

OPEC bulletin 5-6/23

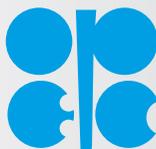
Historic Vienna
Hofburg hosts
OPEC Seminar

35th ONOMM
Precautious, proactive
and pre-emptive

IR Iran Visit
OPEC SG
makes first
official visit





OPEC 
**International
Seminar**

Save the date

5–6 July 2023

Hofburg Palace, Vienna, Austria

The 8th International OPEC Seminar will be held under the theme:

*‘Towards a sustainable
and inclusive
energy transition’*

The event of the year

By the time this edition of the OPEC Bulletin is rolling off the press, the latest OPEC International Seminar will be very present in the minds of everyone within the world energy community.

Though it is meant to be held every second year, the last time the OPEC Seminar was held (the 7th) was in June 2018. Since then, it has been put on hold due to the COVID-19 pandemic. Thus, this year's Seminar (the 8th), to be held from 5–6 July at the Hofburg Palace in Vienna, is being met with especially high excitement and interest after a five-year break.

This year's theme, 'Towards a Sustainable and Inclusive Energy Transition', gets right to the heart of the biggest topic of the day affecting the oil market and global energy security as a whole. The 8th OPEC International Seminar will thus focus on key issues pertaining to the energy transition, including energy security, technological innovation, environmental matters, sustainable development, energy policies, along with broader trends in the world economy.

Once again, a high-level group of top people from the oil industry and energy world will be sharing their wisdom and thoughts. It is also a perfect venue for participants to reacquaint themselves with old friends and contacts after a long hiatus.

Running parallel to the two-day 8th Seminar programme, the Seminar Exhibition will allow exhibitors and attendees to shine a spotlight on the global energy agenda and its most pressing challenges and opportunities, including trends and innovations related to the latest technologies and developments across the industry's entire value chain. This will help build bridges for future dialogue and cooperation.

OPEC Secretary General Haitham Al Ghais put it well when he said: "The OPEC International Seminar has an outstanding record for both the calibre of participants and the high level of discussions that take place on the leading issues affecting the energy sector, especially at this critical time in the global industry. We are looking forward to welcoming all our guests to Vienna for what will be a truly memorable and informative event."

The initial OPEC Seminar was held in Vienna in the summer of 1969, under the title 'International oil and

the energy policies of the producing and consuming countries'. This was followed by further seminars in 1978, 1979 and 1981, and in 1992 the Organization held a one-off Seminar on the Environment in the lead-up to the Earth Summit in Rio de Janeiro.

The latest in the current series of seminars started in 2001 and has provided an exciting platform with which to examine key industry issues and develop new opportunities for dialogue and cooperation.

The event has been increasing in size and scope over the years — with an expanding range of subjects to match its growing reputation — to become a premier event on the world energy calendar. Back in 1978, it was attended by around 200 participants, while at the last seminar in 2018, a record 950 participants attended from over 50 countries.

The venue for this year's Seminar is once again the Hofburg Palace. A lot of history has been written here, including a summit between Soviet leader Nikita Khrushchev and US President John F Kennedy in 1961. It was the backdrop for the Congress of Vienna in 1814 and 1815, chaired by the legendary Austrian statesman Prince Klemens Wenzel von Metternich. That meeting is credited by many as having created long-term stability across Europe.

The emphasis on dialogue and stability will also be front and centre at the upcoming Seminar, where history will once again be made. At OPEC, we believe in continuing to develop existing and new avenues of cooperation, with innovative thinking and collaboration on key issues, many of which are complex, broad and interrelated.

The enthusiasm with which this Seminar is being approached shows that the issues of energy security and the energy transition remain front and centre for everyone. In this regard, oil is expected to remain the main source of energy for the planet until at least 2045, according to OPEC analysis. With population and energy requirements growing, all forms of energy and all technologies to help reduce emissions will be needed to ensure no one is left behind in the energy transition.

With that, we hope those attending the 8th OPEC International Seminar enjoy the event. 



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This month's cover shows the Penang Bridge in Malaysia (see feature on page 62). Image courtesy of Shutterstock.

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OPEC Membership and aims

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



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

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8th OPEC International Seminar: events lineup

OPEC is excited to host the 8th OPEC International Seminar from 5–6 July at the Hofburg Palace in Vienna, which will bring the energy world together. The theme this year, ‘Towards a Sustainable and Inclusive Energy Transition’, is one that touches every citizen on this planet.

With an amazing lineup of high-level speakers, the event promises to be a highlight not only in this year’s energy calendar, but in the annals of OPEC history. The Seminar will feature many OPEC and non-OPEC oil ministers, CEOs of national and international oil companies, heads of international organizations and much more.

“The OPEC International Seminar has an outstanding record for both the caliber of participants and the high level of discussions that take place on the leading issues affecting the energy sector, especially at this critical time in the global industry,” stated OPEC Secretary General Haitham Al Ghais.

Day One

Day one of the event will see the opening not only of the OPEC International Seminar, but also the Seminar Exhibition, which will run parallel. It allows exhibitors and attendees to spotlight the global energy agenda, as well as its most pressing challenges and opportunities. This includes trends and innovations regarding technologies and developments across the industry’s value chain.

The opening ceremony will be held by the President of the OPEC Conference for 2023, the OPEC Secretary General, as well as host country dignitaries. The history of the event, along with the current global energy landscape and future outlook, will be featured.

This will be followed by a special introductory session.

The First Ministerial Session on ‘Market stability and energy security’ comes next, and will discuss the

Below: Evening view of the Vienna Hofburg palace.



importance of sustainable energy market stability. In the case of the oil market, this means balanced and sound fundamentals, as well as a platform to ensure that the necessary investments across the full industry value chain are in place to meet future demand. Recognizing the potential impact of excessive volatility on the oil market will be part of the discussion. This includes the impact of disconnects between the physical and paper markets, the role of speculative activities, and how policies and the environmental disclosure drive can lead to a shortfall in oil investment that leads to further energy insecurity.

The First High-level Roundtable on the 'Energy sustainability trilemma' will talk about the strains and conflicting targets related to energy security, energy affordability and the need to reduce emissions, which together comprise the energy sustainability trilemma. Focusing on one aspect of the trilemma while neglecting the others has clearly been shown to lead to unintended consequences, such as market volatility, price shocks and energy shortages. Protecting against these includes evolving and fine-tuning appropriate national and international energy policies, as



OPEC

International Seminar

well as taking a holistic view of the energy sustainability trilemma.

The Second Ministerial Session on 'Investments, finance and inclusive petroleum growth strategies' talks about investments as the lifeblood of the global oil industry. In OPEC's World Oil Outlook, oil industry investments needed to meet demand total \$12.1 trillion to 2045. Recent required annual levels have been significantly below this, due to industry downturns, the pandemic, and the increasing focus on environmental, social, and governance (ESG) issues. The Ministerial will discuss how industry stakeholders can help to ensure a long-term investment-friendly climate, with sufficient finance available and supportive and inclusive policies.



*Haitham Al Ghais,
OPEC Secretary
General.*



*Antonio Oburo
Ondo, President
of the Conference.*





The Second High-level Roundtable called ‘Energy investment: challenges and opportunities’ sees energy as a central pillar of global economic growth and social welfare, underpinning old and new industries, investments, innovations, access to health, education and job opportunities. Access to reliable and affordable energy sources for all cannot be achieved without regular and steady investment. Today, investors are often caught up in dilemmas that challenge their impetus to invest, for example, political and regulatory uncertainty, ESG issues and the knock-on impacts of the pandemic. OPEC’s World Oil Outlook sees global energy demand rising by 23 per cent in the period to 2045, and investment in all energy sources will be required to meet this growing demand.

High-level Roundtable 3 on ‘Technology and innovation for a low-emissions future’ will discuss the potential of technology advancements and innovations to improve performance across the entire oil industry value chain. Both are vital for improving efficiencies, extending the industry’s reach in terms of the way resources are identified and developed, enabling better optimization and automation, and in helping provide better, faster, cheaper, healthier and safer operations and products, along with significantly reducing the carbon footprint of the industry.

This will be followed by a Gala Dinner, to be held at the glorious Vienna City Hall, hosted by the President of the Conference Antonio Oburo Ondo and his home country, Equatorial Guinea. The City Hall is one of the most spectacular of the many monumental buildings located on the ring surrounding the first district. Built in the Gothic style, it has a tower similar to that of Gothic cathedrals and boasts stunning staterooms. At the dinner, five awards will be handed out. These include the Award for Research (established in 2004) and the Award for Journalism (established in 2009). Three new awards will also be included this year: the OPEC Award for the Best Energy Research Institute; the OPEC Award for the Best Energy Research Paper; and the OPEC Award for the Best Young Energy Professional.

Day Two

Day two will start with Ministerial Session 3 on ‘Pathways to just energy transitions’. One of the major future challenges is how to construct sustainable and reliable energy systems, which requires a delicate balance between various targets, such as reducing emissions,

energy availability and affordability, as well as energy security. This session will discuss the folly of focusing on only one of these over the others, which can lead to unintended consequences, such as market distortions, heightened volatility and even energy shortfalls. R&D and technology play an important role in helping improve the environmental credentials of all energies, thus helping the world move towards an inclusive and just energy transition for all.

High-level roundtable 4 on ‘Eradicating energy poverty’ is the next event. It will discuss what is required to help eradicate energy poverty amid disruptions related to the impacts of the COVID-19 pandemic, geopolitics and the global economic situation. At present, the world is falling behind in the attainment of UN Sustainable Development Goal (SDG) 7, related to energy poverty eradication, among others. The roundtable will emphasize the importance of international cooperation and finance, which are fundamental factors for achieving progress on SDGs, including on universal energy access, so that no one is left behind as the world looks at a just and inclusive energy transition.

‘The pace of energy transitions and climate change policies’ is the topic of High-level Roundtable 5, which will examine how to strike a balance between satisfying the energy needs of the global economy and building a comprehensive, resilient, sustainable, and climate-friendly energy system that supports and enables sustainable

development. This is one of the key challenges of the current generation. Besides national policies, a stronger role for international climate change policy has been called for, recognizing that the choice of a climate mitigation pathway must be inclusive and just.

In Ministerial Session 4 on ‘Diversifying energy economies’, the increasingly stringent climate mitigation policies and actions and their implications for energy-exporting economies and their right to sustainable development will be examined. It will look at economic diversification and resilience as possible ways to provide innovative approaches to mitigate risks and offset any impacts arising from the implementation of climate response measures.

The final roundtable, High-level Roundtable 6 on ‘The role of international cooperation in diversifying economies’ will look at economic diversification and enhancing economic resilience, which can be achieved through a range of pathways. This includes examining the role of international cooperation and multilateral fora, which could play a key role in aiding the diversification of energy-exporting and importing economies through the facilitation of knowledge sharing and technological exchanges, as well as in the energy space through actions aimed at improving market stability.

The Seminar will end with a closing session summarizing the two days and looking forward into the future. 🌐



The Vienna City Hall will be host to the Gala Dinner concluding the Seminar's first day.

