventional opportunities, and delivering the Hail, Ghasha and Dalma mega sour gas projects to ensure a sustainable and economic gas supply. We will make

announcements on these and other upstream projects in due course.

ADNOC has said it will increase its oil production capacity to 3.5 million barrels/day by the end of this year. Is this still ADNOC's intention and what impact will it have on the UAE's commitment to the agreement between OPEC and non-OPEC countries to limit oil production?

The production capacity target of 3.5m b/d by the end of 2018 remains and we are on course to achieve it. The UAE is fully committed to comply with all OPEC production mandates and ADNOC will take the necessary measures to support that commitment.

The next Joint Ministerial Monitoring Committee (JMMC) meeting is being held in Abu Dhabi just before the industry convenes at ADIPEC, one of the world's largest oil and gas exhibitions. What can participants at this year's event expect?

ADIPEC is where the global oil and gas industry convenes to engage in dialogue, conduct business and source the creative solutions and strategies that will shape the industry for the years ahead. This year's ADIPEC will be no exception. It will provide a timely opportunity for our industry to discuss and seek solutions to the challenges created by three important trends — the historic shift of energy use, from north to south and west to east, the rapid acceleration in technological innovation and digitalization and the urgent need for the oil and gas industry to evolve and meet the challenges of the 4th industrial revolution.

In particular, ADIPEC will provide a forum to examine how our industry can pave the way for the era of digital transformation, including the adoption of advanced artificial intelligence and predictive data technologies; address the human capital challenges created by an aging non-digital workforce, by embracing and leveraging equality, inclusion and diversity across the industry; and provide ways to create new agile partnership ecosystems, where operators and their counterparts share, innovate and compete together, both operationally and commercially.

The ADNOC headquarters in Abu Dhabi.

UAE titan returns home to OPEC

OPEC staff gathered in the massive Conference room at the Vienna headquarters this past June to share the privilege of hearing United Arab Emirates oil titan and industry legend Dr Mana Saeed Otaiba share his poetry, his humour and his story.

The former Minister of Petroleum and Mineral Resources of the UAE for 20 years — from 1970 to 1990 — took time from his still busy schedule (he is currently a personal Advisor to the President of the UAE His Royal Highness, Khalifa bin Zayed Al Nahyan) to share his good will, his personal story and his reflections on how to progress in international diplomacy with the OPEC family.

During his visit, he stressed the importance of dialogue, as he has throughout his career and his life. "Dialogue is so important in building bridges; we must always talk with each other," he told a rapt audience.

Dr Otaiba has not only served his country with dignity and skill, he has left a long and distinguished legacy at OPEC as well, acting as Secretary General from July 1983 to December 1983, and as President of the OPEC Conference on six occasions between 1971 and 1983.

OPEC Secretary General, Mohammad Sanusi Barkindo, praised Dr Otaiba's outstanding dedication to public service, and his many accomplishments, stating: "There are so many highlights from Dr Mana Saeed Otaiba's career that in order to list them all, I would need hours or days."

Despite the incredible work he has performed over his lifetime, Dr Otaiba still managed to find time for a second career as a poet, filling the Secretariat not only with his wisdom and knowledge of the oil industry, but with words of prose and poetry.

His dynamic career on that front has produced 100 books of poetry in colloquial and formal Arabic and English. Nabati poetry was his specialty, but he also produced novels and non-fiction books with the petroleum industry as a subject. He even used his poetry as a tool in negotiation sessions.

Dr Mana Saeed Otaiba (c), former Minister of Petroleum and Mineral Resources of the UAE, during his visit to the OPEC Secretariat; with Suhail Mohamed Al Mazrouei (r), UAE Minister of Energy and Industry, and President of the OPEC Conference 2018; and Mohammad Sanusi Barkindo (l), OPEC Secretary General.

"I am an Emirati and I have every
right to be proud
And for me to be considered to be local
I deserve every right to be proud
The UAE, The beloved one, that's my
country
If it's been spoken of in front of me, my
feelings rush
And my heart starts beating for the
amount of love I have towards it"

Dr Mana Saeed Otaiba (c), former Minister of Petroleum and Mineral Resources of the UAE, was honoured at the Gala Dinner held for the 7th OPEC International Seminar in May 2018, by Suhail Mohamed Al Mazrouei (l), UAE Minister of Energy & Industry and President of the Conference 2018, and Mohammad Sanusi Barkindo (r), OPEC Secretary General.

Dr Otaiba was honoured once more at a Gala Dinner held for the 7th OPEC International Seminar, and a tribute video and special award were made in recognition of his outstanding contributions to the advancement of the Organization.

His legacy as a role as a conciliator, bridge builder and consensus broker has been carried on by ministers following in his footsteps.

In honour of his OPEC visit, Dr Otaiba wrote a poem:

"Today I've come to meet my old comrades — within whose presence you do revel and rejoice;
And to revive those joyous memories in my heart.
You are mighty and strong, in whose shady and verdant land we have always taken refuge.
Your steadfastness has shielded us from the avaricious;
By controlling the tap of your crude oil, you sufficed us and satisfied our needs."

OPEC Secretariat staff gather for a group photo with Dr Otaiba.

The UAE: An integral part of the OPEC family

For over 50 years, the United Arab Emirates has been a committed Member of OPEC, offering its support, guidance and wisdom. Many outstanding ministers and leaders have enriched this contribution, including Suhail Mohamed Al Mazrouei, the UAE's current Minister of Energy and Industry, who ably holds the position of President of the OPEC Conference for 2018. The OPEC Bulletin *reflects on the country's historical achievements during its membership.*

"No matter how many buildings, foundations, schools, and hospitals we build, or how many bridges we raise, all these are material entities.
The real spirit behind progress is the human spirit, the able man with his intellect and capabilities can protect these foundations and can progress and develop with them."

These touching words by HH Sheikh Zayed bin Sultan bin Zayed Al Nahyan, of blessed memory, the founding father of the nation and President of the United Arab Emirates for 33 years, succinctly summarizes the outstanding ethos of the UAE — national unity and a commitment of its leaders to the wellbeing of the people; an innovative and creative spirit; hard-work, resourcefulness, integrity and dedication to the highest ethical standards. These are the values which Sheikh Zayed himself embodied and which inspire successive generations. His immense contribution to the betterment of his nation and the world are being appropriately commemorated in this 'Year of Zayed'.

These values have been at the forefront of the UAE's glorious contribution to OPEC, since Abu Dhabi as it was then known, joined the Organization in 1967. In the subsequent 51 years, the UAE has earned a stellar reputation as a conciliator, a bridge builder and a consensus broker within the Organization.

There have been two OPEC Secretary Generals from the UAE:

Dr Nadim Pachachi

- *Head of Delegation of Abu Dhabi (United Arab Emirates), 1967–70*
- *Appointed OPEC Secretary General from the UAE, 1971–72*

Dr Mana Saeed Otaiba

- *Minister of Petroleum & Mineral Resources, Head of Delegation, UAE, 1970–90*
- *President of the Conference, July–December 1983*
- *OPEC Secretary General, July 1983–December 1983*

Four OPEC Conferences have been held in Abu Dhabi

1971: 26th OPEC Conference

1978: 52nd OPEC Conference

1981: 62nd OPEC Conference

2007: 146th OPEC Conference — which was a particularly seminal Conference as this was the conference when Ecuador resumed full membership in the Organization.

The nation has also been represented at OPEC by some of the most outstanding diplomats in the Organization's history:

Dr Mana Saeed Otaiba

— *Minister of Petroleum & Mineral Resources, Head of Delegation, UAE, 1970–90*

— *President of the Conference, July–December 1983*

— *A visionary leader, a poet and a tireless and dedicated public servant, who made an immeasurably positive contribution to OPEC*

Abdulla Ismail

— *Head of Delegation of 36th Conference in November 1973*

Yousef Omeir Bin Yousef

— *Minister of Petroleum & Mineral Resources 1990–94*

— *Alternate President of the 90th Conference in 1991*

— *President of the 91st Conference in 1992*

Ahmed Said Al-Badi

— *Acting Minister of Petroleum & Mineral Resources, Minister of Health, 1994–95*

Rakadh Bin Salem Bin Hamed Bin Rakadh

— *Acting Minister of Petroleum & Mineral Resources, 1995–97*

— *President of the Conference in 1996 to the 100th OPEC Conference*

Obaid bin Saif Al-Nasseri

— *Minister of Petroleum & Mineral Resources, 1997–2004*

— *President of the Conference in 1998 for the 104th and 105th OPEC Conferences*

Mohamed Bin Dhaen Al-Hamli

— *Minister of Energy 2004–13*

— *President of the Conference 2007*

— *Alternate President of the Conference during 2006*

— *Ad hoc Governor from 1994-May 1997*

— *Governor for OPEC June 1997 to September 1992*

Suhail Mohamed Al Mazrouei

— *Minister of Energy & Industry, Head of Delegation, November 12, 2013–present*

— *President of the Conference 2018*

— *Alternate President of the Conference 2017*

Dr Mana Saeed Otaiba

Dr Nadim Pachachi

Abdulla Ismail

Yousef Omeir Bin Yousef

Ahmed Said Al-Badi

Rakadh Bin Salem Bin Hamed Bin Rakadh

Obaid bin Saif Al-Nasseri

Mohamed Bin Dhaen Al-Hamli

Suhail Mohamed Al Mazrouei

Al Mazrouei has guided the Organization as President of the Conference in 2018 with immense skill, diplomatic tact and statesmanship. During this time, OPEC and its non-OPEC partners have had the onerous task of implementing their voluntary production adjustments. This has been done with exceptional aplomb. When it was necessary to change course in order to respond to the evolving supply and demand balance dynamic, under Al Mazrouei's leadership, participating countries at 174th OPEC Conference and 4th OPEC and non-OPEC Ministerial meeting, opted to take the necessary action.

Al Mazrouei also launched the 7th OPEC International Seminar on June 20, 2018, a record-breaking event which saw the oil industry leaders from across the world deliberate on the key issues facing the industry.

Throughout all these mammoth undertakings, the Minister has conducted himself with the greatest dignity, utmost adroitness and courage, earning plaudits from the international community.

HH Sheikh Khalifa bin Zayed bin Sultan Al Nahyan

The country has also benefitted from the noble leadership of HH Khalifa bin Zayed bin Sultan Al Nahyan, President of the United Arab Emirates and Emir of Abu Dhabi. He has been a tremendous champion of OPEC and ensured that the judicious governance of the nation's petroleum resources have been a cornerstone of the nation's success.

HH Sheikh Mohammed bin Zayed bin Sultan Al Nahyan

Additionally, the leadership of Crown Prince HH Sheikh Mohammed bin Zayed bin Sultan Al Nahyan and the guidance provided by UAE Vision 2021 continues to ensure that the UAE thrives economically and takes its place as a leader in the international community, harnessing the innovative spirit of its people, especially its youth.

HH Sheikh Mohammed bin Rashid Al Maktoum

HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister, and Ruler of the Emirate of Dubai, has also played a pivotal role in the country's tremendous accomplishments.

HH Sheikh Khalifa bin Zayed bin Sultan Al Nahyan

HH Sheikh Mohammed bin Zayed bin Sultan Al Nahyan

The UAE's Energy Strategy 2050 is another indication of the foresight, innovative vision and tenacity of the nation's leaders. The importance of technology as a means of combatting the challenge posed by emissions is an important component of this plan.

Sultan Ahmed Al Jaber

Sultan Ahmed Al Jaber, Minister of State and CEO of ADNOC has led the national oil company to become one of the most reputable companies in the world, staffed by dynamic men and women, which make an indelibly positive contribution to the social and economic wellbeing of the country.

With such stellar national leaders, it is unsurprising that the UAE has been a driving force behind the success of the 'Declaration of Cooperation' and an integral part of the OPEC family. Sheikh Zayed's words inspire all of us when he said:

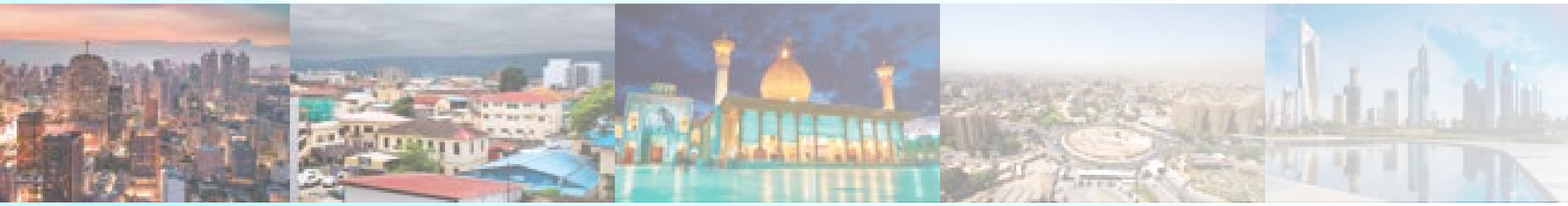
> *Wealth is not money. Wealth lies in men. This is where true power lies, the power we value. This is what has convinced us to direct all our resources to building the individual, and to using the wealth which God has provided us in the service of the nation.*

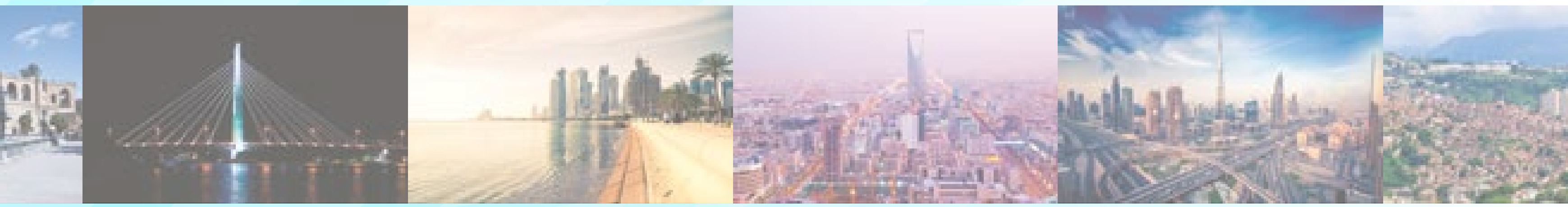
HH Sheikh Mohammed bin Rashid Al Maktoum

Sultan Ahmed Al Jaber

OPEC CITIES IN FOCUS

Traditional and modern architecture in Abu Dhabi.





In the April 2017 edition of the *OPEC Bulletin*, we introduced a new series — **OPEC Cities In Focus** — which would endeavour to provide an overview of the major cities in OPEC's Member Countries and highlight their many attributes.

Though each OPEC Member Country has played a prominent role in the oil and gas sector over the years, and has maintained a steadfast commitment to the Organization's broader objectives in regards to market stability, they all have much more to offer than just energy resources. Through this series, we hope to spotlight the history and development of their principal cities.

Our motivation is to highlight some of the other features of our Member Countries apart from oil and gas. And our desire is to offer readers a window into the rich urban life in our Member Countries and their cultural diversity.

Abu Dhabi

icon of prosperity and advancement

Since its early days, the Emirati capital of Abu Dhabi has embarked on a journey to flourish and develop. This journey has been backed by the abundance of natural resources possessed by the city, as well as the distinguished and able leadership that has drawn the path to prosperity.

In the 12th instalment of 'OPEC Cities in Focus', the OPEC Bulletin's *Ayman Almusallam profiles the United Arab Emirates (UAE)'s precious jewel — Abu Dhabi.*

View of the Louvre across water, showing the 'Rain of Light' dome.