OPEC Awards at the OPEC International Seminar

At the 8th OPEC International Seminar, OPEC will once again honour distinguished individuals who have made outstanding oil industry contributions in the areas of research and journalism. The ‘Award for Research’ was first handed out in 2004 at the 2nd OPEC International Seminar and the ‘Award for Journalism’ was established in 2009.

The ‘OPEC Award for Research’ is given to researchers who have dedicated their careers to research and analysis of important oil-related issues, contributed to improving the understanding of the key determinants that support oil market stability, and who have exhibited a consistently critical yet impartial view on oil-related issues in public debates and discourse.

The successful candidate will also have exhibited a high level of objectivity, integrity and innovative thinking throughout his or her career and furthered knowledge in the oil industry by encouraging and promoting young researchers from OPEC Member Countries and the developing world.

The past recipients of the ‘OPEC Award for Research’ are:

- Professor Robert Mabro in 2004;
- Peter Odell in 2006;
- Professor Paul Stevens in 2009;
- Professor Øystein Noreng in 2012;
- Professor Vaclav Smil in 2015; and
- Dr Bassam Fattouh in 2018.



The 'OPEC Award for Journalism', which is open to both print and broadcast journalists, is granted to an experienced journalist or media organization that has delivered objective and balanced reporting/analysis of the oil market and related issues for more than ten years.

In recognition of the evolving nature of oil market reporting, journalists who have utilized online platforms for objective and balanced reporting have also been considered.

The past recipients of the 'OPEC Award for Journalism' are:

- Dr Walid Khadduri in 2009;
- Bloomberg OPEC news team in 2012;
- Margaret MacQuaile in 2015; and
- Barbara Shook in 2018.

The selection process for the Award recipients is the responsibility of two high-level committees of research experts, and media and journalism professionals,

whose knowledge and experience give them unique insights into their respective fields.

The research panel this year are also responsible for the selection process of three further categories. These are:

- The OPEC Award for the Best Energy Research Institute, which looks to honour energy research institutes that have made outstanding contributions to increasing knowledge of the oil and energy industry;
- The OPEC Award for the Best Energy Research Paper, which looks to honour scholars who have made outstanding contributions to enhancing knowledge of the energy industry; and
- The OPEC Award for the Best Young Energy Professional, which honours young scholars who have made outstanding contributions to enhancing knowledge of the energy industry.

This year's awards will be presented at a special Gala Dinner to be held on the evening of 5 June at Vienna's Rathaus (Town Hall).

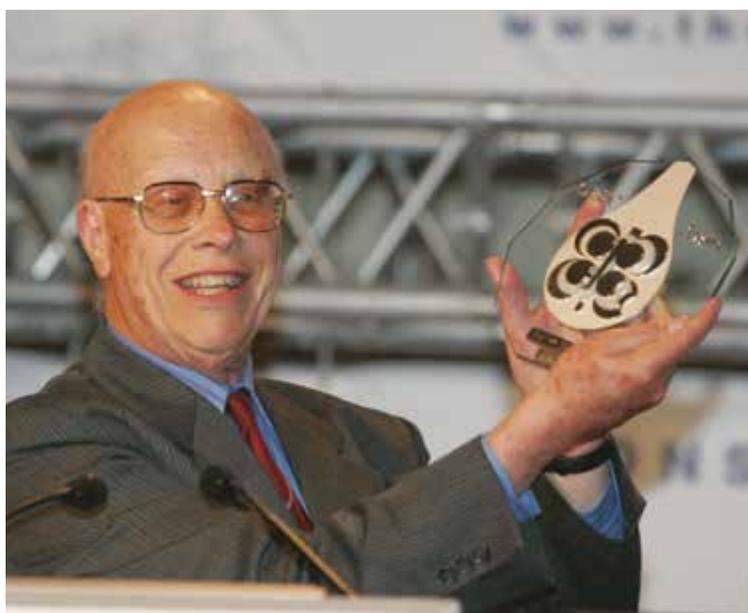
2004

Professor Robert Mabro with the 'OPEC Award for Research' in 2004.



2006

Professor Peter Odell, economist, with the 'OPEC Award for Research' in 2006.



L-r: Professor Paul Stevens (l), an Emeritus Professor at the Centre for Energy, Petroleum and Mineral Law and Policy of the University of Dundee, receiving the 2009 'OPEC Award for Research'; Eng José Maria Botelho de Vasconcelos, Angola's Minister of Petroleum and OPEC Conference President; and Abdalla Salem El-Badri, then OPEC Secretary General.



2009

Dr Walid Khadduri received the 2009 'OPEC Award for Journalism'.



Professor Øystein Noreng receiving his 2012 'OPEC Award for Research' from Abdul-Kareem Luaibi Bahedh (r), OPEC Conference President and Iraqi Oil Minister; and Abdalla Salem El-Badri (r), then OPEC Secretary General.



2012

The 'OPEC Award for Journalism' in 2012 went to Bloomberg's OPEC news team.



Dr Vaclav Smil, Distinguished Professor Emeritus, University of Manitoba, won the 2015 'OPEC Award for Research'.



2015

Margaret MacQuaile, of the Platts news service, won the 2015 'OPEC Award for Journalism'.



Professor Bassam Fattouh, Professor at the School of Oriental and African Studies, and Director of the Oxford Institute for Energy Studies won the 2018 'OPEC Award for Research'.



2018

Barbara Shook, energy journalist and analyst and former Houston Bureau Chief, and Senior Reporter-at-Large and Analyst at the Energy Intelligence Group, won the 2018 'OPEC Award for Journalism'.





The first **OPEC Seminar** was held in Vienna in June 1969 under the theme 'International oil and the energy policies of the producing and consuming countries'.



The OPEC International Seminar: A history

It is one of the most tangible manifestations of OPEC's commitment to dialogue, with the much-anticipated OPEC International Seminar today regarded as a premier event on the global energy calendar. Over the decades, the seminars have come in various forms, although the high-profile gatherings have been unified in their breadth of outreach. The OPEC Bulletin takes a look at the history of the event.

Professor Robert Mabro from the Oxford Institute for Energy Studies spoke at the **OPEC Seminar on the Environment**, in Vienna in April 1992.





The **OPEC Seminar** on 'The present and the future role of the national oil companies', was held in Vienna in 1977.



The **OPEC Seminar** on 'Energy and development: options for global strategies', was held in Vienna in 1981.

OPEC International Seminar participants are a proverbial who's who of the 'great and the good' in the oil industry, including ministers from OPEC Member Countries and other oil-producing and oil-consuming nations, as well as heads of intergovernmental organizations, chief executives of national oil companies (NOCs) and international oil companies (IOCs), academics, specialist media and other energy experts.

As the parameters in which the oil and energy industry operates have evolved, so too have the OPEC seminars, embracing areas such as global finance and sustainable development and the environment. Their reputation has grown in stature over the decades.

A respectable 200 participants attended the 1978 seminar; four decades later in 2018, there were nearly

five times that number, with 950 at the Hofburg Palace in the Austrian capital, Vienna.

The first OPEC Seminar was held in Vienna, from 30 June to 5 July 1969, with the theme 'International oil and the energy policies of the producing and consuming countries'. An eight-year wait then ensued until the next one, which turned out to be the first in a mini-series, listed as follows:

- 10–12 October 1977 — The present and the future role of the national oil companies;
- 9–11 October 1978 — Downstream operations in OPEC Member Countries: prospects and problems;
- 3–5 October 1979 — OPEC and future energy markets;
- 24–26 November 1981 — Energy and development: options for global strategies.



The **1st OPEC International Seminar** on 'OPEC and the global energy balance: towards a sustainable future' took place at the Intercontinental Hotel, Vienna on 28–29 September 2001.



The 2nd OPEC International Seminar took place at the Intercontinental Hotel, Vienna, on 16–17 September 2004, entitled ‘Petroleum in an interdependent world’.



The 3rd OPEC International Seminar took place from 12–13 September 2006 at the Hofburg Palace in Vienna, and was titled, ‘OPEC in a new energy era: challenges and opportunities’.

An important presaging in the increasing prominence that environmental issues would play was the one-off Seminar on the Environment on 13–15 April 1992, held to prepare for the Earth Summit in Rio de Janeiro in June of that year.

A new series

A new era began in 2001, with the launch of a new series called the ‘OPEC International Seminar’.

The 1st OPEC International Seminar took place at the Intercontinental Hotel, Vienna, from 28–29 September 2001. In his opening address at this Seminar, then Algerian Minister of Energy and Mines and President of the OPEC Conference, Dr Chakib Khelil, stated: “This Seminar, entitled ‘OPEC and the global energy balance: towards a sustainable future’ is the first full OPEC Seminar to be held in almost a decade. Its purpose is to provide the international energy industry with a special opportunity to examine in-depth topical issues that concern all of us, particularly with regard to the way the industry

is likely to evolve in the coming decades.

“The Seminar can be envisaged as the concluding event in OPEC’s protracted 40th anniversary celebrations. It comes exactly one year after the historic Second Summit of OPEC Heads of State, which was held in Caracas, Venezuela, on 27–28 September 2000.”

The 2nd OPEC International Seminar took place at the Intercontinental Hotel, Vienna, from 16–17 September 2004, entitled ‘Petroleum in an interdependent world’. Around 500 participants benefited from the two-day



The 4th OPEC International Seminar, 18–19 March 2009, again at the Hofburg Palace, under the theme ‘Petroleum: future stability and sustainability’.

Seminar programme, which included addresses from internationally-renowned speakers from many of the world’s biggest oil companies (both state-owned and private), as well as academics, analysts, and representatives from OECD nations and OPEC Member Countries, to name but a few.

Important questions were asked about the many energy challenges facing the world, from the hot topic of capacity expansion to the role of natural gas, technological and environmental developments, and the use of petroleum in the light of sustainable development.

Opening the Seminar, then President of the OPEC Conference and Secretary General, Dr Yusgiantoro, noted that its theme had been chosen because it embodied the principal challenges facing the petroleum industry. He said: “The world, and not just dominant sections of it, should be able to derive benefits from this remarkable natural resource, petroleum. Such benefits should be compatible with broader-based issues of mankind, such as sustainable development, environmental harmony and the eradication of poverty.”

The 3rd OPEC International Seminar took place from 12–13 September 2006, at the Hofburg Palace, Vienna. The emphasis was on longer-term issues, as was clear from its title ‘OPEC in a new energy era: challenges and opportunities’.

OPEC Conference President, Dr Edmund Maduabebe Daukoru, said in his welcoming address: “This theme has been chosen ... to reflect the fact that there have been fundamental changes to both the character and the dynamics of the world energy industry since the turn of the century, and that this may, in turn, affect the way the industry addresses the challenges that lie before it.”

It attracted some 500 participants and speakers, including oil and energy ministers, oil company executives, high-level consuming and producing government representatives and petroleum experts and analysts.

The 4th OPEC International Seminar took place from 18–19 March 2009, again at the Hofburg Palace, entitled ‘Petroleum: future stability and sustainability’.

The backdrop to this Seminar was the grave financial crisis that the world then faced. In his opening remarks, Eng José Maria Botelho de Vasconcelos, Angolan Minister of Petroleum and President of the OPEC Conference, said: “The financial and economic crises facing the global economy are having major knock-on effects on the energy industry, and the oil market in particular. This has led to a contraction in oil demand ... The implication of this situation for the future stability and sustainability of the petroleum industry will be critically examined in the course of the next two days. This will be done against the background of consensus in the





2012



The 5th OPEC International Seminar entitled 'Petroleum: fuelling prosperity, supporting sustainability', Vienna, 13–14 June 2012.

industry that, for the foreseeable future, fossil fuels will continue to be the major source of the world's energy supply."

2010s

The 5th OPEC International Seminar took place from 13–14 June 2012, entitled 'Petroleum: fuelling prosperity, supporting sustainability'.

This Seminar saw an address by the Federal President of the Republic of Austria, Dr Heinz Fischer, who emphasized that the relationship between OPEC, Austria and the City of Vienna had gone from strength-to-strength since 1965. President Fischer stated: "It's true ... It's a very positive relationship and we are proud to host you in Vienna." He added: "I very much value the efforts of OPEC to extend the dialogue and cooperation on energy issues."

The 6th OPEC International Seminar took place between 3 and 4 June 2015, under the theme 'Petroleum: an engine for global

development'. Eight hundred participants attended the Seminar, at which high-level speakers addressed the main issues surrounding international energy markets and spoke of the principle challenges facing the industry going forward.

Over a very busy two days, participants were treated to some 30 presentations covering all aspects of the energy industry, including global energy outlooks; oil market stability; production capacity and investment; technology and the environment; and prospects for the world economy.

In addition, many members of the international media, who find the OPEC Seminar an invaluable source of information on petroleum industry developments, were on hand to conduct numerous interviews, as well as listen to current modes of thinking.

The 2015 event also coincided with a special milestone in OPEC's close and highly valued ties with the Federal Republic of Austria and the City of Vienna. Qatar's Dr Mohammed Bin Saleh Al-Sada, Alternate President of the OPEC Conference, noted: "It is our golden anniversary ... the Organization feels privileged to

The 6th OPEC International Seminar, 3–4 June 2015, Vienna, under the theme 'Petroleum: an engine for global development'.



2015

have been able to call this outstanding international city home for the past half century.”

The 7th **OPEC International Seminar** took place from 20–21 June 2018, under the theme ‘Petroleum — cooperation for a sustainable future’. It tackled issues such as evolving a sustainable energy future; technology breakthroughs; the energy transition; the environment; oil industry challenges; investments and the global economy.

The OPEC Bulletin stated that the Seminar “broke new ground and set new records, with more than 950 participants from over 50 nations, around 80 speakers, 60 ministers and CEOs, 19 sponsors, 20 exhibitors, and 170 journalists, analysts and photographers. It saw the Secretariat’s audiovisual team take over 7,000 pictures and record more than nine terabytes of video coverage, while the Organization received thousands of interactions on both Twitter and Facebook.

In his welcoming remarks at the 7th OPEC International Seminar, OPEC Secretary General, Mohammed Sanusi Barkindo, said: “This year’s OPEC Seminar is the first to bring together so many producers, both OPEC and non-OPEC producers, as well as major consuming nations, elevating this 7th OPEC Seminar to a new level.

“They will speak alongside CEOs of national oil companies, international oil companies, independents, service companies and major think tanks; we have the heads of other international organizations; the head of the UNFCCC, IEA, IEF, GECF and a host of eminent industry stakeholders. I could go on. It is really a who’s who of global oil and energy industry leaders. The wisdom and

insights of these leaders will undoubtedly provide for rich and engaging discussions.”

In his concluding remarks, Barkindo added: “Reflecting on our discussions over this Seminar, one cannot help but conclude that the future success of this industry indeed lies in the three ‘c’s’: cooperation, cooperation and cooperation.”

Cooperation: an overarching theme

The value of dialogue and cooperation is central to the upcoming 8th International OPEC Seminar that will take place at the Hofburg Palace, Vienna, the sixth consecutive occasion at this historic Austrian landmark, from 5 and 6 July 2023. It will be held under the theme, ‘Towards a Sustainable and Inclusive Energy Transition’.

It has also been central to the importance OPEC places on working with all industry stakeholders, which is evident in the OPEC Research and Journalism Awards (see page 8). These are now a regular part of the Seminar and a means to honour distinguished individuals who have made outstanding contributions to the petroleum industry and oil-related issues.

In fact, at the upcoming Seminar there are now a number of a new awards: the Award for the Best Energy Research Institute; the Award for the Best Energy Research Paper; and the Award for the Best Young Energy Professional.

OPEC was set up in Baghdad in September 1960 around the premise of cooperation, it was central to the setting up of the OPEC Seminar series, and it will remain central to the future of it, and OPEC as an Organization, in the years ahead. 

The 7th OPEC International Seminar, 20–21 June 2018, Vienna, under the theme ‘Petroleum — cooperation for a sustainable future’, broke new ground and set new records.



Globetrotting during a break in the OPEC International Seminar

Delegates with an hour or two of spare time during the 8th OPEC International Seminar on 5–6 July may want to consider visiting one of Vienna’s world-class museums, or simply stroll in a park. The OPEC Bulletin recommends a few places near the Hofburg Palace — the Seminar’s main venue — to visit during a break in activities, or for those who wish to add some extra time to their travel itinerary.

The Globe Museum.



Österreichische Nationalbibliothek

Museums

A little-known gem in the heart of Vienna, the **Globe Museum** (*Globenmuseum*) houses a unique collection of globes, maps and cartographic innovations. Part of the Austrian National Library (*Österreichische Nationalbibliothek*), the museum also features geological and astronomical instruments and displays on the techniques used to perfect map-making and the accuracy of globes.

Housed in the Baroque-era Palais Mollard, the museum’s collection includes 770 objects, with 250 permanently exhibited. “It is the only institution where globes and globe-related instruments are acquired, studied and presented to the general public,” says the museum’s official website.

The Globe Museum is one of several exhibits and collections that are part of the Austrian National Library. The full list with information on opening times and ticket prices can be found here: <https://www.onb.ac.at/en/museums>

The **Albertina** — also just steps away from the Hofburg — is one of Vienna’s most visited museums. Its vast collection of contemporary and modern art includes a permanent exhibit of French impressionist painters.

View of the famous Albertina Museum.



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(Insider's tip: This museum is often crowded, so advance tickets are recommended.) <https://www.albertina.at/en/home>

Part of the Hofburg complex, the **World Museum** (*Weltmuseum*) is an "ethnographic museum" featuring collections from non-European cultures. The permanent collection includes art and artefacts from Africa, Asia and other regions. The museum's entrance is on Heldenplatz. <https://www.weltmuseumwien.at/en/>

Vienna is renowned for its world-class museums and many can be found across the tree-lined Ringstraße from the Hofburg. The imposing **Art History Museum** (*Kunsthistorisches Museum*) and the **Museum of Natural History** (*Naturhistorisches Museum*), both constructed in the late 19th century, face each other on the Maria-Theresien-Platz.

Beyond the aptly named Museumstraße is the Vienna **Museums Quartier**, featuring exhibits of well-known Austrian artists, modern art and architecture. There are also a number of art shops, cafés and restaurants within this popular quarter. Information about these and many other museums in Vienna can be found here: <https://www.wien.info/en/sightseeing/museums-exhibitions/top>

For visitors on the lookout for unusual souvenirs, gifts or a relaxing lunch, many local museums have excellent shopping and eating options. Especially notable are the gift shop at the **Museum of Modern Art** (*mumok*) in the Museums Quartier. The shop sells stylish and practical items ranging from pens and paper to kitchen utensils. The **Art History Museum café** is worth a visit, if not to partake in its tasty main courses or desserts, then to marvel at its stately surroundings and distinctive red-upholstered chairs and benches.

The Museum of Modern Art (mumok), located in the Museums Quartier.



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OPEC bulletin 5-6/23



View of the Museum of Natural History, seen from the Volksgarten.

a garden café, shady benches and extraordinary views of Vienna's rich sampling of imperial-era architecture.

Those looking for a bit of fresh air will also enjoy a stroll through the **Burggarten**,

which is part of the Hofburg complex. Once the private turf of emperors, the park was opened to the public following the fall of the Austro-Hungarian Empire in 1919. One of its most-photographed features is the statue of Mozart, but less visited by tourists is the memorial to the late Austrian Emperor Franz Josef I. The restaurant in the palace greenhouses, the **Palmenhaus**, is a favourite for lunch, coffee or an afternoon sweet.

Lipizzaner horses

The **Spanish Riding School**, another part of the Hofburg complex, features equestrian performances by the world-famous Lipizzaner horses. The classical horsemanship and the Spanish Riding School's high school were inscribed in the United Nations Educational, Scientific and Cultural Organization (UNESCO) Representative List of the Intangible Cultural Heritage of Humanity in 2015. In 2022, the knowledge concerning the breeding of horses was added to the UNESCO list. For more information, visit the Riding School's website: <https://www.srs.at/en/>



Horse stables at the Spanish Riding School.

Gardens

The royal residents who once lived in the Hofburg clearly enjoyed their outdoor spaces. Fortunately, these green spaces in the middle of the city have survived and today are popular with residents and visitors alike.

Brimming with summer roses and carefully tended gardens, the **Volksgarten** (*People's Garden*) across the **Heroes' Square** (*Heldenplatz*) from the Hofburg was dedicated by the Austrian Emperor Franz I as a public garden. Marking its 200th anniversary this year, it features

Shopping and dining

Vienna's central **First District** features many pedestrian streets and byways that are ideal for walking, gift buying or simply window-shopping. The selections range from high-end clothing and watches, to speciality shops selling anything from gloves to





chocolates. There are also many restaurants and cafés with shaded outdoor seating ideally suited for dining in the summer months. The elegant **Café Central**, located across from the Hofburg at the corner of Herrengasse and Strauchgasse, is a virtual institution in Vienna. Founded in 1876, its customers have included some of Austria's most famous writers, intellectuals and personalities, and the occasional queues of customers waiting for a table attest to its popularity to this day.