Unification of the Seven Emirates

The history of the United Arab Emirates — and of its charming capital of Abu Dhabi — dates to around 3000 BCE. According to artefacts and other archaeological findings, at least two ancient civilizations flourished in the region during the Bronze Age: the Um Al-Nar and the Hafit civilizations. The latter civilization inhabited the area surrounding the mountain of Hafeet, UAE's second-tallest mountain.

Over the centuries, various other civilizations rose and fell in the region, eventually coalescing into seven Emirates, each ruled by an Emir.

In 1971, six of the seven Emirates agreed to form a union to be known as the United Arab Emirates. This occurred under the leadership of His Highness Sheikh Zayed bin Sultan Al Nahyan, the Founder, first President and Ruler of Abu Dhabi. The seventh Emirate — Ras Al-Khaimah — joined the union the following year, on February 10, 1972.

Today, Abu Dhabi serves as the capital of the UAE. It is both the seat of government and home to the country's President, HH Sheikh Khalifa Bin Zayed Al Nahyan.

On August 6, 2018, to mark the 100th birthday of the country's Founder, the President declared 2018 as the 'Year of Zayed'. This was a respectful way to acknowledge the Founder's achievements and extraordinary vision. Interestingly, that day also coincided with the anniversary of 'Accession Day', which marks the day in 1966 when HH Sheikh Zayed bin Sultan Al Nahyan became Ruler of the Emirate of Abu Dhabi.

HH Sheikh Zayed bin Sultan Al Nahyan.

Wooden boats at the heritage village in front of the Abu Dhabi skyline.

Sheikh Zayed Bridge, a wave bridge highway in Abu Dhabi.

Geography and climate

Overlooking the Gulf, the exquisite city of Abu Dhabi is split: part is located on an island, and part on the UAE mainland. These two sections are joined through a number of bridges, one of which was designed by the late Iraqi architect Zaha Hadid. It is known as Sheikh Zayed Bridge, and opened in 2010.

Abu Dhabi is located in the south-eastern area of the Arabian Peninsula, and is believed to be home to the world's largest population of Indo-Pacific humpbacked dolphins.

The climate in Abu Dhabi is regular and typical of hot desert regions. In general, sunny weather and clear skies are expected throughout the year.

The summer months — June, July, August and September — tend to be very hot and humid. Sandstorms occur occasionally during this season, and can notably reduce visibility to a few meters. From November to March, the climate tends to be cooler than the rest of the year, periodically pervaded by dense fog.

Why Abu Dhabi?

In Arabic, the official language of the United Arab Emirates, *Dhabi* is the word used to refer to a particular type of gazelle. In the past, these gazelles were commonly found in the UAE in general, and in Abu Dhabi, in particular.

The name of the Emirati capital — Abu Dhabi — means the father of the gazelle.

Economy and social progress

A wealth of primary and essential resources has provided Abu Dhabi with a solid foundation for a prosperous economy. The hydrocarbons sector, in particular, has played a pivotal role in strengthening the city's economy.

Abu Dhabi is home to the UAE's oil and gas giant, ADNOC, which is in charge of exploring, extracting, refining, marketing and distributing UAE's national treasure of hydrocarbons.

For many decades, the trading of pearls was considered to be one of the key professions in the region. It is believed that the Gulf area possessed some of the world's top oyster reefs. The old profession began to decline in prominence as artificial pearl farming started to emerge.

In March 2017, the Government of Abu Dhabi announced an ambitious plan, known as 'Abu Dhabi Economic Vision 2030', which is set to further propel the socio-economic progress of the capital. The comprehensive, transformative strategy is projected to achieve

A fishing and pearl diving dhow used by locals in Abu Dhabi.

various goals and objectives, including the development of an integrated, efficient, effective business environment, the establishment of robust financial and monetary markets, and the construction of solid and adequate infrastructure to support economic growth projections.

Among the strongest industries in the Emirati capital of Abu Dhabi are tourism, real estate, energy and trade.

Oil: industry for posterity

As the pearl trade declined in the 1930s, the able leaders of the UAE began to shift its focus to more sustainable sources of income, particularly oil. In 1936, the firm Petroleum Development was granted concessions to explore, and the search for oil in the region began. Its contract was further extended in 1939.

However, onshore exploration attempts faced various difficulties, particularly due to the nature of the land. A few years later, namely in 1953, oil majors British

View of Abu Dhabi's skyline with the Aldar headquarters building (inset), the first circular building in the Middle East.

Petroleum (BP) and Total SA founded Abu Dhabi Marine Areas (ADMA), a joint venture with the aim to explore offshore fields. Soon, two key oil fields, Umm Shaif and Murban, were discovered.

This marked the beginning of a new chapter in the history and economy of the UAE, in general, and Abu Dhabi, in particular. These discoveries were quickly followed by more, including the Bu Hasa field in 1962 and the Zakum offshore field in 1965.

In 1967, Abu Dhabi joined OPEC. Its membership was soon transferred to the United Arab Emirates, following the unification of the seven Emirates. Ever since, the UAE has actively contributed to the successful management of the Organization's affairs and has been a valuable Member and influential leader within OPEC. This year, the UAE has held the Presidency of the OPEC Conference, providing the Organization with a wealth of wisdom and diplomacy, in addition to an extensive set of technical abilities.

Today, the oil industry in the UAE is recognized as a worldwide leader. Shah, Asab and Sahil are a few examples of productive onshore fields, while Al-Bunduq and Abu Al-Bukhoosh produce oil offshore.

Key attractions

Since its early days, Abu Dhabi has witnessed the erection of various landmarks and hotspots. Over the years, these have served as a testament to the development and prosperity achieved by the city.

Below are two remarkable key attractions that Abu Dhabi has to offer to its local, as well as international, visitors.

Sheikh Zayed Grand Mosque

Located in the modern city of Abu Dhabi, Sheikh Zayed Grand Mosque is the country's largest mosque and its key site for daily prayers, Friday gatherings and Eid prayers.

Sheikh Zayed Grand Mosque in Abu Dhabi, is the country's largest mosque.

The Yas Hotel Abu Dhabi on Yas Island. Yas Island holds the Yas Marina Circuit, which has hosted the Formula One Abu Dhabi Grand Prix.

Construction of the grand mosque began in 1996, and lasted for around nine years. The megaproject was launched by the late Founder and President of the United Arab Emirates, HH Sheikh Zayed bin Sultan Al Nahyan, who envisioned it becoming a key landmark symbolising the rich diversity and culture of Islam, while embracing the elegance and modernity of contemporary architecture and art.

The design was inspired by a blend of influences. Various natural materials were used for construction, due to their long-lasting qualities, including marble, gold and ceramics, which endowed the mosque with a special presence. Additionally, the mosque was decorated with splendid Arabic and Islamic calligraphy.

Construction work was completed in 2007, during the reign of the current President of the UAE and Ruler of Abu Dhabi, HH Sheikh Khalifa Bin Zayed Al Nahyan.

The mosque, which is spread over a land area of around 12 hectares, can accommodate around 50,000 visitors during busy seasons. It also hosts a library, which provides the local community with a wide range of books and journals addressing various topics, including calligraphy, art, science, history and civilization. Additionally, it is home to the final resting place of HH Sheikh Zayed bin Sultan Al Nahyan.

Masdar City

Masdar City is a planned project developed by a subsidiary of Mubadala Development Company, called Masdar Company. The city, which is located in the south-eastern part of Abu Dhabi, is entirely dependent on renewable energy, solar energy in particular, demonstrating the UAE's long-term commitment to sustainable energy and strategic development.

The ground-breaking initiative was launched in 2006, and construction work began two years later with the aim to build the most ecological and sustainable city worldwide. Its first tenant was the Masdar Institute of Science and Technology, which has been based in Masdar City since 2010.

A leading example in its field, the city has signified the smart investment and forward-thinking mind-set of Emirati leaders, which eventually led to a decrease in the use of energy and water, and the production of waste. It also accommodates the increasing demands of modern urbanization. Since its foundation, Masdar City has continued to add schools, houses and restaurants to its resilient blueprint, in addition to attracting local and international investors and business leaders.

The city is also the home to the International Renewable Energy Agency (IRENA).

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The corniche boulevard along the coastline in Abu Dhabi.

The streets of Masdar City, projected to be first city in the world to be totally sustainable.

The splendors of Al Ain — preserving UAE's ancient culture

The United Arab Emirates has a rich history and cultural heritage dating back to Neolithic times. Its strategic location also made it a vital crossroads between Oman, the Arabian Peninsula, the Gulf and Mesopotamia. The OPEC Bulletin's ***Scott Laury*** *files this special report on the magnificent cultural sites of Al Ain, which form the centerpiece of the country's glorious past.*

Located one-and-a-half hours' drive from the United Arab Emirate's capital city of Abu Dhabi, the Al Ain cultural sites are considered to be some of the world's oldest permanently inhabited settlements and together are recognized as a World Heritage site by the the United Nations Educational, Scientific and Cultural Organization (UNESCO).

The site, which was placed on the World Heritage register in 2011, is comprised of six oases in Ain and the archaeological sites of Bida bint Saud, Hafeet and Hili.

It provides a unique look at the transition of cultures in the desert region from primarily hunting and gathering societies to sedentary human settlements dating back to the Neolithic period, during which a variety of prehistoric cultures thrived.

Lush oases and irrigation

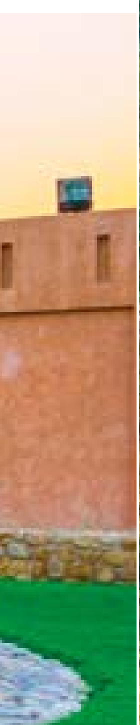
Translated as 'the spring', Al Ain was once a vital green oasis dotted with palm trees and located right along the caravan route from the UAE to Oman.

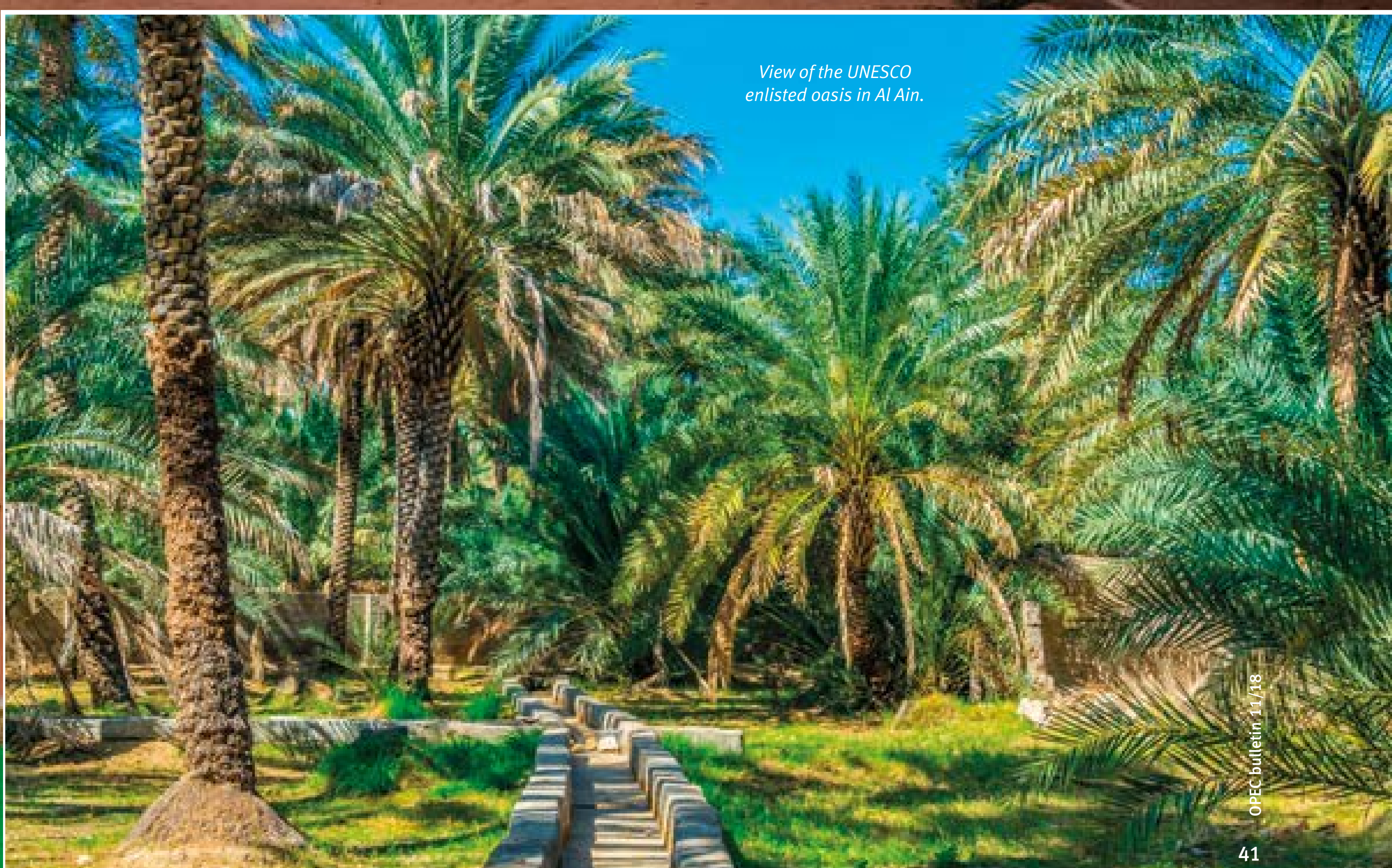
The historic oasis covers a vast 3,000 acres of territory and testifies to the strength and determination of the region's inhabitants, who began settling in the desert 4,000 years ago.

The site features an educational Eco-Centre with interactive exhibitions that help bring to life the measures being taken to preserve the delicate oasis ecosystem while also highlighting the massive contributions made by Al Ain's oasis farmers and their traditional methodologies.

The majestic Al Jahili Fort in Al Ain.

Courtyard of the Sheikh Zayed Palace Museum in Al Ain.





View of the UNESCO enlisted oasis in Al Ain.

Famous road to Jebel Hafeet mountain in Al Ain.

An extensive trail system shaded by date palms allows visitors to enjoy the 100 different varieties of vegetation and many working plantations scattered around the property.

Visitors can also learn about unique and innovative irrigation systems based both on wells and the more traditional *'falaj'* system of irrigation found in the UAE. The exhibit displays several examples of the unique falaj technique, which has been employed by locals for thousands of years as an effective means to access underground water reserves.

Just to the west of Gharn bint Saud, an ancient falaj, estimated to be 3,000 years old, was discovered, a clear indication of the impressive skill and ingenuity of the local population in tapping into precious water resources.

This falaj, as well as others in Hili and elsewhere in the UAE and Oman, are the earliest documented sites in the world using this type of irrigation technology. These sites played an essential role in the development of the eastern region of Abu Dhabi.

Archaeological wonders

A big part of the UNESCO site is devoted to the archaeology of the ancient cultures that lived in this desert habitat all the way back to Neolithic times.

The Bida bint Saud site houses a variety of stone tombs that were discovered and unearthed at the top of the Gharn bint Saud mountain, which is located to the north of Al Ain.

Although some of the tombs may date as far back as 5,000 years ago, many of them were actually re-used during the Iron and Bronze Ages. The largest tomb measures eight metres long and six metres wide.

The 5,000-year-old Jebel Hafeet tombs mark the beginning of the Bronze Age in the UAE. These single-chamber tombs were built using roughly cut local stones, quite the contrary to the later Umm an-Nar tombs that housed hundreds of deceased and were constructed using finely honed blocks.

In 1959, Danish archaeologists dug up evidence of ceramic vessels and copper artefacts at the site, which

The Jebel Hafeet tombs are 5,000-year-old beehive tombs composed of stacked natural and edged stones. The site is located near the Omani border on the east side of Al Ain in the UAE.

provided clues as to the central role played by maritime trade across the Gulf at that time.