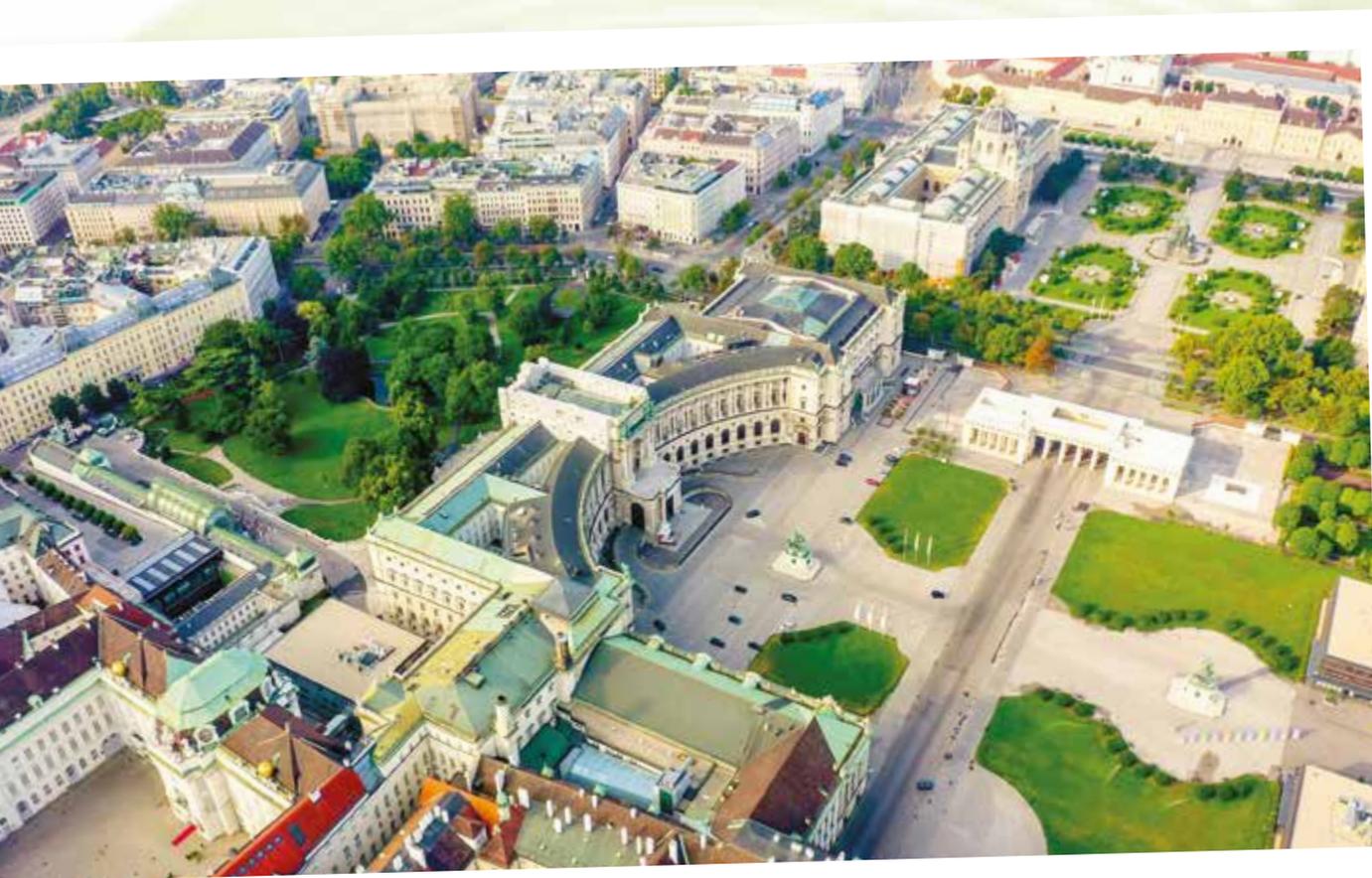
Further information

For those looking to pass time beyond the city centre, the **Vienna Tourism Office** is also close to the



A selection of pastries on display in Café Central.

Hofburg Palace. It is open daily from 9:00 to 18:00 at Albertinaplatz 1. There is also a branch at the **Vienna International Airport** arrival hall. Outside regular hours, information about museums, music, shopping and sightseeing is available online at <https://www.wien.info/en>



The Hofburg complex as seen from above.

The dancing congress



In 1814 and 1815, all eyes were on Vienna when the Austrian capital became the hub of European political activity. The Congress of Vienna, as it is known, saw four great powers — Russia, Great Britain, Austria and Prussia — meet with their French counterparts to reorganize the distribution of power in Europe. On the sidelines, however, it was not just politics, but dancing that was the order of the day. The OPEC Bulletin looks at the role the Hofburg Palace played in the festivities.

The Congress of Vienna marked the establishment of a new political and legal order for Europe after more than two decades of turmoil and war following the French Revolution. The defeat of Napoleon in 1813–14, and again at the Battle of Waterloo in 1815, led to representatives from across Europe meeting to debate a new order.

Taking the lead was Austrian Foreign Minister, Prince Klemens Wenzel von Metternich, dubbed ‘the coachman of Europe’. The decisions taken at the Congress, mostly in Metternich’s own Palais at the Ballhausplatz, were instrumental to 19th century European history, with its basic features lasting almost 100 years until the outbreak of World War I in 1914.

It was not just talk in Vienna, however, there was also an array of evening dances, balls, operas and social events to entertain those in the Austrian capital. In November 1814, it has been recorded that Beethoven performed his Symphony No. 7 in a concert attended by no less than the King of Prussia and two empresses.





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The Palais at the Ballhausplatz in Vienna.



Wikimedia Commons

Prince Klemens Wenzel von Metternich.

The social scene of the time is said to have inspired Belgian diplomat Charles Joseph de Ligne to say in a letter to French Foreign Minister Charles Maurice de Talleyrand that: “The congress of Vienna does not run, it dances.”

Many of the balls and dances took place at the Hofburg Palace, and while some view the festivities as a mere backdrop to the serious political negotiations of the Congress, others suggest that the events aligned with the political aims of the Congress organizers in bringing people and politicians together.

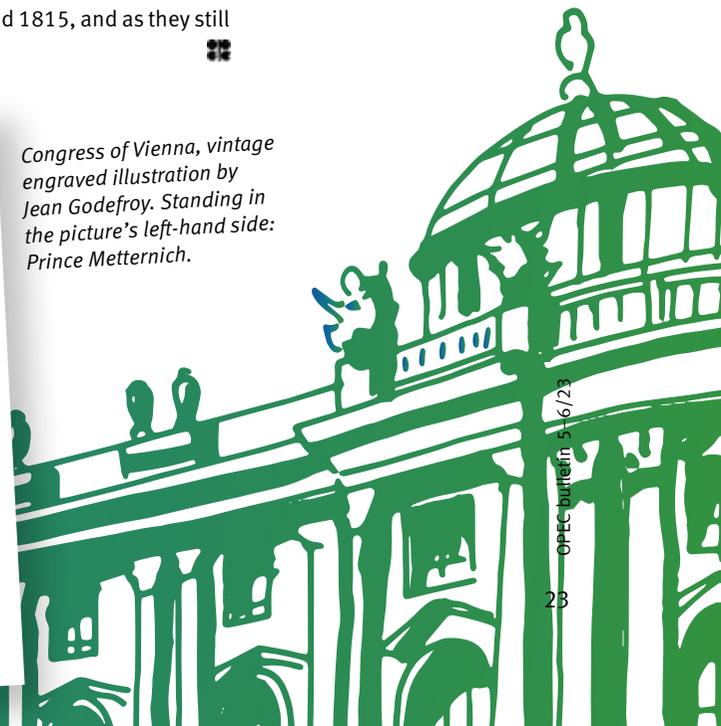
Viennese balls and dances and the Hofburg Palace continue to be intrinsically linked today. More than 400 balls take place in Vienna every winter, attracting visitors from all walks of life. Elegant formal attire, an opening fanfare, beautiful music, and graceful dancing — a Viennese ball remains a sight to behold.

As they did back in 1814 and 1815, and as they still do today, ‘Alles Walzer!’



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Congress of Vienna, vintage engraved illustration by Jean Godefroy. Standing in the picture’s left-hand side: Prince Metternich.



OPEC bulletin 5-16/23

Precautious, proactive and pre-emptive

Over the weekend of 3–4 June OPEC and non-OPEC Participating Countries in the Declaration of Cooperation (DoC) met in Vienna to discuss recent oil market developments, and a pathway forward for the DoC and its voluntary production adjustments. The OPEC Bulletin reports on what was achieved.

Following lengthy talks over the weekend of 3–4 June OPEC and non-OPEC Ministers in the DoC emerged to address the assembled global media to announce a decision that has been called both “comprehensive” and “mega”.

The resultant communique for the 35th OPEC and non-OPEC Ministerial Meeting (ONOMM) stressed the continued commitment of all countries in the DoC to achieve and sustain a stable oil market and to provide long-term guidance for the market. It also highlighted the successful approach of being precautionary, proactive, and pre-emptive, which has been consistently adopted.

Extension and baselines

The production adjustments already set for 2023, including individual ones announced by some countries in early April 2023, remain in place for the rest of the year.

The meeting also decided to adjust the level of overall crude oil production for OPEC and non-OPEC participating countries in the DoC to 40.46 million barrels per day (mb/d), starting 1 January 2024 until

Antonio Oburo Ondo, Equatorial Guinea’s Minister of Mines and Hydrocarbons and President of the Conference (C); Mohammad Al Shatti, Kuwait’s Minister of Oil and ONOMM Chairman (I); and Haithem Al Ghais, OPEC Secretary General.





Ministers, high-ranking officials and the Secretary General gather for a photograph at the 49th JMMC and the 35th ONOMM.

31 December 2024. This included new 2024 baselines for countries, and noted the need for further verification for Angola, Congo and Nigeria production levels from three independent sources before the next ordinary ONOMM that is set for 26 November, 2023. The individual production adjustments from April 2023 will also be carried over to 2024.

In addition, by the end of June 2024, all participating countries in the DoC will go through an assessment by three independent sources (IHS, Wood Mackenzie, and Rystad Energy) in order to identify countries' production capacities to be used for 2025 reference production levels. This will be coordinated by the OPEC Secretariat.

"This is a grand day for us, because the quality of the agreement is unprecedented," Saudi Arabia's Energy Minister Prince Abdul Aziz Bin Salman said in the press

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





OPEC Ministers and the Secretary General gather for a group picture at the 186th Meeting of the OPEC Conference.

conference, adding that the new set of production levels is “much more transparent and much more fair”.

Saudi Arabia’s extra

On top of the extensions and new baselines, Saudi Arabia also announced an additional downward production adjustment of 1 mb/d for July 2023.

“We want to just ice the cake with what we have done ... We will do whatever is necessary to bring stability to the market,” said Prince Abdul Aziz Bin Salman. He added that this could be extended beyond July if needed.

He added, when asked about the make-up of the additional adjustment, that it “will be a real million [b/d] ... We have always honored our commitments.”

The communique also granted the Joint Ministerial Monitoring Committee (JMMC) the authority to hold additional meetings, or to request an ONOMM at any time to address market developments, whenever

deemed necessary. It also reiterated the critical importance of adhering to full conformity to the production adjustment levels.

186th OPEC Conference

On 3 June the 186th OPEC Conference was also held at the Secretariat, with Antonio Oburo Ondo, Minister of Mines and Hydrocarbons, Equatorial Guinea, presiding over the Conference for the first time.

He said it was a privilege and honour to be President of the OPEC Conference and as a former Director General of his country’s national oil company, GEPetrol, he said he was “well aware of the heroic efforts undertaken by the Declaration of Cooperation since its inception in 2016.”

Oburo Ondo also welcomed a number of new ministers who have assumed their positions since the last meeting in December 2022.