Hili Archaeological Park

The Hili Archaeological Park features monuments and tombs, mainly from the Umm an-Nar period dating from approximately 2500 BCE to 2000 BCE.

Its centrepiece is the Hili Grand Tomb, dating to about 2000 BCE. Circular in form and measuring four meters high with a diameter of up to 12 metres, the tomb was used for the burial of people from the surrounding settlements.

The two entrances to the tomb feature decorative engraved reliefs portraying human and animal figures.

The site also boasts several Bronze Age forts and settlements within and just outside the Hili Archaeological Park. The Hili 8 settlement shows the earliest evidence of agricultural production in the UAE from nearly 5,000 years ago. Artefacts from these sites can also be seen at the Al Ain National Museum.

View of an ancient monument excavated in the UNESCO listed Hili Archaeological Park in Al Ain.

The Hili Archaeological Park houses the largest Bronze Age complex in the UAE, dating from the 3rd millennium BC.

An ancient monument in the UNESCO listed Hili Archaeological Park.

Al Ain National Museum

Located next to the Eastern Fort in Al Ain, the National Museum holds a vast collection of relics and other findings from the Stone Age until the early days of the United Arab Emirates.

During the 1950s, in the course of oil exploration and production activities, archaeological discoveries were made in Abu Dhabi and on the Island of Umm Al Nar. Subsequent findings were also made in nearby Jebel Hafeet, Hili and Bida bint Saud.

The late HH Sheikh Zayed bin Sultan Al Nahyan, then ruler of the Eastern Region, was determined to preserve these precious items and ordered the establishment of a museum to house them.

When the United Arab Emirates was founded in 1971, Al Ain was chosen to host the museum, as well as the Department of Antiquities and Tourism.

The museum consists of two main exhibits, encompassing an ethnographic section and an archaeological section.

The section covering ethnography provides an overview of the daily lives of the region's inhabitants during the pre-oil era. Among the impressive collection are old versions of the Holy Quran and ancient manuscripts, as well as typical examples of women's clothing and cosmetics worn during that time.

The archaeological content of the exhibit covers antiquities dated in chronological order from the Stone Age to the Bronze Age (the third and second millennium BC), over the Hellenistic era, and finally concluding with the Islamic Age.

On display are relics from inhabitants' daily lives, such as stone tools, ironware, bronze ware, as well as pottery and arrow heads. Modern developments and the cultural transition following the discovery of oil are also chronicled, including the socioeconomic impacts of these major changes.

The museum also hosts a gift gallery that displays a collection of Arabic and Islamic works of art that have been offered to the museum by neighboring countries. The gallery includes metal objects, pottery,

Cannon in front of the Sheikh Zayed Palace Museum.

The Sheikh Zayed Palace Museum.

The Sheikh Zayed Desert Learning Centre located at the Al Ain Zoo. It is the first building in the UAE that received a LEED Platinum certification.

porcelain and glassware dating back to the Ayubi and Mamluk eras.

Additionally, the collection includes special gifts that were presented to the late HH Sheikh Zayed bin Sultan Al Nahyan by presidents and kings, which he then donated to the museum. These include golden swords, silver daggers, a golden-hued ship, guns and other precious objects.

Finally, the museum hosts an oil gallery that provides a photographic history of the Emirate's early days of oil exploration and production.

Sheikh Zayed Palace Museum

The Sheikh Zayed Palace Museum, sometimes referred to as the Al Ain Palace Museum, is based in the palace of the former UAE President, the late HH Sheikh Zayed bin Sultan Al Nahyan, where he resided with his family until 1966.

Located on the western side of the Al Ain Oasis, the palace was originally constructed in 1937 in the Bedouin architectural tradition. In 1998, it was converted into a museum, and in 2001 it was opened to the public.

The museum provides access to the palace's many rooms and also includes an art gallery. Visitors can see the lavish rooms, or *majlis,* where the President received foreign dignitaries and heads of state during his time in office.

In one area of the palace, there is a grand court tent, providing visitors with a taste of the Bedouin lifestyle and customs. Also on display is a Land Rover jeep like the one that Sheikh Zayed used to travel to remote areas of the desert for visits with Bedouin communities.

At the rear of the museum, visitors can enter the lush Al Ain Oasis, which has a connector path leading to the Al Ain National Museum.

All pictures courtesy Shutterstock.

OPEC India relations go from strength-to-strength

***Mohammad Sanusi Barkindo**, OPEC Secretary General, has prioritized a strong relationship with India during his tenure at the helm of the Organization. Contact between both sides has been regular, with the Secretary General visiting New Delhi four times on official business since assuming office. Perhaps the prominence of the relationship is best exemplified by the OPEC-India High-Level Energy Dialogues, the third edition of which took place on October 17 in New Delhi. While in the Indian capital, the Secretary General also participated in the second annual India Energy Forum by CERAWeek. The* OPEC Bulletin *reports from this successful mission.*

India Energy Forum returning

The second annual India Energy Forum took place in New Delhi from October 14 to 16, under the patronage of the Honourable Dharmendra Pradhan, Minister of Petroleum and Natural Gas and Skill Development and Entrepreneurship. The conference brought together energy industry leaders and government officials for dialogue on strategies to fuel the energy needs of India's growing economy.

On the first day of the conference, a delegation from the OPEC's Research Division gave a presentation on the OPEC *World Oil Outlook 2018 (WOO)*. This focused on expected GDP growth in India, as well as the country's enormous forecast increase in energy demand. These were issues Mohammad Sanusi Barkindo, OPEC Secretary General, would return to in his plenary remarks the next day.

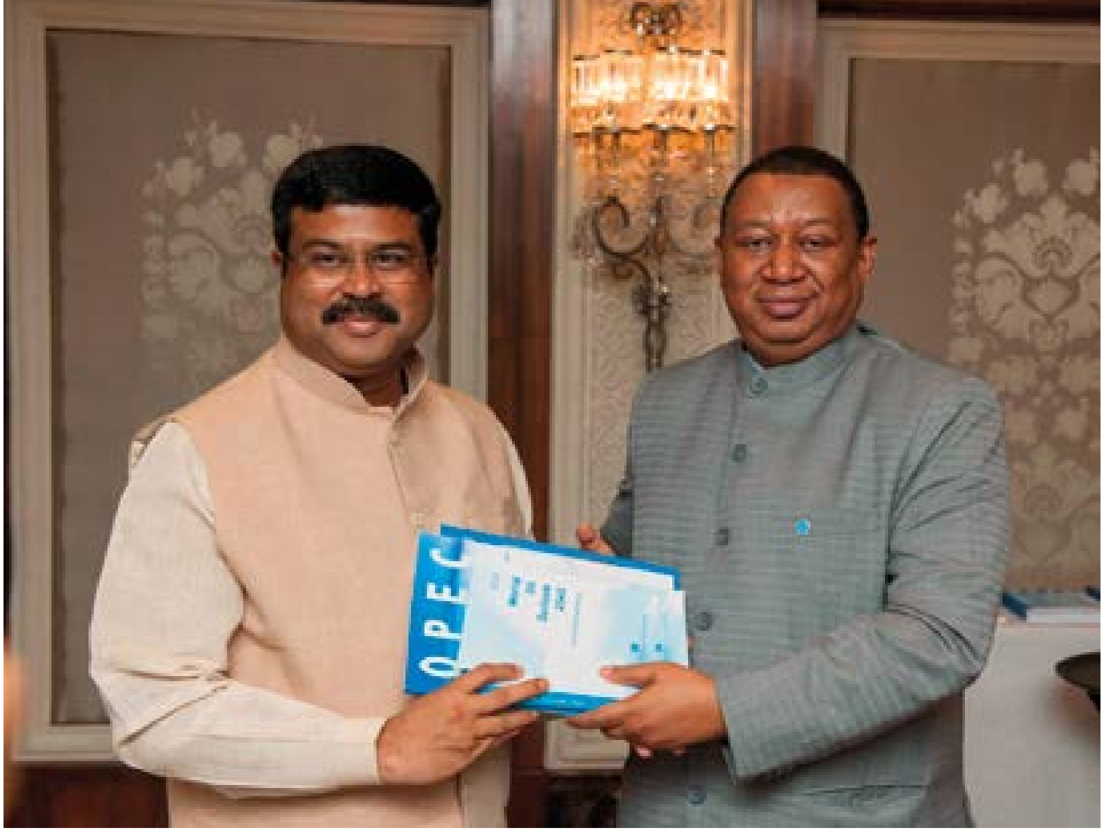
The Secretary General spoke at a plenary session entitled, *'How will oil markets impact India?'* which was moderated by Daniel Yergin, Vice Chairman, IHS Markit. These remarks covered a broad range of topics, including issues pertaining to short-, medium- and long-term perspectives. The following is an excerpt of the speech delivered by the Secretary General.

"The topic of the Indian energy transition is very much bound with the global energy transition, underscoring how interconnected our energy future will be. It was India's Noble Prize winning poet, Rabrindranath Tagore, the first non-European to win that distinguished prize, who foresaw a future, "Where the world has not been broken up into fragments by narrow domestic walls."

He stated that the interconnectivity of our world means that the only way we can overcome common challenges is through international cooperation and teamwork. "This approach is integral to OPEC and is reflected in our Statute. It receives its modern manifestation in our collaboration with our non-OPEC partners under the umbrella of the historic 'Declaration of Cooperation.' And a collaborative approach, centered on the principles of mutual respect, transparency and knowledge-exchange forms the basis of the ever blossoming relationship between OPEC and India. "

India in OPEC's World Oil Outlook

Another defining characteristic of our energy future is that oil will continue to play a critical role in the energy mix, stated Barkindo. This is one of the foremost conclusions of OPEC's recently launched *WOO* for 2018 of which there



Mohammad Sanusi Barkindo (r), OPEC Secretary General, and Dharmendra Pradhan (l), India's Minister of Petroleum and Natural Gas.

was a dedicated presentation at the forum by the OPEC Research Division. One of the other key takeaways from the presentation was the pivotal importance that India will play in the future of the global oil industry and economic growth.

OPEC forecasts that primary energy demand, globally, is expected to increase by 33 per cent, or 91m barrels of oil equivalent/day (boe/d), between 2015 and 2040. A massive 24 per cent of this anticipated increase will be from India, or 22m boe/d. World oil demand is expected to increase by 14.5m b/d, increasing from 97.2m b/d in 2017 to 111.7m b/d in 2040. India will account for oil demand growth of 5.8m b/d, which represents an astonishing 40 per cent of the overall increase. Therefore, the WOO concludes that India is projected to see the largest additional oil demand (3.7 per cent per annum) and the fastest growth globally in the period to 2040.

This impressive growth reflects the remarkable transformation of the Indian economy during the forecast period, said Barkindo. OPEC estimates that India's economy will grow at an average annual rate of 6.5 per cent for the period 2017–40. Real GDP is expected to surpass OECD Europe by 2035, and by 2040, it is anticipated to even surpass OECD America. To meet the future needs of both India and the world in the period up to 2040, the required global oil sector investment is estimated at $11 trillion, stated the Secretary General.

Worrying consequences of the downturn 2014–16

Given these investment needs, one must consider how gravely worrying the situation was during the last market downturn, the most severe in the industry's history, he said. From 2014 to 2016, world oil supply growth outpaced that of oil demand, with world oil supply growing by 5.8m b/d, while world oil demand increased by 4.3m b/d. By July 2016, the OECD commercial stock overhang reached a record high of about 403m b over the five-year average. The OPEC Reference Basket price fell by an extraordinary 80 per cent between June 2014 and January 2016.

Most ominously of all, investments were choked-off, with exploration and production spending falling by an enormous 25 per cent in both 2015 and 2016, added the Secretary General. Additionally, nearly one trillion dollars in investments were frozen or discontinued, and many thousands of high quality jobs were lost. A record number of companies in our industry filed for bankruptcy. "The multiplier effects of this contagion had the potential to wreak havoc on the future of the global economy, especially in developing countries. There can be no doubt about it, our industry was on the verge of catastrophe; a catastrophe that would have been devastating for producers and consumers."

Mohammad Sanusi Barkindo, OPEC Secretary General.

"The future depends on what you do today"

"When I consider this scenario, I am reminded of just how prescient the great statesman and father of this nation, Mahatma Ghandi, was when he said: *The future depends on what you do today.* To safeguard a future which has the interests of consumers and producers at its core, decisive action was necessary. For as Rabindranath Tagore also said: *You can't cross the sea merely by standing and staring at the water.*"

OPEC, in cooperation with a group of ten other non-OPEC producers, held extensive consultations about the portentous situation in the latter half of 2016. These efforts eventually culminating in an historic decision in December 2016 of voluntary production adjustments under the name of the 'Declaration of Cooperation', aimed at reintroducing stability to the market, which is essential for creating conditions conducive to attracting investment back to our industry, said Barkindo.

Transformative impact of the 'Declaration of Cooperation'

Since 2016, the 'Declaration of Cooperation' has evolved from a noble vision to a transformative force-for-good, a permanent feature of the energy landscape — one that has had a profoundly positive impact on the global oil industry and beneficial multiplier effects for global economic growth, he added.

"A long-absent element of stability has been reintroduced to the market, the rate of inventory draw-downs has been reversed and industry optimism and confidence abounds.

The importance of the Declaration has also received backing from other producers, as well as from consumers. Without the collective efforts of the 'Declaration of Cooperation' strategic partners, the oil industry and the global economy would have easily slid into a major crisis."

Throughout the entire 'Declaration of Cooperation' process, OPEC has solicited the views of consumers, incorporating and responding to them within its strategy, he said, adding that the OPEC-India dialogue and the Third High Level Meeting, are extremely important in this regard.

Current impact of non-fundamental factors

While a broad and inclusive consultative process has yielded results, it continues to remain necessary because of current conditions in the global economy and in the oil industry. Non-fundamental factors, beyond the control of any individual stakeholder, can have a particularly strong influence on the industry, said Barkindo.

"Geopolitical events, natural catastrophes, technological breakthroughs or other critical uncertainties, these can feed into the financial markets, thus amplifying their impacts on oil. This has been particularly apparent in recent months."

OPEC's recently published *Monthly Oil Market Report (MOMR)* acknowledged this in its most recent publication

Mohammad Sanusi Barkindo (l), OPEC Secretary General, during the CERAWeek with moderator Daniel Yergin (r), Vice Chairman, IHS Markit.

on October 11. While global economic growth remains solid, it faces potential headwinds, according to the report. Following a period of relatively synchronized growth, economic growth trends between, and within, major regions are increasingly diverging. While growth in the major OECD economies remains well supported, decelerating trends have become visible in some emerging markets and developing countries (EMDCs), it says. A combination of monetary tightening of the G4 central banks, weakening financial situation in some EMDCs, rising trade disputes and ongoing geopolitical challenges in some parts of the world are thus challenging the growth trend. Hence, OPEC's global economic growth forecast for 2018 was revised down slightly by 0.1 percentage points to now stand at 3.7 per cent, while the 2019 forecast remains unchanged at 3.6 per cent.

Other reporting agencies draw similar conclusions. The IMF, in advance of the recent 2018 Annual Meetings of the IMG and World Bank Group, October 12–14 in Bali, Indonesia, downgraded its 2018 estimate for global growth in a similar manner to 3.7 per cent, which although robust, is down from an earlier forecast of 3.9 per cent. Furthermore, the IMF conclusion from its Annual Meetings noted that "policy uncertainty, historically high debt levels, rising financial vulnerabilities and limited policy could further undermine growth prospects."