These were: Pedro Tellechea, the new People’s Minister of Petroleum of Venezuela and Manaf Abdulaziz Al Hajeri, Kuwait’s Minister of Finance, Minister of State for Economic Affairs and Investments, Minister of Oil and Acting Minister of State for National Assembly Affairs. He also welcomed Ambassador Gabriel Tanimu Aduda, Permanent Secretary of

Nigeria’s Ministry of Petroleum Resources and its Acting Head of Delegation.

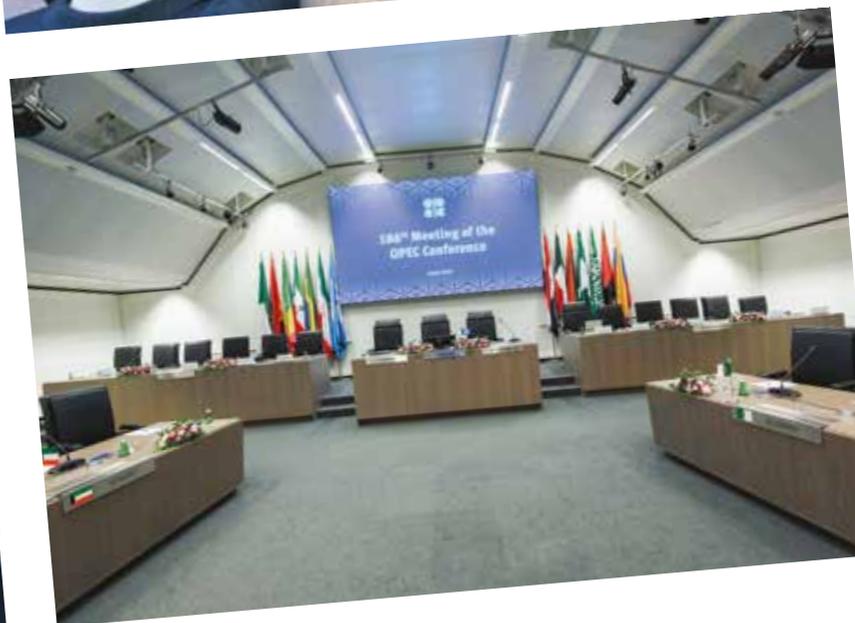
The Conference also expressed its sincere thanks to the previous Heads of Delegation and Ministers: Gabriel Mbagha Obiang Lima of Equatorial Guinea, Tareck El Aissami of Venezuela, Dr Bader Al Mulla of Kuwait, and Timipre Silva of Nigeria.

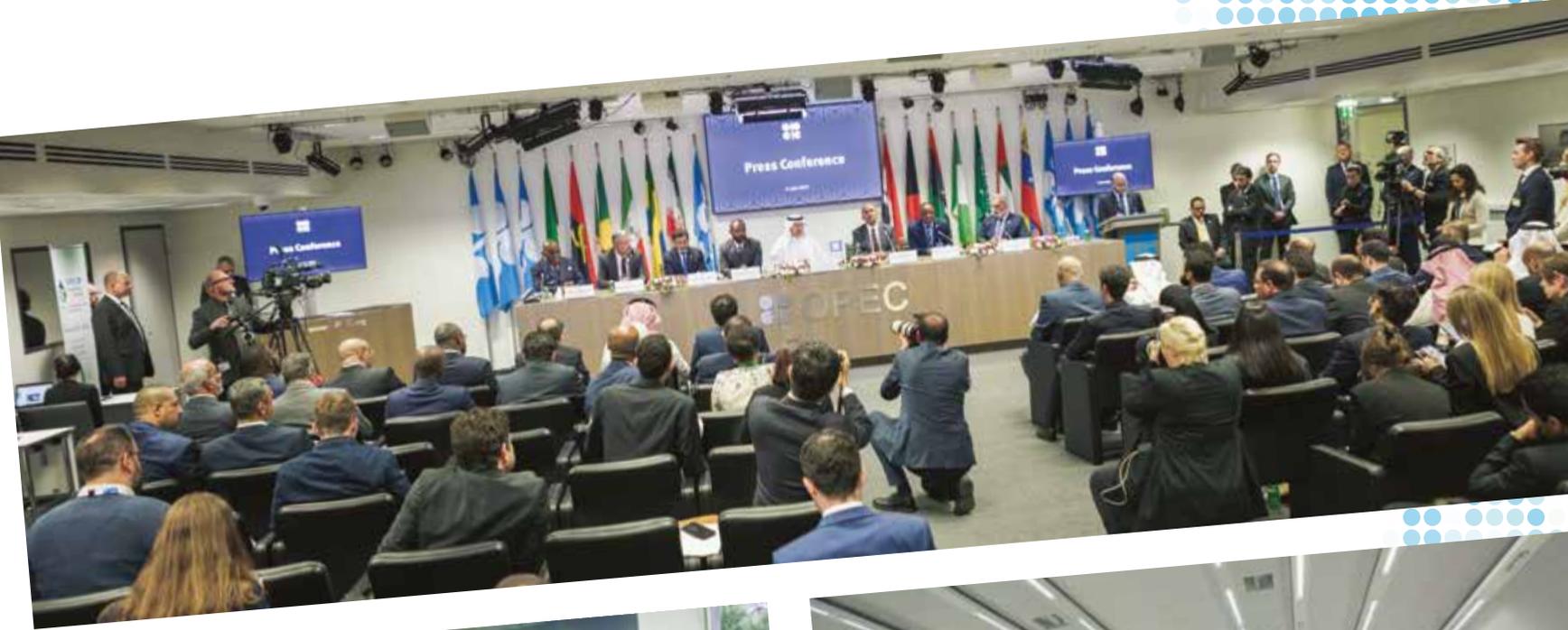
Oburo Ondo thanked his fellow ministers for the welcome, and praised Co-Chair of the ONOMM, Prince Abdul Aziz Bin Salman, and OPEC Secretary General, Haitham Al Ghais, for their strong and proactive leadership. 

Press Conference.



Impressions from the Conference





OPEC bulletin 5-6/23

IEA hosts gas and coal talks

The International Energy Agency (IEA) headquarters in Paris hosted more than 80 representatives from the energy industry, international institutions and academia in mid-May to discuss the outlook for natural gas and coal markets worldwide. This included challenges related to energy security, decarbonization strategies and the importance of balanced and just energy transitions.

The IEA-IEF-OPEC Symposium on Gas and Coal Market Outlooks is an integral part of the trilateral work programme between the IEA, the International Energy Forum (IEF) and OPEC. The other two are the IEA-IEF-OPEC Symposium on Energy Outlooks, which is held annually in Riyadh, and the IEA-IEF-OPEC Workshop on the Interactions between Physical and Financial Energy Markets, which was held most recently in Vienna in April.

The events were established by the three organizations and endorsed by oil and energy ministers at the 12th International Energy Forum Ministerial Meeting in Cancún, Mexico, in March 2010.

IEA Executive Director Fatih Birol provided opening remarks at the symposium, which was followed by remarks from IEF Secretary General Joseph Monagle. Behrooz Baikalzadeh, the Head of OPEC’s Petroleum Studies Department, delivered remarks on behalf of OPEC Secretary General, Haitham Al Ghais.

OPEC speaks

Baikalzadeh said that the collective efforts of these dialogue initiatives “continue to fortify the producer-consumer dialogue.”

He added that “the global challenges we face will only intensify in the years to come, and thus we must





continue to prioritize crucial global energy cooperation to help support stable energy markets, and evolve sound, robust, and objective policies, that benefit and promote future economic growth.”

From OPEC’s perspective, he said: “It is important to begin by emphasizing that in order to reach rising global energy demand, we will need all available energy sources.” According to the latest OPEC World Oil Outlook, fossil fuels will continue to play a major role in the energy mix. “Oil is projected to remain the largest contributor accounting for around 28 per cent, followed by gas at about 24 per cent and coal at almost 17 per cent.”

Regarding the themes of energy access and affordability, which will be discussed in session one,

Baikalzadeh stated, “allow me to say we still live in a world of haves and have-nots. Energy poverty, unfortunately, continues to be a reality in the developing world. As of 2020, about 733 million people still had no access to electricity, and roughly 80 per cent were in Africa. On top of this, approximately 2.4 billion were without access to clean cooking solutions in 2020.”

He added: “This is simply unacceptable. As energy stakeholders, we must unite to help to alleviate this scourge. OPEC will continue to work with all of its partners on the international stage to advocate for universal access to affordable energy.”

In terms of session two’s theme on energy transitions and reaching climate goals, he underlined that there is no one solution or one single approach. “Rather, the scale of the challenges brought on by energy transitions will require us to leverage all available energies and utilize all the latest technology. Our Member Countries are very active in this regard, such as with Saudi Arabia’s innovative ‘Saudi Green Initiative’ and the ‘Middle East Green Initiative’.”

These innovative and timely contributions, he said, “help underpin global efforts to address climate change while also respecting the core elements of the UNFCCC, particularly relating to equity, historical responsibility and national circumstances. This multifaceted approach will ensure balanced transitions that account for the needs of people in relation to their social welfare, the economy, and the environment.”



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Physical and financial energy markets in focus

In late April, high-level experts met for the 9th Joint IEA-IEF-OPEC Workshop on the Interactions between Physical and Financial Energy Markets. The OPEC Bulletin reports.

OPEC, the International Energy Agency (IEA) and the International Energy Forum (IEF) held the 9th Joint IEA-IEF-OPEC Workshop on the Interactions between Physical and Financial Energy Markets on 27 April at the OPEC Secretariat in Vienna.

The high-level meeting was chaired by Dr Ayed S Al-Qahtani, Director of OPEC’s Research Division, together with IEF Secretary General, Joseph McMonigle, and Toril Bosoni, Head of the IEA’s Oil Industry and Markets Division.

OPEC SG speaks

In pre-recorded welcoming remarks, OPEC Secretary General, Haitham Al Ghais, said: “What this past year has shown us is the need for the continued monitoring of factors driving volatility in energy-related financial markets, and how it can impact not only the short term, but the medium and long term too.”

He stated that these developments have been closely monitored by OPEC Member Countries and their partners within the Declaration of Cooperation (DoC). DoC participants, he said, “have when required, undertaken extraordinary efforts to stabilize the oil market in these extraordinary times, in the interests of producers, consumers, the oil industry and the wider global economy.”

He added that this group of countries “have been taking proactive and pre-emptive actions to stabilize

the market based on detailed research and analysis, including adjusting production both up and down over the past several years. This is on the physical side of the oil market.”

On the financial side, he noted, “we have been observing an accelerated trend in speculative trading, with investors and other players trading futures and options at faster rates, sometimes severely impacting



market liquidity and hindering price discovery mechanisms. There has also been a visible and more prominent role of Commodity Trading Advisors and algorithm trading.”

These were issues that were discussed in detail by participants during the workshop, one that was held under the Chatham House Rule.

IEF and IEA remarks

In his opening remarks, the IEF Secretary General, McMonigle, told the workshop: “Both financial and physical markets continue to tighten. Rising inflation and underinvestment in physical supplies expose new vulnerabilities. Producers and consumers must have this in mind when engaging risk in investment or to understand the evolution of energy costs for consumers.”