Of course, a downward revision for global economic growth has serious repercussions for global oil demand, said the Secretary General. Consequently, OPEC has revised down its world oil demand growth forecast for 2018 and 2019. According to the October edition of the *MOMR*, world oil demand is projected to increase by 1.54m b/d in 2018, a downward revision of around 80,000 b/d from the previous month's report. In 2019, world oil demand is anticipated to grow by 1.36m b/d to average 100.15m b/d, a downward revision of 50,000 b/d from the previous month's report.

The supply aspect of the future energy balance

"There have also been concerns expressed by consumers with regard to the outlook for supply, including from some of our friends in India," said Barkindo. "However, our current view is that the market is at the moment adequately supplied and well-balanced, though in a fragile state. For 2019, there is a growing potential for an imbalance, due to larger growth in supply. Naturally, this prognosis is subject to the critical uncertainties mentioned earlier.

"Our recent meeting of the OPEC and non-OPEC Joint Ministerial Monitoring Committee (JMMC), which met in Algiers, Algeria, on September 23, 2018, explicitly acknowledged and addressed some of the concerns of consumers with regard to supply. I would like to quote from the meeting's conclusions: 'The JMMC noted that, despite growing uncertainties surrounding market fundamentals, including the economy, demand and supply, the participating producing countries of the 'Declaration of Cooperation' continue to seek a balanced and sustainably stable global oil market, serving the interests of consumers, producers, the industry and the global economy at large ... The Committee urged countries with spare capacity to work with customers to meet their demand during the remaining months of 2018.'"

This underscores the commitment of OPEC Member Countries to accommodate anxiety over supply

Mohammad Sanusi Barkindo, OPEC Secretary General (r), during an interview.

interruptions, he added. In the midst of critical uncertainties, downside risks to the global economy and issues related to future demand, international cooperation and multilateralism are, quite simply, indispensable, he said.

"For this reason, OPEC and its non-OPEC partners in the 'Declaration of Cooperation' continue to explore further means of institutionalizing our cooperation. In this spirit, I wholeheartedly endorse the sentiment and conclusions of World Bank Group President Jim Young Kim, when he recently said: 'Challenges can turn into crisis if we don't face them together. The strongest tool that we have to battle those challenges is the kind of solidarity that is embedded in multilateralism.'"

The challenge of climate change

It would be remiss to omit the climate change challenge from any discussion on the energy transition, said Barkindo. This is particularly relevant given the launch on October 8, 2018, of an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, he said.

"Allow me to share some observations: the report indicates that there are multiple pathways to a 1.5°C warmer world. However, climate-related risks are unevenly distributed and the impact of 1.5°C global warming will disproportionately affect disadvantaged populations, especially in the developing world.

"Given the scale of the challenge to eliminate 42 billion tonnes of carbon dioxide in annual emissions, a collective and comprehensive response is not only essential, but urgently needed. The key word here is emissions. We cannot afford to disregard the positive contributions of any one energy source or industry. We in OPEC are unwavering believers that the global oil industry has a critical role to play in meeting the challenge. For our industry, we need to recognize that the environmental challenge is not oil and gas in-and-of themselves. It is the emissions that come from burning them."

Barkindo said it is not about choosing one energy source over another, though it has been suggested in some quarters that renewables represent the only energy future. "Not only is this line of thinking misguided, it overlooks the critical role the oil industry can play in being part of the solution. And I believe that solutions can be found in technologies that reduce and ultimately eliminate these emissions.

"OPEC remains fully engaged with and supportive of the Paris Agreement. We firmly believe that a global consensus from the multilateral process remains the best and most inclusive way for all nations to collectively counter climate change in a fair and equitable manner."

The issue of energy poverty

Alongside this challenge, energy poverty, as the IPCC report acknowledges, remains a scourge, he said. Today around 3 billion do not have clean fuels for cooking, and approximately 1bn have no access to electricity. The link between climate change and sustainable development appears to be rather complex. The IPCC report concludes that maximizing synergies and limiting trade-offs should be the goal when planning future actions to reduce climate change and pursuing sustainable development promoting equitable societies.

Reducing the development and climate policy implementation gap depends on an enabling international governance and financial architecture to allow access to finance and technology and help address trade barriers, said Barkindo. It is important to ensure a Party-driven process and recall different national circumstances, as well as evoking the principles of equity and of common-but-differentiated responsibilities and respective capabilities; balancing mitigation, adaptation and the means of implementation; and taking into account the overriding priority of sustainable development.

Group photo of the officials attending the third High-level Meeting of the OPEC-India Energy Dialogue.

With regard to the energy transition, it should be stressed that it is vital to use energy efficiently and constantly develop and adopt cleaner energy technologies, such as carbon capture utilization and storage (CCUS), stated the Secretary General. "Coordinated action should also be enhanced, supporting research and development, innovation and technology transfer, while providing sufficient financial support."

Third OPEC-India Energy Dialogue

On October 17, a very productive high-Level meeting of the OPEC-India Energy Dialogue concluded the successful mission. The meeting was co-chaired by Dharmendra Pradhan, India's Minister of Petroleum and Natural Gas, and the OPEC Secretary General. The parties issued the following joint conclusion: "Both parties reiterated the continued importance of the OPEC-India Energy Dialogue as an indispensable forum for fostering good relations, facilitating knowledge exchange and pooling technical expertise."

The regularity of interaction between both sides was commended and Barkindo thanked Pradhan for his active participation and valuable contribution to the 7th International OPEC Seminar. Discussions thereafter focused on current developments in the oil market and OPEC provided an update on its ongoing cooperation with non-OPEC producing countries under the umbrella of the 'Declaration of Cooperation'.

In his opening remarks Barkindo said: "India is an extremely important partner for OPEC, and all of us in the Organization are determined to continue strengthening the relationship." He emphasized that a major component of OPEC's *World Oil Outlook 2018* was the increasing importance of India for the future of the international oil industry. Barkindo stated that India is "projected to have the fastest average oil demand growth (3.7 per cent/year) over the period 2017–40, as well as the largest additional demand."

The high-level meeting saw presentations from OPEC on short-term oil market developments, as well as the long-term energy outlook. This included some analysis on the outlook for the global economy, oil supply and oil demand for the remainder of 2018, as well as medium- and long-term challenges and opportunities.

A technical meeting of experts from India and OPEC was also held prior to the high-level meeting to analyze various issues, as well as look at ways and means to enhance the cooperation in the coming years.

The Third High-Level Meeting builds on the first that took place in New Delhi, India, on December 15, 2015, when Pradhan and accompanying Indian delegates hosted an OPEC delegation headed by then-OPEC Secretary General, Abdalla Salem El-Badri. The second took place in Vienna, Austria at the OPEC Secretariat on May 22, 2017. The parties agreed to have their next high-level meeting in 2019 in Vienna.

Successful mission

The mission further reinforced the abiding bonds of friendship between OPEC and India. The process of soliciting perspectives and exchanging information and knowledge, both at a technical and a high level, continues to reap benefits for both sides. The positive ramifications of the mission will be felt for many years to come.

An optimistic outlook

Under the theme, 'The New Energy Map', the 2018 Oil & Money Conference took place in London at the start of October. Given recent developments in the oil market, the chosen theme seemed apt, with many participants discussing the market's recovery over the past 20 months or so, its possible short- and long-term trajectories, including both challenges and opportunities, and the ongoing cooperation between OPEC and non-OPEC producers. The OPEC Bulletin *reports on the event, with a specific focus on the participation of the OPEC Secretary General,* ***Mohammad Sanusi Barkindo****.*

From October 9–11, senior executives, policy makers, financiers, strategists and experts from the international oil and gas industry gathered in London for the 39th annual Oil & Money Conference. It provided an opportunity to take stock of oil industry developments over the previous year, to look at various perspectives on its future, and to honour those who have given a great deal of their life to the industry.

In terms of the latter, this was evident at the Petroleum Executive of the Year Gala Dinner. This year's recipient was Bob Dudley, BP's Group Chief Executive, who had been recognized by his industry's peers. Upon receiving the award, Dudley reflected not only on how the industry had changed since he joined the industry in the late 1970s, but also on the path ahead.

He said: "We are in the midst of a major energy transition and transitions can be unsettling. But I think the reality is that there has never been a more important and exciting time for our industry. We have a duty to keep the world advancing through this transition. And we have an army of problem solvers at the ready — along with a history of navigating many, many challenges in the past. So, as I look to the future, I see possibilities everywhere."

This optimism for the industry's future was prevalent throughout the conference, and was also a key message in the remarks delivered by OPEC Secretary General, Mohammad Sanusi Barkindo.

In his keynote speech, the Secretary General also took the opportunity to offer his congratulations to Bob Dudley. He said: "Bob is a true gentleman, but with a steely resolve that has enabled BP to recover from the challenges it faced at the beginning of this decade. He has led the company's recovery, rebuilt its reputation and returned it to growth.

"He has also been proactive in seeking solution to improve the environmental credentials of oil, and has been a supportive voice in OPEC's market stability efforts. There is no-one more deserving of this prestigious award from his industry peers."

Brighter path ahead

In recalling his speech to delegates at Oil & Money in 2017, Barkindo said at that point "we were just over nine months into the historic 'Declaration of Cooperation' between OPEC and non-OPEC producers. It was a time when the market and the industry were starting to emerge out of the shadows of the three-year downturn that had impacted the entire industry."

He stated that it has been evident over the past year that "we are now seeing a brighter path ahead. The cooperative efforts of the 25 producers in the 'Declaration' have helped accelerate the return of balance to the global oil market, restore much needed stability and confidence to the industry, and it has had a positive effect on the global economy and trade worldwide.

"The 'Declaration' has had a transformational impact on the global oil industry. The change we have seen over the past 20 months is like night and day."

He was adamant, however, that "we are not resting on this success. Our full focus remains on building what has been achieved by sustaining a healthy and stable global oil market, in the interests of both producers and consumers."

Mohammad Sanusi Barkindo, OPEC Secretary General.

The Secretary General highlighted that only the previous week in Moscow at Russia Energy Week, he heard from Vladimir Putin, President of the Russian Federation; Alexander Novak, Oil Minister of the Russian Federation; and Khalid A Al-Falih, Saudi Arabia's Minister of Energy, Industry and Mineral Resources, about the additional oil that had been added to the market since June to maintain the supply and demand balance.

He added that Al-Falih had also said that Saudi Arabia had not turned down a single customer.

The Secretary General stressed that this all emphasizes that "the market is well-balanced and well-supplied", and moreover, "through the Joint Ministerial Monitoring Committee (JMMC) and the Joint Technical Committee of the 'Declaration of Cooperation' it is also well-monitored."

Nonetheless, he stated, "we do recognize that there are many non-fundamental factors influencing the market that are beyond the oil industry's control, such as geopolitics, growing trade disputes, natural disasters and other developments. They can have compound effects and are a major source of uncertainties."

Sustaining the stability

Barkindo said that the goal of sustaining the stability is a "reason why we continue to "explore means of institutionalizing the 'Declaration of Cooperation', as was discussed most recently in Algiers during the 10th JMMC meeting."

He added that importance of sustainable stability is evident across all timeframes, which is clear in OPEC's recently released *World Oil Outlook (WOO) 2018,* which aims to bridge the linkages between the various timeframes.

Longer term outlook

The Secretary General stated that "the WOO 2018 underscores that the world will need more energy in the decades to come, as economies expand, populations grow, and given the fact today around three billion people lack access to clean fuels and efficient technologies for cooking, and almost one billion are still without access to electricity.

"In our Outlook, global energy demand increases by a healthy 33 per cent between 2015 and 2040. Energy is a central facet that links our daily lives; it is not on call, it cannot take a holiday, it cannot call in sick. Energy is a 24-hour service. Thus, it needs to be reliable, consistent and sustainable, and as I have already mentioned, it needs to be accessible to each and every one of us."

He added that alongside the challenge of meeting growing energy demand is "the need to constantly improve the environmental footprint of the energies we use. In this regard, let me stress that OPEC remains fully engaged and supportive of the UNFCCC and the Paris Agreement, which remains the only viable global framework to address climate change."

In emphasizing these two points, Barkindo asked the question: how can this growth be achieved in a sustainable way, balancing the needs of people in relation to their social welfare, the economy and the environment?

Bob Dudley (l), BP's Group Chief Executive, was this year's recipient of the Petroleum Executive of the Year Award which was presented to him by Patrick Pouyanné, Chairman and CEO of Total.

All energies required

Barkindo said that what is emphasized in the WOO is that the future requires all energies; "it is not about choosing one over another."

In some quarters, he said "we hear stories that suggest renewables are our only energy future. This is clearly misguided.

"Renewables are evidently coming of age, with wind and solar, expanding fast, and others such as hydropower and biomass, maintaining their shares in the energy mix out to 2040. However, even by 2040, they are estimated to make up only around 19 per cent of the global energy mix." He noted that many OPEC Member Countries also have great sources of solar and wind, and significant investments are being made in these fields by Member Countries.

"With the share for nuclear expected to be at just over 6 per cent by 2040," he said, "it means that the world will need to look elsewhere for around three-quarters of its energy needs by 2040."

From the perspective of oil and gas, Barkindo highlighted that "there is no doubt that they will remain central to supplying an expanding global population with the critical energy it needs. In our Outlook, oil has an expected share of around 28 per cent in the global energy mix, and gas is at 25 per cent, by 2040."

He added that "even in the most optimistic of outlooks I have seen for renewables, I have not observed one predicting that they will come close to surpassing oil and gas in the decades ahead."

Oil demand grows

Barkindo stated that in the WOO "we see oil demand increasing by around 14.5 million barrels a day (m b/d) between now and 2040 to reach close to 112m b/d. Moreover, this is the second consecutive year we have raised our oil demand number for 2040."

He also iterated that there are voices that see oil demand being significantly impacted by the electrification of the road transportation sector. While noting that that electric vehicles will make inroads into the sector, "it will not be to the extent that some would have us believe," making reference to the numbers in the WOO.

He said that "electric vehicles made up well below one per cent of the total vehicle fleet in 2017. While their expansion is impressive in the years ahead, reaching a level of around 13 per cent in 2040, supported by falling battery costs and policy support, it is conventional vehicles, including hybrids, that are still expected to make up 82 per cent of the vehicle fleet by 2040.

While noting possible upsides for electric vehicles, and other alternative fuel vehicles, which are highlighted in the WOO, the Secretary General also emphasized that "there are possibilities to improve the efficiencies of conventional engines and the fuels they use.

"In fact, it should be noted that fuel efficiency improvements are expected to result in a far greater reduction in oil demand, than the increasing penetration of alternative fuel vehicles in the period to 2040. ... The clear message is that conventional vehicles will remain the mainstay of the road transportation sector."

Policies and technologies

The Secretary General also emphasized the importance of broaching the issues of policies and technologies. In this regard, he said "we need to continually look to develop, evolve and adopt cleaner

Herman Franssen (r), Executive Director, Energy Intelligence and Conference Chairman, with Mohammad Sanusi Barkindo (l), OPEC Secretary General.

energy technologies, as well as all-inclusive and non-discriminatory energy policies, that enable us to meet expected future energy demand, in a sustainable and ever more efficient manner."

He recalled the comments of Bob Dudley at the Oil & Money Conference last year, when he said: "This shouldn't be about a race to renewables alone; it's about a race to lower greenhouse gas emissions."

He stated that for oil and gas, we need to recognize that the environmental challenge is not oil and gas themselves; it is the emissions that come from burning them. "I am a believer that solutions can be found in technologies that reduce and ultimately eliminate these emissions.

"I welcome coordinated action within the industry and through various research and development platforms, such as the Oil & Gas Climate Initiative, which continues to expand as a group and implement bold actions."