The challenges related to investment, highlighted by McMonigle, proved to be another key discussion point over the day’s proceedings.

Toril Bosoni of the IEA confirmed that volatility remains a risk for energy markets. The last three years have underlined the impact of supply and demand shocks, as well as of financial markets for energy price movements. The broader consequences concern particularly inflation, as well as investment to meet supply and respond to the energy transition.

She added that the IEA appreciates the depth and expertise shared by today’s speakers, who bring substantial insight to the workshop.

Discussions

Discussions during the workshop were structured into three sessions, grouped around the theme ‘Spot and paper markets: divergent trends amid low liquidity in futures markets.’

The first session was on the ‘Factors driving volatility in the energy-related financial markets’. This was followed by a second session that considered the ‘Impact of physical and paper oil interactions on market functioning and price discovery’. The third and final session covered ‘Ensuring adequate financing to sustain oil and gas developments’.

The Joint Workshop is a part of the trilateral work programme established by the three organizations and endorsed by energy ministers at the 12th International Energy Forum in Cancún, Mexico, in March 2010.

Since then, the joint IEA-IEF-OPEC meetings covering the evolving inter-linkages between physical and financial energy markets have developed into a unique, high-level technical event that bring together a diverse range of market participants to discuss issues that are not addressed in other high-level fora.

The next joint workshop on the topic is set to convene again in 2024.



OPEC hosts 23rd Coordination Meeting on Climate Change



Haitham Al Ghais, OPEC Secretary General, delivered remarks via a recorded message.

The 23rd Coordination Meeting on Climate Change, held at the OPEC Secretariat on 22 May via videoconference, was intended to assist OPEC and Declaration of Cooperation (DoC) countries in preparing for the upcoming 58th sessions of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation (SB58) of the United Nations Framework Convention on Climate Change (UNFCCC), which took place in Bonn, Germany from 5–15 June.

The session addressed the key outcomes of COP27, which was held from 6–18 November 2022, in Egypt, including energy-related matters and loss and damage. It also discussed recent developments in international efforts to establish a global instrument on plastics, the

role of the Intergovernmental Panel on Climate Change (IPCC) reports in climate policy and energy system diversification, as well as legal issues regarding the obligations of states in respect to climate change.

OPEC Secretary General Haitham Al Ghais, in a recorded message, stated that the IPCC reports address very important topics for OPEC Member Countries and DoC partners in the run-up to SB58 and COP28, to be held in OPEC Member Country the UAE from 30 November to 12 December of this year.

The IPCC Sixth Assessment (AR6) reports are expected to be the main scientific inputs to UNFCCC processes for some years, including the first global stocktake under the Paris Agreement.

“We are particularly proud to have an OPEC Member Country at the helm of the highly important COP meeting for the first time. Just recently, COP28 President-Designate, United Arab Emirates’s Dr Sultan Al Jaber, presented his larger ambitions for the COP,” said Al Ghais.

“As Chairman of Masdar and CEO of ADNOC, I can think of nobody who can provide a more balanced approach to climate change and the energy transition, or as I like to say, energy transitions, in the plural. He knows well the importance that oil will, and must play in the energy transition, and at the same time strongly supports advancements in renewables.”

These elements need to work together in order for a fair and inclusive transition to occur, he added.

The 23rd Coordination Meeting on Climate Change also marked the first time the new Environmental Matters Department (EMD) at OPEC hosted the meeting. The EMD grew out of the smaller Environmental Matters Unit as OPEC recognized the importance of this topic to its members. With a larger department, support should



Attendees of the 23rd Coordination Meeting on Climate Change at the OPEC Secretariat in Vienna.

be further expanded to both OPEC members and DoC countries.

OPEC had a delegation at the 58th Session of the IPCC which took place in Interlaken, Switzerland on 13–19 March, during which the Synthesis Report (SYR) of the IPCC AR6 was adopted.

“It is important to intimately know the contents of this report and their implications, as it not only summarizes the current state of knowledge of climate change, but it will also serve as a reference for the upcoming UN climate change negotiations, including COP28,” said the Secretary General.

Some of the key takeaways from the report will increase pressure on developing countries, including the recommendation for deep, rapid and sustained mitigation actions in this decade, he added.

A landmark agreement was achieved at COP27 to establish funding for loss and damage, he said, including a dedicated fund, which has been viewed as a great success.

“At this COP, other finance issues were heavily discussed, including the new collective quantified goal on

climate finance. Finance remains overarching, but also contentious.

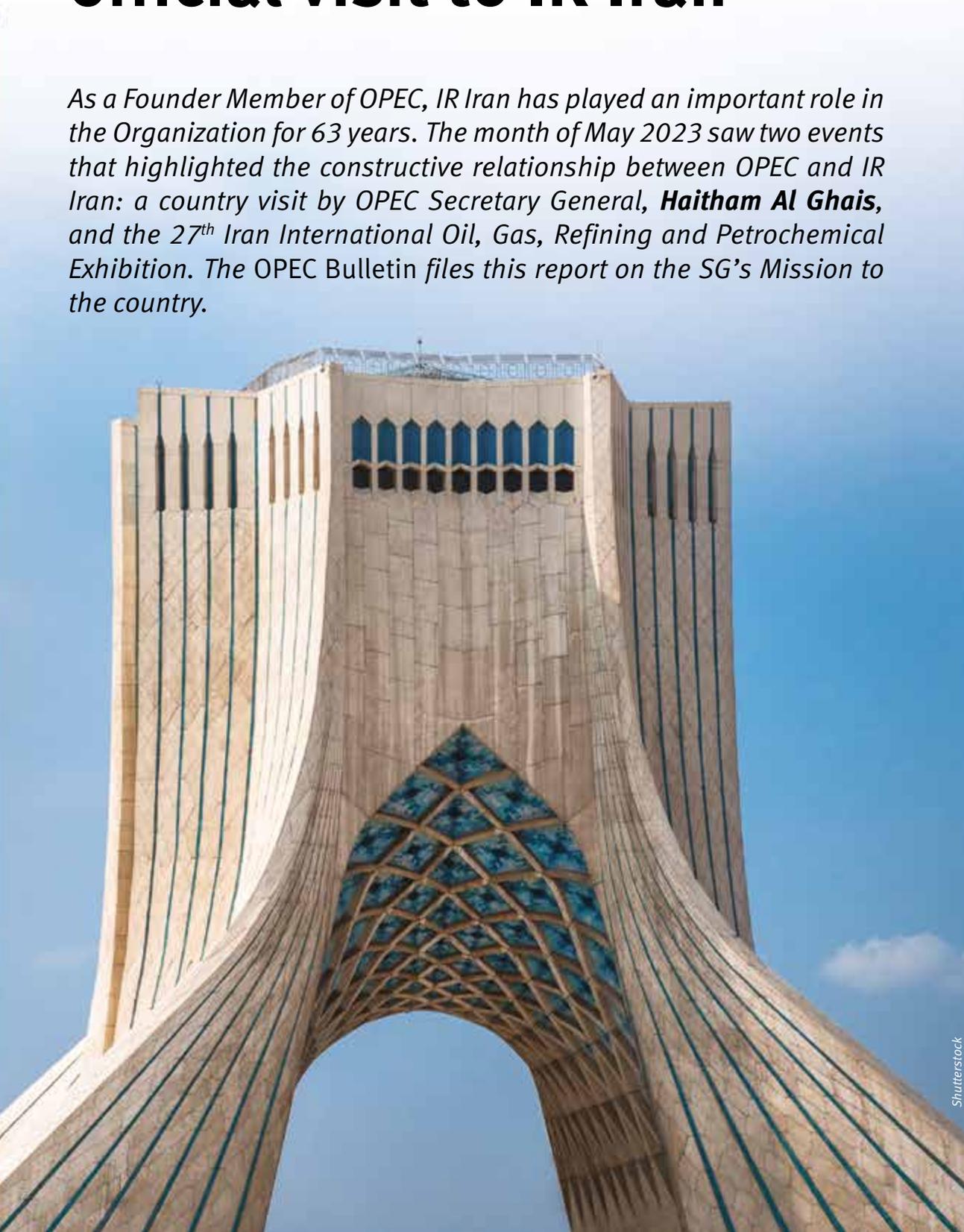
“Our urgent action is needed during UN climate change discussions. Oil production is the backbone of most of our economies, and its future is at stake in these international deliberations.”

He encouraged DoC countries to be present and active at IPCC talks, UN processes and OPEC Coordination Meetings.



OPEC SG makes first official visit to IR Iran

*As a Founder Member of OPEC, IR Iran has played an important role in the Organization for 63 years. The month of May 2023 saw two events that highlighted the constructive relationship between OPEC and IR Iran: a country visit by OPEC Secretary General, **Haitham Al Ghais**, and the 27th Iran International Oil, Gas, Refining and Petrochemical Exhibition. The OPEC Bulletin files this report on the SG's Mission to the country.*





Ayatollah Ebrahim Raisi, President of IR Iran (r), welcomed Haitham Al Ghais, OPEC Secretary General.

Meeting with the President

On his first official visit to IR Iran, Al Ghais met with the President of IR Iran, Ayatollah Ebrahim Raisi. The President emphasized the importance of the fruitful interaction of OPEC Member Countries, saying, “The Islamic Republic of Iran has always had a constructive cooperation with this Organization and we will continue and improve the level and strengthen this cooperation.”

According to the official webpage of the President of IR Iran, President Raisi stated that the philosophy behind the formation of OPEC was to support the rights of oil producers and prevent discrimination against them. The SG thanked the President for his leadership and the country’s significant contributions to OPEC, including its role in supplying the global oil market, along with its valuable support to the ‘Declaration of Cooperation’. The SG stated, “Excellency, we, at OPEC, are grateful for your leadership, and we are confident that IR

Iran will continue to play a key role in the Organization and the energy industry for decades to come.”

Meeting with the Minister

The SG also held a bilateral meeting with Eng Javad Owji, IR Iran’s Minister of Petroleum. The meeting took place in the build-up to the 186th Meeting of the OPEC Conference. The discussion covered a range of topics including oil market developments, energy security, the energy transitions and the investment challenges facing the industry. The SG also congratulated the Minister on a very successful 27th Iran International Oil, Gas, Refining and Petrochemical Exhibition.



Haitham Al Ghais, OPEC Secretary General (l), with Eng Javad Owji, Iranian Minister of Petroleum.

Interview with SHANA

During the Mission, the SG held an interview with the Iranian SHANA news agency and Iran Petroleum monthly. Al Ghais expressed his gratitude for the hospitality of IR Iran, saying, “First of all, I would like to thank the Ministry of Oil of the Islamic Republic of Iran and SHANA for taking the time to interview me. It’s a great pleasure to be in Tehran. As you may know, this is my first official visit to the Islamic Republic of Iran as Secretary General of OPEC, and indeed this visit is very critical as the Islamic Republic of Iran is one of our Founding Member countries. Today, I had the honour to meet with the President of Iran, His Excellency Ayatollah Ebrahim Raisi, and listen to His Excellency’s words of wisdom and receive his kind guidance on both the affairs of OPEC, as well as its surrounding challenges, both current and future. Also, I had a great meeting with Minister of Oil, His Excellency Eng Javad Owji.”

Throughout the interview, the SG discussed current market developments, the harmful consequences of chronic underinvestment in the oil industry, the

positive actions of the ‘Declaration of Cooperation’, and OPEC’s open door policy with regard to the possibility of more countries joining the Organization in the future.

The SG spoke very positively and warmly about his time in IR Iran. “I’ve had an excellent time. The welcoming here for me and my delegation has been very hospitable. I am really happy amongst my brothers, sisters and family. I really feel at home. I’m from Kuwait, which is very close to IR Iran. This is my first visit, but I guarantee it will not be my last visit. I look forward to coming back again,” he said. ❏

Delegates pose for a group photograph on the sidelines of the bilateral meeting in Tehran.



The 27th IR Iran International Oil, Gas, Refining and Petrochemical Fair showcases range of local and international companies

*The 27th IR Iran International Oil, Gas, Refining and Petrochemical Exhibition, also known as the Iran Oil Show 2023, took place in Tehran between 17 and 20 May 2023. The event is considered to be one of the most influential of its kind. It attracts companies, both national and international, to a site where many business deals are agreed. OPEC participated in the 2023 edition, which was held under the motto: “Oil Industry; Technological Production, Optimal Consumption”. The OPEC Bulletin’s **Mathew Quinn** files this report.*

Opening ceremony

The Exhibition began with an opening event on 17 May, which was attended by IR Iran’s First Vice President Mohammad Mokhber; Minister of Petroleum, Eng Javad Owji; Science, Research and Technology Minister Mohammad-Ali Zolfigol; CEO of the National Iranian Oil Company (NIOC) Mohsen Khojastehmehr; Syria’s Minister of Oil and Mineral Resources, Firas

Hassan Kaddour; and several members of the Iranian Parliament, as well as other Iranian officials and senior oil industry directors.

First Vice President Mokhber outlined how the Supreme Leader of IR Iran, the Ayatollah Ali Khamenei, designated the title for this year’s exhibition, “Production Growth and Inflation Control”. As Mokhber stated in his remarks, “This year’s designation is a very important and fundamental opportunity for the oil and

The opening ceremony included IR Iran’s First Vice President Mohammad Mokhber (c); and Eng Javad Owji, Minister of Petroleum (second l).



gas industry to organize production growth and control.”

The First Vice President emphasized that the Government’s strategy of increasing production and curbing inflation involves popularizing the economy and activating the private sector. In order to reach this point, all the capacities of the country must be used and the private sector must come to the field with all its strength. He also pointed out the importance of the activation of universities and knowledge-based companies in order to take advantage of the country’s capacities.

The First Vice President stressed that, “holding such exhibitions can lead to familiarization and cooperation between domestic and foreign companies in the field of energy, so that with joint planning, new movements and cooperation, innovation in this field should be formed.”

In his remarks, Minister Owji said that the participation of 200 foreign companies in the Exhibition is “indicative of the effective promotion of energy diplomacy by the current administration”. This complements the 1,500 domestic Iranian companies that participated in the event. There were companies from Russia, China, Belarus, Germany, Austria, Italy, France, Spain, India,



Mohammad Mokhber, First Vice President.

the UAE, Oman and Türkiye participating in the event. The Minister indicated that the number of domestic and foreign firms participating in the 27th edition increased by 35 and 100 per cent, respectively.

Owji highlighted the presence of Russian Deputy Prime Minister Alexander Novak, who arrived in IR Iran earlier in the week on a two-day visit as the head of a trade delegation. Twenty-eight Russian companies were represented at the exhibition. The Minister said that IR Iran has extensive cooperation with Russian firms. According to SHANA, Russia and IR Iran signed ten documents — comprising six MoUs, two contracts, one agreement and a roadmap — on cooperation in the oil industry.

He stressed that the presence of the Russian delegation in IR Iran is a strong indication of the depth of cooperation between the two countries in the oil and gas sectors, adding that business-to-business meetings were held between Iranian and Russian companies on the sidelines of the Exhibition. An example of this was the CEO of the National Iranian Oil Company, Mohsen Khojastehmehr meeting with the CEO of the Russian state company, Gazprom, Vitaly Markelov.

Exhibition showcases companies’ achievements

OPEC had a prominent booth at the Exhibition, which displayed the Organization’s activities and publications, where it was in good company. With 1,500 Iranian companies participating in the Exhibition, it would not be possible to write about them all in the OPEC Bulletin.



Outside view of the Exhibition on opening day.

To provide a flavour of the event, the following are an example of the organizations and companies that displayed their achievements in interactive and interesting booths.

MAPNA Group

MAPNA Group is a diversified industrial enterprise that is comprised of its parent company, the MAPNA Group Company, and 70 specialized subsidiaries and affiliates. The Group's portfolio encompasses many sectors, including engineering, construction, renewable energy, thermal power plants, combined heat and power facilities, power generation and water desalination plants. It has also developed specialization in offshore and onshore oil and gas projects, rail transportation projects and electrification.

MAPNA Group's origins date back to August 1993, when it was established under the name "Iran Power Plant Projects Management Company." In October 2013, it officially changed its name to MAPNA Group. At the end of the 2000s, the Group established a Research and Development department with the aim of driving technological advancement.

Mahmoud Fatehimarj, Oil and Gas Marketing and Sales Manager, Marketing and Sales Deputy, Service Division, MAPNA Group, told the OPEC Bulletin of the great benefits MAPNA Group has attained through participation in the Iran Oil Show. "It's very useful to meet clients and negotiate deals," he said. As the MAPNA Group website stated of the Oil Show, "On the sidelines of the exhibition, Mavadkaran Engineering Company, a subsidiary of MAPNA Group, signed a contract with Arak Oil Refinery for manufacturing SGT-700 gas turbine parts for the first time in IR Iran."

IOEC Group

The Iranian Offshore Engineering and Construction Company (IOEC) is a world-class engineering, procurement and construction firm that services offshore and onshore projects domestically and internationally. It was established in 1993 with the intention of fabricating

and installing production facilities for the oil and gas industry. As its website states, "It provides project management, engineering, procurement, fabrication, installation, commissioning and drilling to project owners and operators."

The company possesses a fleet of 18 offshore vessels equipped with state-of-the-art facilities that can



Attendees gather at OPEC's exhibition booth.



Various booths had detailed models of the energy industry on display.



Display at the Exhibition.

Display at the Exhibition.



support operations. It is capable of laying subsea cables and pipelines up to 60 inches in diameter in water depths ranging from 10 to 250 metres. It is also capable of lifting structures weighing up to 4,500 tonnes.

IOEC Group has several subsidiaries, including the Sokan Arvand Ship Management Company, which was established in August 2000. The company's core business is to provide marine and ship management services. Persia Telecom Co. is seasoned in the information and communications technology field in both the private and public sectors.

Further companies associated with the IOEC Group include Nilsun Kisch, which specializes in the field of pre-commissioning, commissioning, startup, operation and maintenance, hook up and construction of oil and gas projects. IOEC E&P engages in oil and gas activities ranging from exploration and appraisal to development and production.

Well Services of Iran

Known as WSI, Well Services of Iran has been offering a wide range of services in the upstream oil and gas industry in IR Iran. The company utilizes high-quality equipment and trained

personnel. WSI has a track record for servicing both onshore and offshore operations. Its headquarters are located in Tehran, with two main operating facilities providing a range of oil and gas services in the fields of reservoir evaluation, reservoir development and reservoir management.

WSI's Kish Island Operations Base includes a fully integrated oilfield services facility with representation of all business lines. The facility sits atop 45,000 m² of land. WSI's Ahvaz Operational Premises is an integrated base focused on land operations. It consists of offices and workshops, as well as yard storage.

Payandan Co

Payandan has half a century's experience in management, engineering, procurement, financing and construction of petrochemical and refinery plants, wellhead facilities, onshore and offshore pipelines, gas compressor stations, pump stations and civil projects. The company has played a prominent role in the industrial development of the country.

Payandan has constructed more than 5,000 km of oil and gas transmission pipeline. Since 2011 it has completed seven refinery projects in the South Pars Gas Field. It has successfully completed several projects in the fields of gas compressor stations, wellhead facilities and storage plants.

Delegates gather for a group picture at OPEC's exhibition booth.





Two natural bitumen vessels, which can be dated to 1600–1900 BCE from Susa, Khuzesta, were presented to the OPEC Secretariat by the Museums and Documentation Centre.

Management of Museums and Documentation Centre of IR Iran’s Oil Industry

IR Iran has excelled in the preservation of its oil history and heritage. In 2014, a work group was established to begin the process of instituting several oil museums throughout the country. These include the Gas Station Museum in Darvazeh dowlat, the Fuel House Museum at Abadan, Apprentices Museum at Abadan, Well number 1 at Masjid Soleiman, the Oil Museum Garden at Kirman, and the Sabzevar Oil Museum. Priorities associated with this enterprise not only relate to familiarizing the public with the history of the industry and maintaining documents, but also involve cultural, artistic, educational and research dimensions related to oil. The Centre had a fascinating booth at the Iran Oil Show showcasing the achievements of IR Iran in its historical preservation efforts.

The Centre has spearheaded a thorough undertaking of chronicling artifacts, documents, facilities and historic buildings related to the oil industry. Experts working for the Centre have travelled throughout the country to identify appropriate sites and material in this regard.

With the aim of familiarizing oil industry employees with the history of the industry, the Management of Museums and Documentation Centre has established permanent exhibitions in the cities of Tehran

and Mahmood Abada. The Tehran permanent exhibition is held in central building Number 17 of the Ministry of Oil and has a total of 150 artifacts on display in categories including personnel, oil and gas exploration, drilling, transfer, processing, export, distribution and organization and industry facilities. Additionally, the oil industry documentation centre has more than 20 million pages of documents.

The Museums and Documentation Centre management showcased two artefacts to OPEC attendees meant to be presented to the OPEC Secretariat, namely, two natural bitumen vessels, which can be dated to 1600–1900 BCE from Susa, Khuzestan. The artefacts were presented to National Representative of IR Iran to OPEC, Dr Afshin Javan.

Successful Exhibition

It is difficult to convey the sheer scale and scope of the achievements of all the Iranian companies that had booths at the 27th Iran Oil Show. The best way is for readers to visit next year’s exhibition for themselves. This is an exceptional event, where one can learn and discover so much about the businesses activities of IR Iran’s oil industry. ■■

OPEC delegates and members from Management of Museums and Documentation Centre of Iran’s Oil Industry.



Dr Afshin Javan, National Representative of IR Iran to OPEC.

A vast tapestry of unique institutions: the museums of Tehran

*International Museum Day falls on 18 May. It is a unique moment for the International Museum Community, when participating museums showcase the role of museums as institutions that serve society and its development. What better place to honour International Museum Day than Tehran, a city which has a broad range of fascinating museums that display the many facets of IR Iran's unique culture and history. The OPEC Bulletin's **Mathew Quinn** files this report.*

Outside view of Golestan Palace.