Moreover, he said, on the policy front, it is important to stress that if our industry is worried about policies that detrimentally impact oil, with talk of stranded assets and declining values of oil; then we have a potentially dangerous scenario, one that could increase volatility significantly. He emphasized that "this is not in the interests of either producers or consumers."

Investments

This is brought home by the scale of the investment requirements, noted Barkindo. "Oil-related investments across the upstream, midstream and downstream are estimated at around $11 trillion in the period to 2040 in the WOO.

He added that "the basic foundation for investment and growth can only come through balance and stability in the market. In this regard, OPEC Member Countries remain fully committed to investments across the whole industry value chain, and the issue of returning global investments is a core focus of the 'Declaration of Cooperation'."

Cooperation the key link

In summing up, Barkindo stressed that everything he had said relates to 'cooperation'.

He stressed that "as OPEC, as the countries in the 'Declaration', and as an industry, we need to tell our story over and over again. We need to work together to bring reasoned thinking, and realistic ambitions to our global energy future."

Over the years, he said "OPEC has pushed many forms of energy cooperation, including both producers and consumers, and we stand willing and ready to dialogue with all industry stakeholders. We always look to build bridges, not walls."

Barkindo recalled that it was the legendary Englishman Charles Darwin, who said: *"In the long history of humankind those who learned to collaborate and improvise most effectively have prevailed."*

With this mind, he said that "while the times we live in often appear turbulent and challenges daunting, experience has repeatedly shown us that the enduring principle of cooperation and the bravery to try something new, such as the 'Declaration of Cooperation', can bring about great success."

OPEC praises Morocco for it's role in climate change negotiations and renewable energy

OPEC Senior Research Analyst, Aziz Yahyai, on behalf of the OPEC Secretary General, Mohammad Sanusi Barkindo, had the opportunity and pleasure to attend the 11th Arab Energy Conference held in Marrakech, Morocco, on October 1, 2018.

Aziz Yahyai, OPEC Senior Research Analyst.

Yahyai emphasized the key role Morocco has played over the years in climate change negotiations, pointing out the country's presidency of the United Nations Climate Change Conference (COP22/CMP12) two years ago, and the signing of the Marrakech Accord at an earlier meeting, a very important agreement made after the Kyoto Protocol.

"So, as you can see, Morocco has played a key role over the years in the climate change negotiations, and will surely continue to do so in the future," he said in his remarks. "It also continues to be a trailblazer in the region, and the world, as far as the development of renewables goes, particularly in the area of solar energy."

Since being launched in 2016 to great fanfare by His Majesty Mohammed VI, the impressive Noor solar plant complex has been in the headlines of the world's leading media outlets, said Yahyai.

"When completed, it is expected to be the world's largest concentrated solar power farm. The project is aiming to produce enough energy to power over one million homes by the end of 2018 while reducing carbon emissions by an estimated 760,000 tonnes per year," he said.

This massive undertaking is one of the driving forces behind Morocco's overall strategy to increase its share of renewable energy generation to 42 per cent by 2020.

"It is evident that Morocco has taken a leadership role in this area, not only in Africa, but on the world stage. And I wish you continued progress in these endeavours," said the OPEC Senior Research Analyst.

Yahyai went on to discuss the 'Declaration of Cooperation', which has transformed the oil industry and cleared the way for a more collaborative, inclusive and multilateral approach to achieving common goals.

"These cooperative efforts have helped expedite the return of balance to the global oil market, bringing back a renewed optimism to the industry. Investments are steadily picking up, and the global economy and trade are on a solid upward curve."

OPEC's *World Oil Outlook*

The short-, medium- and long-term outlooks are all interconnected and must be seen in a holistic manner, he stated, going on to share some facts and figures from OPEC's flagship publication the *World Oil Outlook (WOO)*.

Oil is here to stay, he said: "Oil is expected to remain the fuel with the largest share in the energy mix throughout the forecast period to 2040. And, we do not currently seen any peak in oil demand in the long term. With rising demand, expected to reach a total of 111.7 million barrels/day in 2040, the world will need all forms of energy, including renewables."

Renewables, including solar, are forecast to have the highest average growth rate of around 7.4 per cent until 2040, he added. However, due to the current low base, the increase in absolute terms is estimated at around 19m barrels of oil equivalent/day between 2015 and 2040. This is positive news for Morocco as a major producer of solar energy, said Yahyai.

This rise in demand is partially going to fuel a booming world economy, the size of which by 2040 is expected to be more than 200 per cent that of the economy in 2017, according to OPEC's *WOO*. Also driving this demand will be a rapidly growing global population, which is expected to reach approximately 9.2bn, an increase of over 1.6bn from today's level.

He touched finally on the issue of environment and sustainable development.

"At OPEC, we fully recognize the threat posed by climate change to our environment, and thus we remain fully engaged and supportive of the Paris Agreement.

"It is our belief that a global consensus within the multilateral process remains the best and most inclusive way for all nations to collectively mitigate or adapt to the impacts of climate change based on the core principle of 'common but differentiated responsibilities' in a fair and equitable manner," he said.

"As an industry, and indeed as a global community, we will have to meet the dual challenge of meeting growing energy demand, while constantly improving the environmental footprint of all energies."

Night market on Djemaa el Fna square in the centre of Marrakesh, Morocco.

Kachikwu receives the African Leadership Award in China

In recognition of his leading role in the growth and advancement of the African oil and gas sector, Dr Emmanuel Ibe Kachikwu, Nigeria's Minister of State for Petroleum Resources, was presented with the prestigious 'African Leadership Award' for the year 2018.

At the ceremony, the Ministry of Petroleum Resources of Nigeria expressed its extensive gratitude and deep appreciation for the honour endowed upon it. It also emphasized the Ministry's and its able leaders' intention and commitment to continue the journey it embarked upon.

The Burj CEO Awards event is a prominent annual gathering that focuses on acknowledging and celebrating high-level dignitaries, heads of state, ministers, and chief executives of national and international energy firms. This year's ceremony was held in the province of Shenzhen in China, and was attended by more than 700 delegates representing 32 countries.

The nominees of the awards are carefully named through a committee of respected and recognized world figures that possess a strong sense of judgement, in addition to their notable contribution to select global matters. The first Burj CEO Awards event took place in Dubai in 2006.

According to *Vanguard*, a leading Nigerian news agency, the Burj brand has grown in significant fashion in recent years. Its current membership consists of more than 25,000 CEOs from around 50 countries. The US, the UK and South Africa have generously hosted some of its previous events.

In last year's ceremony, the President of the Republic of Namibia, Dr Hage Geingob, received the same award for the year 2017.

Dr Emmanuel Ibe Kachikwu, Nigeria's Minister of State for Petroleum Resources.

Reuters

Saudi Aramco announces 15 major agreements at the Future Investment Initiative

The Kingdom's energy giant — Saudi Aramco — is set to finalize and sign 15 major deals, worth more than $30 billion, as announced during the Future Investment Initiative, the region's leading gathering in the field of investment and development.

At the event, President and CEO of Saudi Aramco, Amin Nasser, said "these agreements support investment in strategic sectors which will further expand the company's business portfolio while they contribute to the realization of Saudi Vision 2030."

The president also emphasized the importance of the new Memorandums of Understanding (MOUs) and their potential contributions to various fields, including refining, chemicals, conversion industries, localization, investment, training opportunities and job creation.

He added: "They will also help enable a vibrant energy services sector through the development of the King Salman Energy City, an anchor project which will increase the efficiency and reliability of the supply chain capabilities of the company and that of the Kingdom's industrial base."

During the event, Patrick Pouyanné, CEO of the French oil major Total SA, also presented a new joint project in the Kingdom of Saudi Arabia. Pouyanné said it is intended to develop a retail network to operate in that country. This project will be implemented in cooperation with Saudi Aramco.

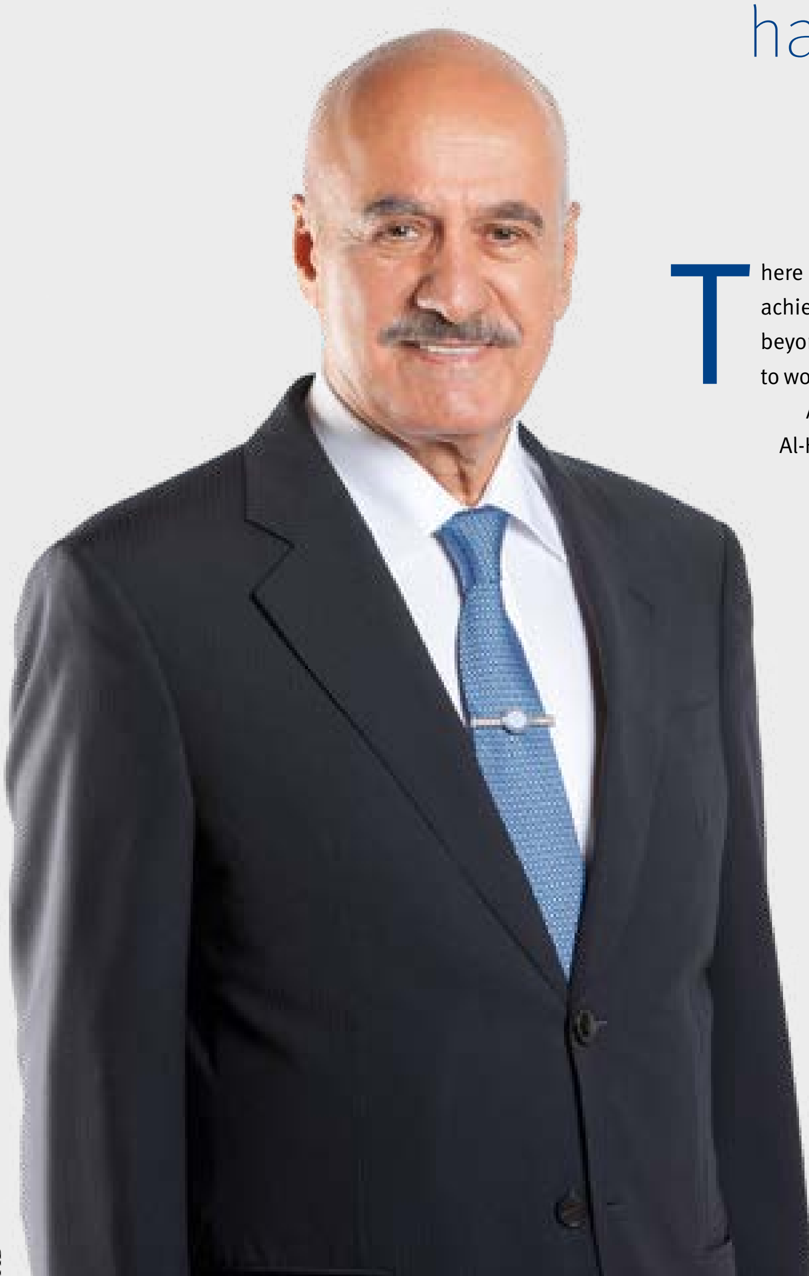
The Future Investment Initiative 2018 is the second event of the key annual gathering series, which attracts senior officials, notable dignitaries and policymakers to discuss issues of great importance and dialogue on development and the emergence of new technology. Saudi Aramco is a partner in the initiative.

Future Investment Initiative seen during the investment conference in Riyadh, Saudi Arabia, in October 2018.

Reuters

A time to say goodbye

After 15 years, Suleiman J Al-Herbish hands over the OFID reins



OFID

There is much that outgoing OFID Director-General, Suleiman J Al-Herbish, has achieved during his 15 years leading OFID. He has modernized the organization beyond recognition; he has made it a better and more progressive place for staff to work; and he's readied OFID for the future — both structurally and financially.

All this has involved an enormous amount of teamwork, of course, and Al-Herbish has surrounded himself with a modern, forward-looking team. It has also required a strong and visionary leader.

From modest but relatively comfortable beginnings, Al-Herbish grew up in the city of Ar Rass in Saudi Arabia. As a child, he tells, he had not heard of electricity, never mind experienced it. The young Al-Herbish would study by the light of a kerosene lantern each night. Later in life, on moving to Riyadh, he was still without electricity at home, but would visit the local mosques in the evenings — which did have electricity — to study.

These formative years shaped Al-Herbish, and if you ask the man himself about his greatest achievement in his long career, he does not hesitate. As he told OFID's Ministerial Council in his farewell speech last June: "Our efforts — along with our friends in the international arena — have culminated in something remarkable; something that will underpin the entire sustainable development agenda to 2030 and beyond: Access to energy for all is recognized as Sustainable Development Goal 7 (SDG 7); a stand-alone goal in the United Nations Agenda 2030 for Sustainable Development.

"We have advocated tirelessly for energy poverty to be given the priority it deserves in the post-2015 Development Agenda after it was ignored in the Millennium Development Goals," he added. "It was such an omission; we called it the 'missing ninth MDG'."

Al-Herbish, who before dedicating his life to fighting for the

2004: *Former Austrian President, the late Dr Thomas Klestil, welcomes Al-Herbish.*

2004: *Al-Herbish said his meeting with late Cuban President Fidel Castro was a "milestone" in OFID's relations with Cuba.*

2006: *Meeting with former Nigerian President Olusegun Obasanjo.*

world's most vulnerable people served for 14 years as the Governor of Saudi Arabia at OPEC, will be remembered by those who worked with him closely for being a demanding boss — wanting tasks completed to perfection. His sense of humor will remain front of mind, too — he would often relieve the tension in a room or situation via a friendly quip. More memorable still will be his compassion. Al-Herbish is quick to recognize and reward good work; ready to listen and adapt; and above all, seems to be driven by some internal force to work relentlessly to make the world a better place.

He will also be remembered by many staff for his extraordinary memory. Al-Herbish has not once misremembered a date, no matter how far back, and beguiles with humorous stories of long-past missions — like flying all the way to New York as a young man only to discover the conference he was due to attend had been cancelled.

Strong relationships

In and out of the organization, Al-Herbish built strong relationships. Friendships based on mutual interest and respect blossomed with the leaders of other international organizations. Kandeh K Yumkella, for example, then Special Representative of the UN Secretary-General and CEO of the Sustainable Energy for All (SEforALL) Initiative, wrote: "Addressing audiences in Africa, Asia, Europe, the Middle East, Latin America, the Caribbean and the USA, Al-Herbish has pursued the energy issue among students, political and business leaders, intellectuals and development workers alike … I would like to take this opportunity to thank Al-Herbish personally for his foresight, commitment and partnership."

Similarly, LI Yong, Director-General of the United Nations Industrial Development Organization (UNIDO) called Al-Herbish one of the world's leading advocates of energy poverty alleviation. "With Al-Herbish at the helm," he wrote in the Foreword of Uniting against poverty: OFID's Suleiman Jasir Al-Herbish and the fight for sustainable development, "OFID has helped its development partners deliver on issues relating to energy access, sustainability and efficiency … Our alliance was forged in our common desire to end poverty and it has been strengthened by the common conviction that access to modern energy services is a vital precondition to achieving sustainable development …"

Toward retirement from OFID, where many may have slowed down in preparedness for a different pace of life, Al-Herbish has done the opposite. This year alone: he has led a delegation to Bangladesh where he met with the country's Prime Minister and signed two loan agreements to help bolster the transportation sector; in Bolivia, Al-Herbish met with President Evo Morales who expressed his gratitude for OFID's support; on the same mission, Al-Herbish received an honorary doctorate from a Bolivian university in recognition of development financing supplied by OFID, and he signed loan agreements with Bolivia and Argentina to boost socioeconomic development in the water and sanitation, and transportation sectors.

Achievements

And there's more. Still during 2018: visiting Rwanda, Al-Herbish signed a $20 million loan agreement for a water and sanitation programme that will improve living standards for nearly 1.6 million people; in Jordan, he signed agreements worth $1.16m to implement projects in support of the resilience of Palestinians residing in East Jerusalem, Hebron and Gaza Strip; and in Belize, he signed a $40m loan agreement in support of an important road rehabilitation project with the Belizean Prime Minister Dean O Barrow. Couple this to meetings in India, Spain, Portugal, the UK and the US — in addition to a recent high-level mission to Bosnia and Herzegovina — and you get the picture. Al-Herbish is not one for taking his foot off the gas.

Al-Herbish had recently returned from Cairo, where he signed grants in support of the Regional Centre for Renewable Energy and Energy Efficiency and Bibliotheca Alexandrina, supporting three causes he holds extremely dear: access to energy, education and the preservation of culture; the latter of which he has more than once referred to as "the fourth pillar of development, in addition to the three widely recognized economic, social and environmental pillars."

Not long back from Cairo, Al-Herbish was preparing for a mission to Amman, Jordan. There, he plans to sign an agreement for a grant under OFID's Special Health Programme amounting to $400,000 in support of the King Hussein Cancer Foundation and Center (KHCF), which focuses on supporting underprivileged and vulnerable patients, including the large refugee community in Jordan, as well as patients from neighboring countries. The agreement is to be signed with Princess Ghida Talal, Chairperson of the KHCF.

Al-Herbish will also sign an agreement for a grant amounting to $150,000, in support of a project to be implemented by the Saudi Center for Blind Girls from Bahrain, Egypt, Iraq, Jordan, Lebanon, Palestine, Sudan, Saudi Arabia, Syria, UAE and Yemen. Based in Amman, the Saudi Centre is a charitable institution established with the aim of enhancing blind women's literacy and promoting their socio-economic empowerment through training and education. It will be gratifying to Al-Herbish that he is concluding his career by signing such important agreements.

Similarly, that this very 'farewell' article to Al-Herbish is printed within a special edition of the *OFID Quarterly* honed in on development in Africa will be particularly

2013: *At the launch of OFID's children's book* One Planet Earth One People, *Al-Herbish explained to young participants how important it was for them to learn to act as responsible global citizens.*

OFID

2015: *An audience with Queen of Jordan, Ranya Al Abdullah.*

2018: *Sheikh Hasina, Prime Minister of Bangladesh, during OFID's first high-level mission to the country.*

2018: *Bolivian President, Evo Morales, was present at the loan signing for an OFID co-financed road project.*

pleasing to Al-Herbish, since the continent is close to his heart. He is alert to Africa's development needs, and has helped maintain OFID's focus on this front. In 2017 alone, OFID approved $695.6m for development operations in Africa — 46 per cent of the organization's commitments for the year. A total of 32 African countries shared this amount.

It's doubtful that Al-Herbish will put his feet up even in retirement. In OFID's internal magazine — in which Al-Herbish has written a regular column for the past decade — he signed off to staff in typical style: "I hope and believe this new chapter in my life — and yours — will be filled with much more love, laughter, exciting challenges and successes.

"I will reflect on the journeys we've shared for as long as I live, and I hope I will always remain a part of the OFID family," he continued.

"I believe what we have achieved together — for OFID and for people across the globe — will last far longer than any of us and will help many generations to come. I believe teamwork has been central to our success and I implore you to continue to work together."

There will be many people who will genuinely miss Al-Herbish's company; his drive and enthusiasm. But there is no need for immediate concern; all indicators point to him being a part of the international development community for some time to come.

2017: *Al-Herbish with his 'OFID family' in front of the OFID monument that was presented to the City of Vienna as a lasting 'thank you' for playing host to OFID.*

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

September 3 Representatives from the Vienna Institute of Economics and 23rd AMP of Management Development Institute, India.

September 12 Representatives from the Federal Minisry of Defence, Berlin, Germany.

September 25 Representatives from the Federal Ministry of Defence, Bonn, Germany.

Impressions from groups visiting the OPEC Secretariat

August–September 2018

It was a great privilege visiting the OPEC Secretariat for me and my colleagues as a student of Chemical and Process Engineering from University of Surrey. I got to know more about OPEC, above what I have read and seen on the media. We were hosted by the PR team; we had a wonderful briefing about the Secretariat and OPEC's contribution to the world of oil, particularly in Member Countries. My country is an OPEC Member (Nigeria). I am extremely delighted to know more about OPEC and I would love to have the opportunity to visit again.

— Salihu Usman, Postgraduate student, Chemical and Process Engineering, University of Surrey, UK

I visited the OPEC Secretariat with a group of students from Ivan Franko National University of Lviv in August this year and feel really satisfied with the visit. During the well-organized meeting in a friendly atmosphere, we gained a lot of useful information about the Organization, understood how it really functions and got answers to our questions. So, thank you for the valuable knowledge and experience we received. It was a great opportunity to become a part of OPEC for a short period of time!

— Hanna Khudyk, student from Ivan Franko National University of Lviv

On September 25, during an educational trip to Vienna, we, a group of the German Ministry of Defense, visited OPEC's Vienna Headquarters. We would like to express our true appreciation to the OPEC Secretariat for delivering a detailed insight of OPEC's structure, aims and mission. You responded with extensive knowledge and expertise — and patience — to our group and our questions. After a comprehensive presentation we had a much broader understanding of what the Organization is all about and we learned what challenges OPEC is currently facing. Our department within the German Ministry of Defense is responsible for the process of setting, monitoring and controlling strategic comprehensive objectives. As we learned that OPEC is focused on objectives as well and one of yours is the stabilization of the oil market in order to secure an efficient, economic and regular supply of petroleum to consumers. We wish OPEC success in fulfilling its role as mediator in this challenging process. We will recommend this worthy visit to OPECs Vienna Headquarters to others.

— Markus Stocks, HC II 3, Bundesministerium der Verteidigung

My visit to OPEC was amazing and enlightening. I am still in awe at the level of comfort and hospitality I and my colleagues received. Knowledge about oil-producing countries and the exceptional contributions of OPEC particularly to its Member Countries has never been clear before the visit. An honour it was and still is. Thank you OPEC for giving us such wonderful opportunity.

— Nura Ali, Msc Process Systems Engineering, University of Surrey

Forthcoming events

Mexican energy conference, November 8–9, 2018, Mexico City, Mexico. Details: Platts, 20 Canada Square, Canary Wharf, London E14 5LH, UK. Tel: +44 207 1766142; fax: +44 207 176 8512; e-mail: cynthia_rugg@platts.com; website: www.platts.com/events/americas/mexican-energy/index.

ADIPEC, November 12–15, 2018, Abu Dhabi, UAE. Details: dmg :: events, 6th floor, Northcliffe House, 2 Derry Street, London W8 5TT, UK. Tel: +44 20 3615 2873; fax: +44 20 3615 0679; e-mail: conferencemarketing@dmgevents.com; website: www.adipec.com.

Floating regas and storage, November 13–14, 2018, London, UK. Details: IBC Global Conferences, The Bookings Department, Informa UK Ltd, PO Box 406, West Byfleet KT14 6WL, UK. Tel: +44 207 017 55 18; fax: +44 207 017 47 15; e-mail: energycustserv@informa.com; website: https://energy.knect365.com/floating-regas.

Myanmar LNG and power, November 15–16, 2018, Yangon, Myanmar. Details: Centre for Management Technology, 80 Marine Parade Road #13-02, Parkway Parade, 449269 Singapore. Tel: +65 6345 7322/6346 9132; fax: +65 6345 5928; e-mail: cynthia@cmtsp.com.sg; website: www.cmtevents.com/aboutevent.aspx?ev=181128&.

Operational excellence in oil, gas and petrochemicals conference and exhibition, November 15–16, 2018, Sochi, The Russian Federation. Details: Euro Petroleum Consultants Ltd, 44 Oxford Drive, Bermondsey Street, London SE1 2FB, UK. Tel: +44 207 357 8394; fax: +44 207 357 8395; e-mail: enquiries@europetro.com; website: www.europetro.com/event/84/0.

Ghana oil, gas and power summit, November 21–22, 2018, Accra, Ghana. Details: CWC Associates Ltd, Regent House, Oyster Wharf, 16–18 Lombard Road, London SW11 3RF, UK. Tel: +44 207 978 000; fax: +44 207 978 0099; e-mail: sshelton@thecwcgroup.com; website: www.cwcghana.com.

Global geothermal energy summit, November 21–22, 2018, Amsterdam, The Netherlands. Details: Active Communications International, 5–13 Great Suffolk Street, 4th Floor, London SE1 0NS, UK. Tel: +44 207 981 98 00; fax: +44 207 593 00 71; e-mail: claire@acieu.net; website: www.wplgroup.com/aci/event/global-geothermal-energy-summit.

2nd Africa oil and gas local content conference and exhibition, November 26–28, 2018, Luanda, Angola. Details: AME Trade Ltd — Africa and Middle East Trade Ltd, Unit 408, United House, 39–41 North Rd, London N7 9DP, UK. Tel: +44 207 70 04 949; fax: +44 207 68 13 120; e-mail: trade@ametrade.org; website: http://ametrade.org/alc.

Global petrochemicals summit, November 27, 2018, Cannes, France. Details: Clarion Events Ltd, Fulham Green, 69–79 Fulham High Street, London, SW6 3JW, UK. Tel: +971 55 307 33 32; e-mail: kay.mitchell@clarionevents.me; website: https://ertc.wraconferences.com.

19th CWC world LNG summit and awards evening, November 27–30, 2018, Lisbon, Portugal. Details: CWC Associates Ltd, Regent House, Oyster Wharf, 16–18 Lombard Road, London SW11 3RF, UK. Tel: +44 207 978 000; fax: +44 207 978 0099; e-mail: sshelton@thecwcgroup.com; website: https://world.cwclng.com.

SPE Middle East artificial lift conference and exhibition, November 28–29, 2018, Manama, Bahrain. Details: Society of Petroleum Engineers, Dubai Knowledge Village, Block 17, Offices S07-S09, PO Box 502217, Dubai, UAE. Tel: +971 4 390 3540; fax: +971 4 366 4648; e-mail: spedub@spe.org; website: www.spe.org/events/en/2018/conference/18meal/middle-east-artificial-lift-conference-and-exhibition.html.

7th Mediterranean bunker fuel conference, November 29–30, 2018, Athens, Greece. Details: Platts, 20 Canada Square, Canary Wharf, London E14 5LH, UK. Tel: +44 207 1766142; fax: +44 207 176 8512; e-mail: cynthia_rugg@platts.com; website: www.platts.com/events/emea/mediterranean-bunker-fuel/index.

CWC digital oil and gas partnerships summit, December 3–4, 2018, London, UK. Details: CWC Associates Ltd, Regent House, Oyster Wharf, 16–18 Lombard Road, London SW11 3RF, UK. Tel: +44 207 978 000; fax: +44 207 978 0099; e-mail: sshelton@thecwcgroup.com; website: www.cwcdigitalsummit.com.

Argus European LPG markets, December 3–5, 2018, London, UK. Details: Argus Media, Argus House, 175 St John Street, London EC1V 4LW, UK. Tel: +971 44 34 51 16; email: me.events@argusmedia.com; website: www.argusmedia.com/en/conferences-events-listing/european-lpg-markets.

8th practical Nigerian content, December 3–6, 2018, Uyo, Akwa Ibom, Nigeria. Details: CWC Associates Ltd, Regent House, Oyster Wharf, 16–18 Lombard Road, London SW11 3RF, UK. Tel: +44 207 978 000; fax: +44 207 978 0099; e-mail: sshelton@thecwcgroup.com; website: www.cwcpnc.com.

2nd Cuba energy, oil and gas conference, December 4, 2018, Havana, Cuba. Details: Global Event Partners Ltd, London Office, 20–22 Bedford Row, London WC1R 4JS, UK. Tel: +44 203 488 11 91; e-mail: enquiries@gep-events.com; website: http://cuba-energy.com.

Offshore leadership forum, December 4, 2018, Houston, TX, US. Details: PennWell, 1421 S Sheridan Road, Tulsa, Oklahoma 74112, US. Tel: +1 918 835 3161; fax: +1 918 831 9497; e-mail: sneighbors@pennwell.com; website: www.offshore-mag.com/offshore-leadership-forum-2018.html.

17th annual shutdowns turnarounds superconference, December 4–5, 2018, Calgary, AB, Canada. Details: Canadian Energy Research Institute (CERI), #150, 3512–33 Street NW, Calgary T2L 2A6, Canada. Tel: +1 403 282 1231; fax: +1 403 284 4181; e-mail: sjohnsgaard@ceri.ca; website: www.canadianinstitute.com/17th-annual-shutdowns-turnarounds-superconference.

Tank storage Germany 2018, December 5–6, 2018, Hamburg, Germany. Details: The Petroleum Economist Ltd, 69 Carter Lane, London EC4V 5EQ, UK. Tel: +44 207 779 8800; fax: +44 207 779 8899; e-mail: customerservice@petroleum-economist.com; website: www.tankstoragegermany.com.

SPE international heavy oil conference and exhibition, December 10–12, 2018, Kuwait City, Kuwait. Details: Society of Petroleum Engineers, Dubai Knowledge Village, Block 17, Offices S07–S09, PO Box 502217, Dubai, UAE. Tel: +971 4 390 3540; fax: +971 4 366 4648; e-mail: spedub@spe.org; website: www.spe.org/events/en/2018/conference/18hoce/kuwait-heavy-oil-conference.html.

2nd energy digitalization summit Middle East, December 11, 2018, Dubai, UAE. Details: Global Event Partners Ltd, London Office, 20–22 Bedford Row, London WC1R 4JS, UK. Tel: +44 203 488 11 91; e-mail: enquiries@gep-events.com; website: http://me.ed-summit.com.

Future energy Asia exhibition and conference, December 12–14, 2018, Bangkok, Thailand. Details: dmg :: events, 6th floor, Northcliffe House, 2 Derry Street, London W8 5TT, UK. Tel: +44 20 3615 2873; fax: +44 20 3615 0679; e-mail: conferencemarketing@dmgevents.com; website: www.futureenergyasia.com.

Winter oil market outlook

October **2018**

The oil market in the winter season is generally characterized by demand for diesel, particularly in the northern hemisphere, leaving product markets more vulnerable to developments related to the middle of the barrel. In 2017, refining margins weakened in winter and product markets were mainly sustained by firm gasoil demand.

Looking back, European diesel demand growth dropped last winter in 4Q17 from levels observed at the beginning of the year and deteriorated further in 2Q18. The trend in 3Q18 so far confirms market weakness. This general slowdown in the European gasoil market is largely a consequence of the 2015 diesel emissions controversy and higher global oil prices. Hence, in 2018 the European gasoil market has transitioned from being the fastest-growing diesel market to the slowest among selected countries.

In the US, while heating oil has seen pressure due to substitution by natural gas, demand for middle distillates has nevertheless been strong on healthy economic activity, including manufacturing, construction and freight movement. In the winter of 2017, refinery runs in the US were at record highs due to Hurricane Harvey, though this is not expected to be repeated this winter. Following this year's driving season, refining margins have begun to decline seasonally, in addition to being pressured by smaller crack spreads, which could lower refinery throughput further in the months to come.

In non-OECD countries, strong economic growth, particularly in India and China, has been supportive of industrial activities, such as heavy equipment operations for mining and farming and power generation, as well as passenger and commercial transportation. Diesel growth in India for 2018 continues to see strong momentum, as well as ongoing improvements in LPG requirements for residential use. In China, LPG and gasoline are the engines of demand growth, with seasonal agricultural activities providing further support for diesel demand in the coming months.

With regard to oil inventories, OECD stocks have witnessed a downward trend since the implementation of the 'Declaration of Cooperation', with an inventory draw in all product categories compared with a year earlier. As per the latest available data, OECD commercial product stocks stood at 41 million barrels below the seasonal average.

Looking ahead, based on current market developments, global product markets are projected to see some weakness, compared with the same quarter a year earlier. In Europe, gasoil cracks are expected to continue to come under pressure, as diesel-powered vehicles remain under scrutiny. At the same time, gasoline markets in the region are expected to show some counterseasonal gains, providing moderate support to otherwise softening European product markets.

In the US, the diesel market will be impacted by various factors such as weather conditions during 4Q18 and 1Q19 and the performance of the industrial and construction sectors. Meanwhile, product demand in non-OECD countries, mainly in China and India, is expected to be driven by positive GDP growth projections for those economies. In addition, limitations in refining capacity in Latin America and Africa, due to a lack of investment, will most likely continue to encourage product imports, providing additional support to global gasoline and middle distillate crack spreads. However, the current weakness in some emerging market currencies and subsidy reductions could negatively impact product demand in the emerging markets in the months to come.

MOMR ... oil market highlights

October 2018

Crude oil price movements — In September, the OPEC Reference Basket increased sharply by almost seven per cent, or $4.92/barrel m-o-m, to average $77.18/b the highest since October 2014. Crude oil futures prices also increased for the month, mainly supported by geo-political tension, growing concerns over a shortage in global oil supply and low US oil inventories, particularly in Cushing, Oklahoma. ICE Brent was $5.27 higher at $79.11/b compared with the previous month, NYMEX WTI was up $2.24 at $70.08/b and DME Oman increased by $6.08 to $78.75/b. Year-to-date (y-t-d), ICE Brent was $20.23 higher at $72.74/b, NYMEX WTI increased by $17.43 to $66.79/b and DME Oman was up $19.25 at $70.48/b, compared to the same period a year earlier. The Brent-WTI spread widened to average $9.02/b for the month. Speculative net long positions ended mixed, significantly higher for ICE Brent, while lower for NYMEX WTI. As for market structure, the backwardation in Dubai expanded sharply in September, while that of WTI eased. The Brent market structure flipped into backwardation amid concerns over a shortage global oil supply. Apart from Asian grades, the global sour discount to sweet crudes decreased due to an anticipated tightening of sour crude and high availability of sweet crude.

World economy — The global economic growth forecast for 2018 was revised down slightly by 0.1 percentage point (pp) to now stand at 3.7 per cent, due mainly to slowing growth in some emerging and developing economies. The 2019 forecast remains unchanged at 3.6 per cent. In the OECD, growth in the US is assessed unchanged at 2.9 per cent in 2018 and 2.5 per cent in 2019 and Euro-zone growth remains at 2.0 per cent for 2018 and 1.9 per cent for 2019. GDP growth in Japan remains at 1.1 per cent in both 2018 and 2019. In the non-OECD countries, India's and China's growth forecasts remains unchanged at 7.6 per cent and 6.6 per cent in 2018, respectively, and 7.4 per cent and 6.2 per cent, respectively, in 2019. Growth in Brazil was revised down by 0.1 pp to 1.1 per cent in 2018, and by 0.2 pp to 1.8 per cent in 2019. Russia's GDP growth forecast is unchanged to stand at 1.6 per cent in 2018 and 1.7 per cent in 2019.

World oil demand — In 2018, world oil demand growth is estimated at 1.54 million barrels/day, following a downward revision of around 80,000 b/d from the previous month's assessment, mainly to reflect the most up-to-date data in OECD Europe and the Middle East, as well as the latest developments in the economies of in Latin America. Total oil demand for the year is now pegged at 98.79m b/d. In 2019, world oil demand growth is forecast at 1.36m b/d, down by around 50,000 b/d from last month's projections, mainly reflecting adjustments in the economic projections for Turkey, Brazil and Argentina. As a result, total world oil demand is anticipated to reach 100.15m b/d. Oil demand growth is projected to be driven by Other Asia, led by India, followed by China, and OECD America. In 2019, OECD demand is forecast to grow by 250,000 b/d, while non-OECD countries will drive oil demand growth by adding an estimated 1.11m b/d.

World oil supply — Non-OPEC oil supply growth in 2018 is estimated at 2.22m b/d, an upward revision of 200,000 b/d from the previous month's assessment. The US, Canada, Kazakhstan and Brazil are expected to be the main drivers for y-o-y growth, while Mexico, Norway, Indonesia and Vietnam will show the largest declines. Total non-OPEC supply for 2018 is now estimated at 59.77m b/d. Non-OPEC oil supply growth in 2019 is forecast at 2.12m b/d, representing a downward revision of around 30,000 b/d from last month's projections. The US, Brazil and Canada are the main growth drivers, while Mexico, Norway, Indonesia and Vietnam are expected to see the largest declines. The 2019 non-OPEC supply forecast remains subject to many uncertainties, with potential skewed to the upside. Non-OPEC supply is forecast to average 61.89m b/d for the year. OPEC NGLs in 2018 and 2019 are expected to grow by 120,000 b/d and 110,000 b/d to average 6.36m b/d and 6.47m b/d, respectively. In September, OPEC crude oil production increased by 132,000 b/d to average 32.76m b/d, according to secondary sources.

Product markets and refining operations — Refinery margins in all the main trading hubs weakened in September, on retreating demand further exacerbated by nature-related events, despite the onset of peak refinery maintenance season. In the US, high refinery runs have kept product inventories well sustained fuelling bearish sentiment and thus softening the product market. In Europe, product markets lost ground, mostly pressured by gasoline, naphtha and fuel oil weakness, along with high feedstock costs, despite support from planned and unplanned outages reported during the month. In Asia, losses at the top and bottom of the barrel were partially offset by support from rising retail fuel prices due to a tightening gasoil market.

Tanker market — Dirty tanker market sentiment was mixed in September. On average, dirty tanker freight rates were up by four per cent from the month before, as a result of higher rates for Suezmax and Aframax, while VLCC rates remained flat. The overall dirty tanker market continued to suffer from an oversupply of ships, which mostly pressured freight rates. Relative gains were achieved in the Suezmax and Aframax classes due to the hurricane season, in addition to transit and port delays in several areas. Average clean tanker spot freight rates were also slightly positive, however gains were limited.

Stock movements — Preliminary data for August showed that total OECD commercial oil stocks rose by 14.2m b m-o-m to stand at 2,841m b. This was 165m b lower than the same time one year ago, and 47m b below the latest five-year average. Crude stocks indicated a deficit of 6m b, while products stocks witnessed a deficit of 41m b. However, OECD commercial stocks remain 271m b above the January 2014 level. In terms of days of forward demand cover, OECD commercial stocks rose by 0.5 days m-o-m in August to stand at 59.3 days. This was 3.8 days below the same period in 2017 and 2.5 days lower than the latest five-year average.

Balance of supply and demand — Demand for OPEC crude in 2018 is estimated at 32.7m b/d, 800,000 b/d lower than the 2017 level. In 2019, demand for OPEC crude is forecast at 31.8m b/d, around 900,000 b/d lower than the estimated level in 2018.

The feature article and oil market highlights are taken from OPEC's Monthly Oil Market Report (MOMR) for October 2018. 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

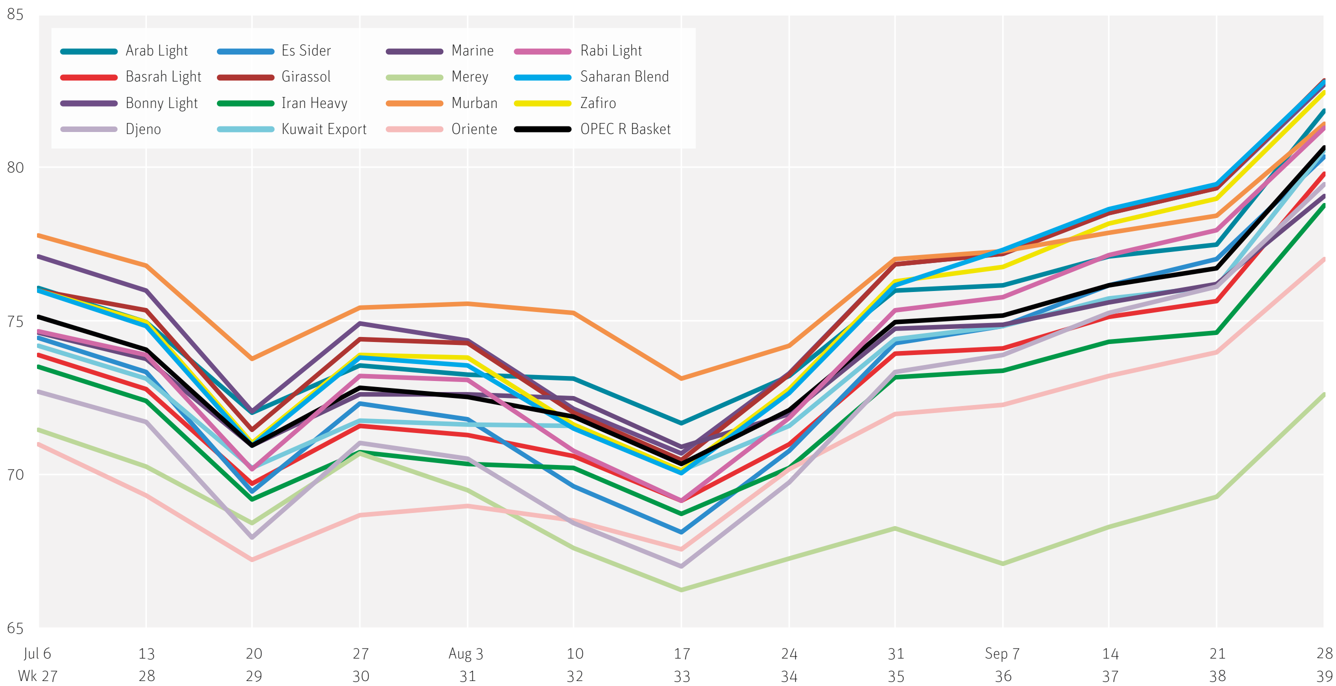
	2017				2018									Weeks 35–39/2018 (week ending)				
Crude/Member Country	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aug 31	Sep 7	Sep 14	Sep 21	Sep 28
Arab Light – Saudi Arabia	53.29	55.73	61.08	62.50	67.42	64.03	64.40	68.91	74.68	74.26	74.16	73.38	78.16	75.99	76.18	77.12	77.51	81.84
Basrah Light – Iraq	53.03	55.02	60.21	61.44	66.11	62.31	62.27	67.06	72.83	71.90	72.02	71.10	76.18	73.92	74.09	75.14	75.66	79.82
Bonny Light – Nigeria	56.55	57.97	63.29	64.64	69.92	66.02	67.05	72.75	77.73	74.86	75.06	73.29	79.45	76.83	77.20	78.53	79.35	82.71
Djeno – Congo*	55.89	56.71	61.75	62.83	67.42	62.97	64.08	69.31	73.84	70.58	70.91	69.66	76.18	73.34	73.90	75.28	76.10	79.46
Es Sider – Libya	55.07	56.48	61.58	63.09	68.23	64.36	64.89	70.43	75.25	72.27	72.43	70.74	77.10	74.28	74.85	76.18	77.00	80.36
Girassol – Angola	56.83	57.88	62.97	64.97	69.77	66.09	66.89	71.80	76.75	73.54	74.40	73.20	79.48	76.83	77.20	78.53	79.35	82.86
Iran Heavy – IR Iran	52.27	54.29	59.27	60.87	65.85	62.27	62.15	66.56	72.15	71.69	71.44	70.46	75.28	73.16	73.39	74.31	74.64	78.77
Kuwait Export – Kuwait	52.23	54.50	59.58	60.94	65.74	62.14	62.23	66.99	72.55	72.38	72.33	71.82	76.82	74.40	74.83	75.75	76.12	80.59
Marine – Qatar	52.91	55.14	60.47	61.54	66.36	63.14	63.39	67.63	73.36	72.94	73.06	72.45	76.45	74.77	74.89	75.62	76.21	79.08
Merey – Venezuela	49.13	50.70	55.86	56.04	59.14	57.68	56.94	60.25	68.29	69.25	70.37	67.38	69.31	68.23	67.09	68.27	69.26	72.63
Murban – UAE	54.94	57.39	62.76	63.84	68.81	65.88	66.31	70.97	76.71	76.18	76.00	74.91	78.75	77.02	77.29	77.87	78.44	81.41
Oriente – Ecuador	51.30	53.77	59.23	59.66	63.53	60.28	61.16	65.37	70.39	70.05	69.11	69.39	74.12	71.95	72.25	73.22	73.99	77.03
Rabi Light – Gabon	55.10	56.31	61.66	63.17	68.16	64.19	64.92	70.61	75.88	73.11	73.07	71.86	78.04	75.34	75.79	77.13	77.95	81.31
Saharan Blend – Algeria	56.32	57.88	63.23	64.74	69.93	66.01	66.69	72.13	77.25	73.37	73.93	72.64	79.55	76.18	77.30	78.63	79.45	82.81
Zafiro – Equatorial Guinea	56.57	57.73	62.75	64.34	69.23	65.19	65.91	71.43	76.68	73.84	74.05	72.74	79.10	76.28	76.77	78.18	79.00	82.44
OPEC Reference Basket	**53.44**	**55.50**	**60.74**	**62.06**	**66.85**	**63.48**	**63.76**	**68.43**	**74.11**	**73.22**	**73.27**	**72.26**	**77.18**	**74.96**	**75.19**	**76.18**	**76.71**	**80.64**

Table 2: Selected spot crude prices $/b

	2017				2018									Weeks 35–39/2018 (week ending)				
Crude/country	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aug 31	Sep 7	Sep 14	Sep 21	Sep 28
Arab Heavy – Saudi Arabia	51.78	53.99	59.03	60.47	65.24	61.60	61.49	66.47	72.24	72.30	72.50	72.35	77.14	74.92	75.14	76.01	76.28	81.13
Brega – Libya	55.34	56.78	61.99	63.54	68.68	64.96	65.64	71.33	76.35	73.47	73.63	71.94	78.00	75.48	75.75	77.08	77.90	81.26
Brent Dtd – North Sea	56.07	57.28	62.63	64.14	69.13	65.16	65.89	71.58	76.85	74.17	74.33	72.64	78.80	76.18	76.55	77.88	78.70	82.06
Dubai – UAE	53.51	55.63	60.81	61.61	66.15	62.69	62.76	68.29	74.20	73.61	73.09	72.47	77.22	75.03	75.76	76.59	76.81	79.73
Ekofisk – North Sea	57.15	57.85	63.28	64.98	69.99	65.81	66.63	72.61	78.28	73.99	74.54	72.84	79.30	76.85	76.85	78.08	79.37	82.91
Iran Light – IR Iran	54.45	56.25	62.12	63.37	68.32	62.64	63.44	68.76	74.60	72.56	72.10	70.34	76.40	74.91	75.25	75.27	76.16	78.92
Isthmus – Mexico	55.20	56.08	61.35	62.57	67.57	64.83	65.40	68.10	73.03	70.92	69.63	67.05	74.44	69.06	70.91	72.88	74.95	79.02
Oman – Oman	53.95	55.63	60.84	61.63	66.42	63.00	63.31	68.34	74.38	73.69	73.20	72.72	78.75	75.29	76.21	77.13	77.44	84.23
Suez Mix – Egypt	53.19	55.11	60.83	62.04	66.99	61.31	61.93	67.62	73.67	71.85	71.50	69.81	76.80	74.41	74.75	75.80	76.95	79.71
Minas – Indonesia*	49.20	50.55	55.50	56.95	60.91	58.15	58.90	63.53	68.26	76.72	73.51	66.90	72.02	69.31	70.49	71.32	71.66	74.60
Urals – Russia	54.89	56.81	62.53	63.75	68.69	63.01	63.63	69.16	75.23	73.55	73.20	71.62	78.50	75.68	76.45	77.50	78.65	81.41
WTI – North America	49.71	51.57	56.67	57.94	63.70	62.15	62.76	66.32	69.89	67.70	71.03	67.99	70.20	69.39	68.78	68.95	70.49	72.58

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, 2018 $/b



Graph 2: Evolution of selected spot crude prices, 2018 $/b

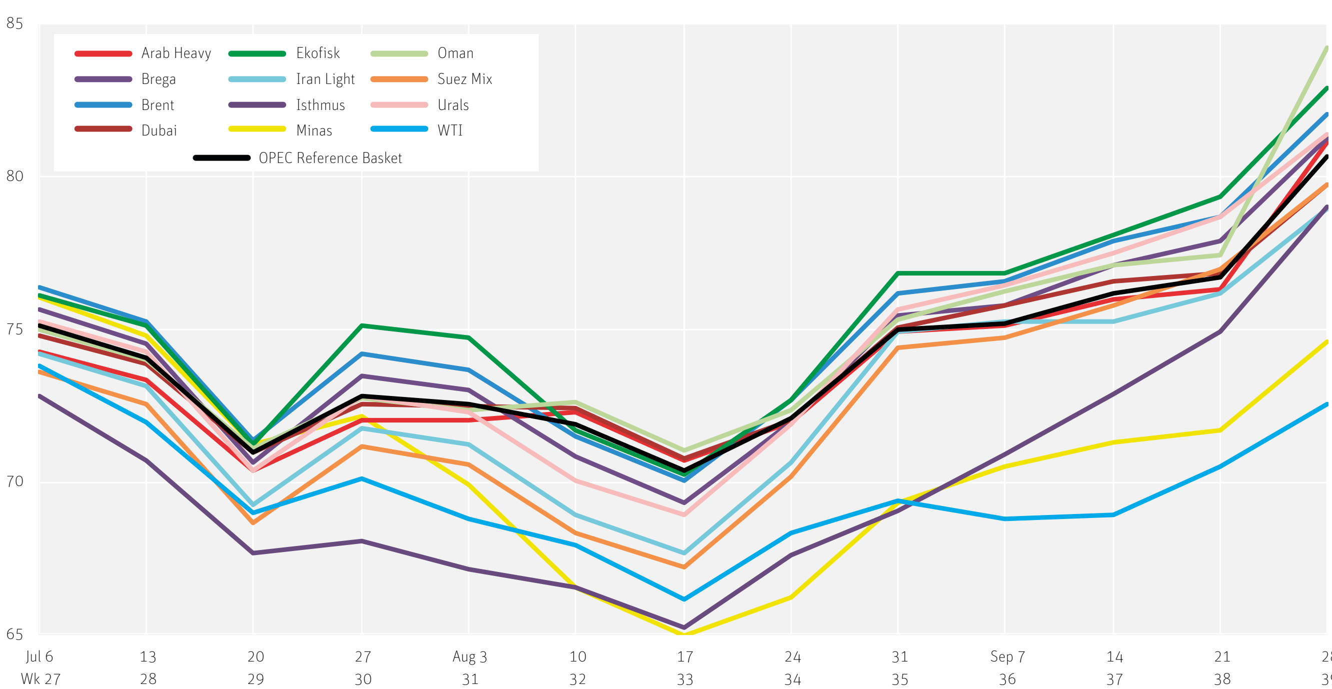


Table and Graph 3: North European market — spot barges, fob Rotterdam $/b

		naphtha	regular gasoline unleaded	diesel ultra light	jet kero	fuel oil 1 per cent S	fuel oil 3.5 per cent S
2017	September	55.76	79.57	71.33	70.72	49.82	47.00
	October	57.45	76.10	71.69	71.36	50.61	47.35
	November	63.44	82.88	75.35	78.12	55.64	51.68
	December	63.79	80.40	76.56	77.64	54.46	51.21
2018	January	65.48	85.60	82.15	83.10	57.65	54.41
	February	61.52	82.80	77.45	81.65	55.15	52.04
	March	63.29	79.34	78.64	82.03	55.15	52.00
	April	67.11	90.68	85.49	87.45	58.66	55.61
	May	73.73	96.58	91.30	93.03	65.69	62.64
	June	69.92	93.71	88.75	89.30	65.94	62.70
	July	71.04	93.79	88.00	88.79	67.51	64.45
	August	70.82	95.01	88.49	87.96	65.73	62.59
	September	74.71	95.03	92.86	92.51	67.75	64.72

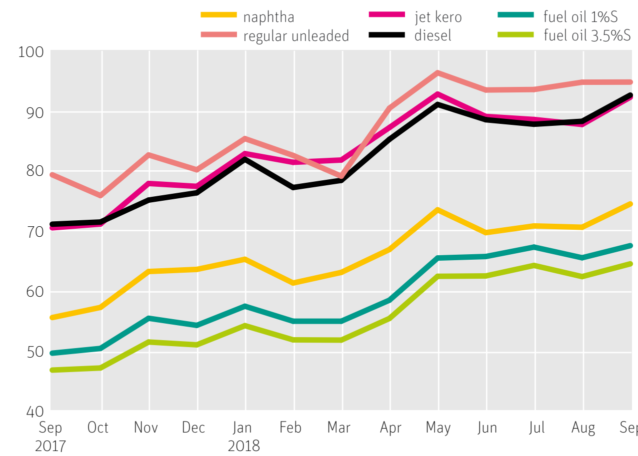


Table and Graph 4: South European market — spot cargoes, fob Italy $/b

		naphtha	premium gasoline 50ppm	diesel ultra light	fuel oil 1 per cent S	fuel oil 3.5 per cent S
2017	September	54.97	71.24	71.77	49.97	48.10
	October	56.67	68.30	72.03	51.51	48.88
	November	62.85	72.97	76.17	56.06	53.14
	December	62.72	72.85	77.24	55.51	52.65
2018	January	64.29	78.36	82.91	59.24	55.94
	February	60.54	74.32	78.73	56.29	53.44
	March	62.41	74.83	79.81	56.38	53.47
	April	66.59	83.43	86.62	59.63	56.90
	May	73.32	88.50	92.52	66.57	63.80
	June	69.53	85.99	89.18	67.38	64.27
	July	70.74	86.82	89.12	68.37	65.88
	August	70.61	88.59	89.63	66.43	63.97
	September	74.54	88.22	96.25	68.74	66.11

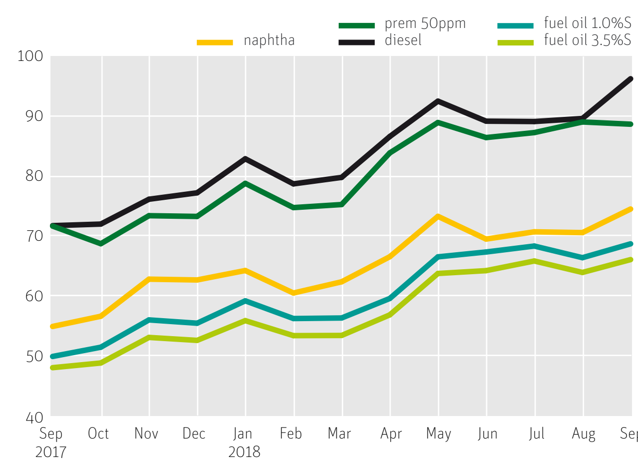


Table and Graph 5: US East Coast market — spot cargoes, New York $/b, duties and fees included

		regular gasoline unleaded 87	gasoil*	jet kero*	fuel oil 0.3 per cent S	fuel oil 3.0 per cent S
2017	September	77.64	68.78	76.57	58.56	48.81
	October	71.96	68.26	71.93	59.19	50.31
	November	77.29	75.33	77.53	64.25	55.65
	December	73.63	77.66	81.35	63.83	54.69
2018	January	80.00	83.24	85.59	70.96	58.29
	February	76.27	75.20	79.96	68.16	55.40
	March	76.67	75.15	79.88	68.49	55.31
	April	83.93	82.00	88.20	73.16	57.68
	May	89.38	87.73	93.51	78.54	64.86
	June	85.29	85.21	89.62	77.31	64.35
	July	86.95	85.04	90.39	82.02	67.99
	August	87.15	86.55	91.21	80.77	65.11
	September	87.45	91.41	94.01	82.60	65.97

* *FOB barge spot prices.*

Source: Argus. Prices are average of available days.

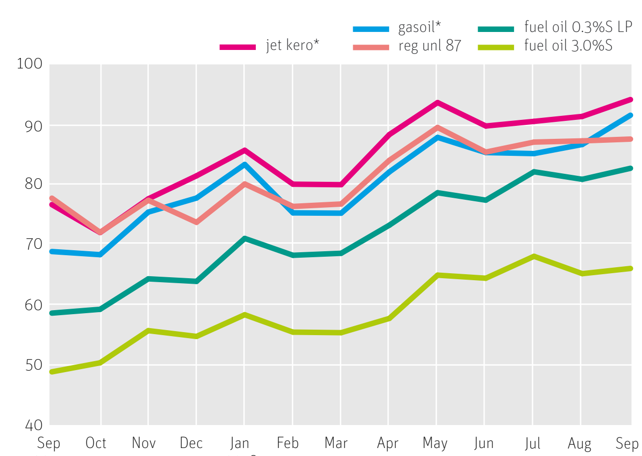


Table and Graph 6: Singapore market — spot cargoes, fob $/b

		naphtha	premium gasoline unl 95	premium gasoline unl 92	gasoil	jet kero	fuel oil 180 Cst	fuel oil 380 Cst
2017	September	55.20	70.43	67.55	68.49	68.08	55.73	50.55
	October	57.79	70.04	67.37	68.61	68.36	57.07	51.72
	November	64.67	75.59	73.07	73.14	74.02	62.02	56.67
	December	65.21	75.32	73.26	75.27	75.45	62.10	56.20
2018	January	66.26	78.61	76.65	80.78	81.00	64.40	58.85
	February	61.41	77.02	74.15	77.46	80.01	62.58	56.56
	March	63.08	77.12	74.25	77.75	79.00	61.74	56.05
	April	67.14	81.50	78.45	83.72	85.16	64.41	59.63
	May	74.66	87.60	85.29	89.52	89.93	73.38	67.07
	June	70.89	83.53	81.50	86.87	86.91	74.47	68.15
	July	72.25	83.11	81.08	85.55	87.31	76.38	69.98
	August	71.76	84.83	82.44	87.61	87.31	75.76	68.57
	September	75.39	89.53	87.51	92.76	91.75	77.59	70.54

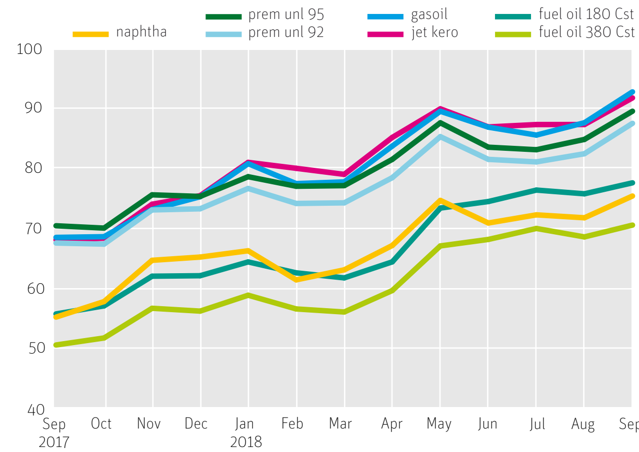
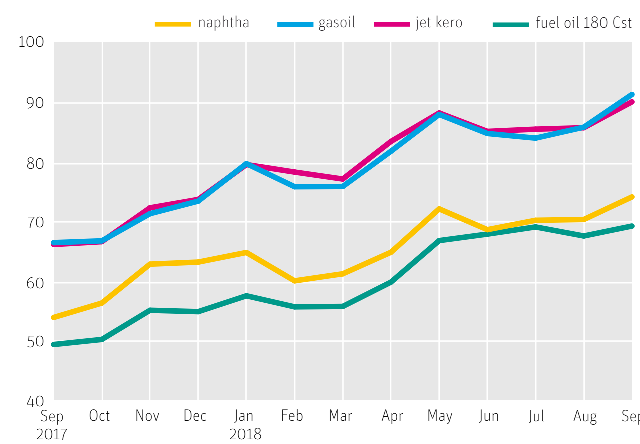


Table and Graph 7: Middle East Gulf market — spot cargoes, fob $/b

		naphtha	gasoil	jet kero	fuel oil 180 Cst
2017	September	54.09	66.55	66.24	49.59
	October	56.49	66.85	66.71	50.43
	November	62.97	71.37	72.35	55.29
	December	63.31	73.46	73.74	55.06
2018	January	64.91	79.71	79.55	57.70
	February	60.19	75.86	78.30	55.86
	March	61.36	75.90	77.14	55.93
	April	64.95	81.77	83.40	59.98
	May	72.17	87.89	88.14	66.89
	June	68.71	84.72	85.07	67.97
	July	70.27	83.95	85.44	69.16
	August	70.40	85.77	85.68	67.66
	September	74.16	91.22	89.99	69.31



Source: Argus. Prices are average of available days.

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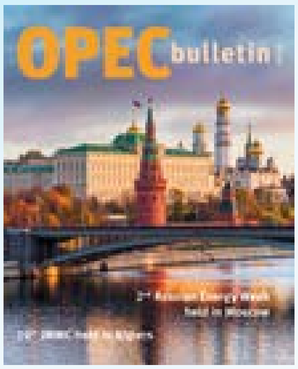

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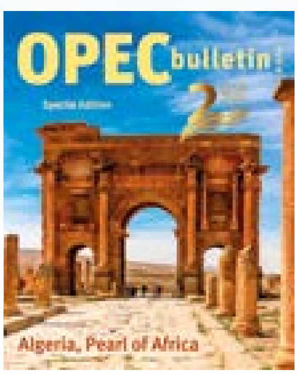

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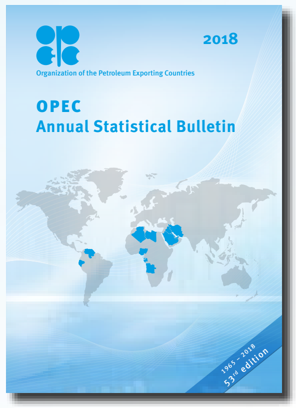

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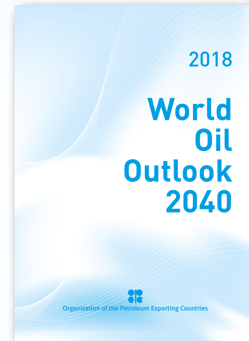

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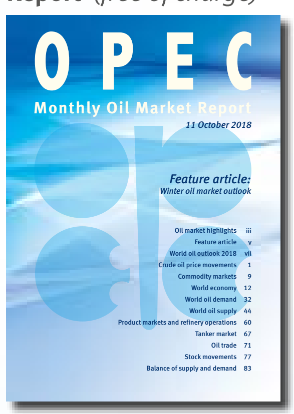

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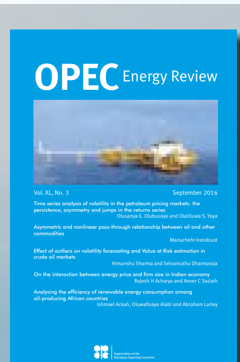

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