Golestan Palace

The Golestan Palace is a UNESCO World Heritage Site. The palace complex was originally built during the Safavid dynasty in the historic walled city. As UNESCO has written, “it received its most characteristic features in the 19th century, when the palace complex was selected as the royal residence and seat of power by the Qajar ruling family.”

The complex of buildings are decorated with beautiful tiles. The elegant garden is also worth visiting in its own right. The complex typifies the architectural and artistic achievements of the Qajar era, including the introduction and emergence of European motifs and styles into art of the region. Walking through the corridors of the Golestan Palace is like travelling back in time. It contains fascinating art, thrones, carpets, treasures, artefacts, jewels, paintings and sculptures.

International Council of Museums

Since 1977, the International Council of Museums has organized International Museum Day. As the Council has stated, the objective of International Museum Day is to raise awareness on the fact that, “museums are an important means of cultural exchange, enrichment of cultures and development of mutual understanding, cooperation and peace among peoples”. This is especially the case in Tehran, the capital of IR Iran, which has an abundance of fascinating museums.

National Museum of Iran

The National Museum of Iran is a state museum that functions under the auspices of the Ministry of Cultural Heritage, Tourism, and Handicrafts. The Museum is comprised of the Iran Bastan Museum (Ancient Iran) and the Museum of Islamic Archaeology and Art of Iran, as well as eight

Intricately designed rooms in the Golestan Palace which was the royal home of the Qajar dynasty.



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The Iran Bastan Museum in Tehran focuses on Ancient Iran.

research departments, the conservation department, the library and the archives.

The Museum houses the largest collections of archaeological objects in the country. The collection encompasses artefacts and displays dating from the Paleolithic to the late Islamic period, representing more than a million years of human settlement and cultural achievement. The collection contains ceramics, pottery, stone figures, clay figurines and carvings from excavations at Persepolis, Ismailabad, Shush, Rey and Turang Tappeh.

Clay boar figurine from the Neolithic Period, seen in the National Museum of Iran.



The Carpet Museum of Iran

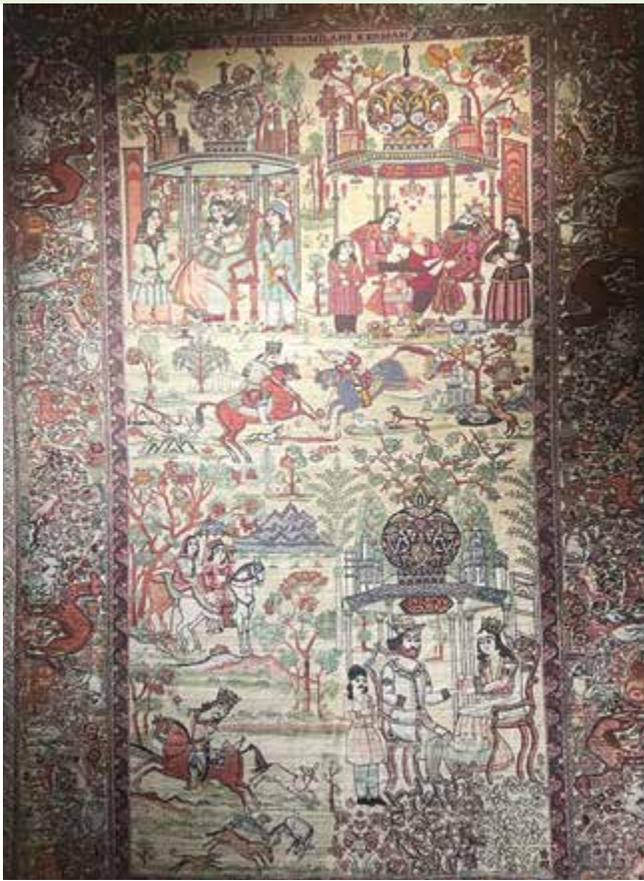
Covering an area of 3,400 metres squared, the Building of the Museum consists of two galleries for permanent and temporary exhibitions, a specialized library, education department, conservation workshop, amphitheater and coffee shop. It was inaugurated in 1978, and possesses beautiful architecture that resembles carpet weaving looms.

The museum's collection originally consisted of 275 pieces of exquisite carpets and kilims. It explains weaving

Entrance to the Carpet Museum.



Rich colours shine in one of the many traditionally weaved pieces in the Carpet Museum.



Detailed illustrations woven into carpets from the Carpet Museum show vivid scenes of a past era.

techniques and ancient traditions. Many of the masterpieces hail from IR Iran's important carpet-weaving centres, for example, Tabriz, Isfahan, Kashan, Korassan, Kerman, Kurdistan and tribal regions. It is fascinating to discover the differing patterns and traditions depending on the regions of IR Iran.

The Treasury of National Jewels

Owned by the Central Bank, the Treasury of National Jewels contains a collection of the most expensive jewels of the world, assembled over the centuries. Many of these priceless objects hail from the Safavid, Afshar, Qajar and Pahlavi periods. These works have not only material value, but also artistic value.

Outstanding museums in Tehran

Given IR Iran's unique history, it is unsurprising that Tehran possesses so many outstanding museums. Other museums worth visiting include the Islamic Museum, the Glass and Ceramics Museum, the Tehran Museum of Contemporary Art, the Automobile Museum and the Fine Art Museum, to name but a few. 



The Iran Central Bank building, location of the National Jewels Museum in Tehran.

Alamy

Beijing hosts OPEC-China Energy Dialogue



In mid-May, an OPEC delegation travelled to Beijing for the Sixth High-level Meeting of the OPEC-China Energy Dialogue. First held in 2005, the meeting and dialogue are key components of OPEC's outreach programme. The OPEC Bulletin reports on the May gathering.

In 2022, Beijing became the first city to have hosted both the Summer (2008) and Winter (2022) Olympics. It is a vibrant city where ancient culture and modern civilization are well integrated, attracting tens of millions of visitors and tourists from China and abroad each year.

In May 2023, an OPEC delegation, headed by OPEC Secretary General Haitham al Ghais, were visitors to China's capital city for the Sixth High-level Meeting of the OPEC-China Energy Dialogue. Al Ghais co-chaired the meeting with Zhang Jianhua, Administrator of the National Energy Administration, the People's Republic of China. The Permanent Representative of the People's Republic of China to the United Nations (UN) and other International Organizations in Vienna, Ambassador Li Song, also delivered opening remarks via video.

Al Ghais thanked the Administrator for the warm welcome and gracious hospitality and said that he and his colleagues were delighted to be in the great city of Beijing.

Positive dialogue

In his remarks to the meeting, Jianhua highlighted that China and OPEC are important strategic partners. Since the establishment of the dialogue mechanism between the two parties in 2005, he said, communication on policy has been maintained through round-table

meetings and high-level dialogues, and both parties have achieved positive results.

He added the cooperation had helped jointly maintain stability of the global oil market, as well as consolidating and expanding oil trade between China and OPEC Member Countries, which is of common interest.

The OPEC Secretary General said that the great rejuvenation of the Chinese nation continues to be one of the most significant developments for the global economy this century. He emphasized that OPEC attaches tremendous importance to its dialogue partnership with China and is determined to reinforce and strengthen it.

He noted that the parties had established a balanced, pragmatic framework for cooperation, and developed an ongoing exchange of views at all levels on energy issues of common interest, in particular security of supply and demand, in order to enhance market stability.

“OPEC is committed to working with China in pursuit of our mutual goal of stability in the oil market, which supports global economic growth and sustainable development.”

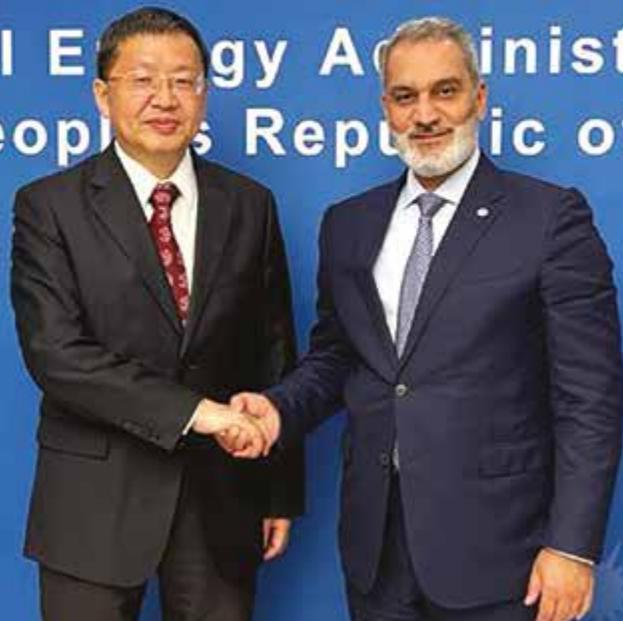
*— Haitham Al Ghais,
OPEC Secretary General.*





中华人民共和国国家能源局

National Energy Administration of
the People's Republic of China



Ambassador Song said that he highly appreciated the stable cooperation and long-term communication between OPEC and China, which contribute positively to the global economy and energy security. The Ambassador envisaged that China's new phase of development would open up opportunities for OPEC and its Member Countries in terms of market access, energy transition and shared prosperity.

Furthermore, he pledged that the Permanent Mission of China in Vienna would continue to serve as a vital bridge in facilitating cooperation between the two parties.

China and OPEC Member Countries

The OPEC Secretary highlighted the expanding relationships between China and OPEC Member Countries.

China's overall imports from OPEC Member Countries amounted to \$235.5 billion (bn) in 2022, he said, which is a staggering \$227.2 bn increase from 2000. "In the other direction, OPEC's total imports from China increased from just under \$5.7 bn in 2000 to around \$160.6 bn in 2022".

In terms of crude oil, he said: "China's total imports have risen from around 1.4 million barrels a day (mb/d)

The meeting was co-chaired by Haitham Al Ghais, OPEC Secretary General (r), and Zhang Jianhua, Administrator of the National Energy Administration, People's Republic of China.

A tanker terminal on the Yangtze river.





in 2000 to approximately 10.2 mb/d in 2022. Close to 52 per cent of this came from OPEC Member Countries.”

In the years ahead, said Al Ghais, OPEC recognizes the pivotal role China will play in the future of the world economy and energy sector – a key conclusion from the Organization’s World Oil Outlook (WOO) 2022.

The Secretary General observed: “According to the WOO, China’s proportion of global GDP is expected to rise from 19 per cent in 2021 to 23 per cent in 2045. Total primary energy demand in China is expected to rise from 69.4 million barrels of oil equivalent per day (mboe/d) to 77.5 mboe/d in 2045. And oil is forecast to grow from around 20.5 per cent of China’s primary energy demand in 2021 to 21.3 per cent in 2045.”

The growth in Chinese demand is an important factor in global primary energy demand, increasing by 23 per cent in the period to 2045, he added, and highlighted the fact that all forms of energy will be necessary to meet this demand increase.

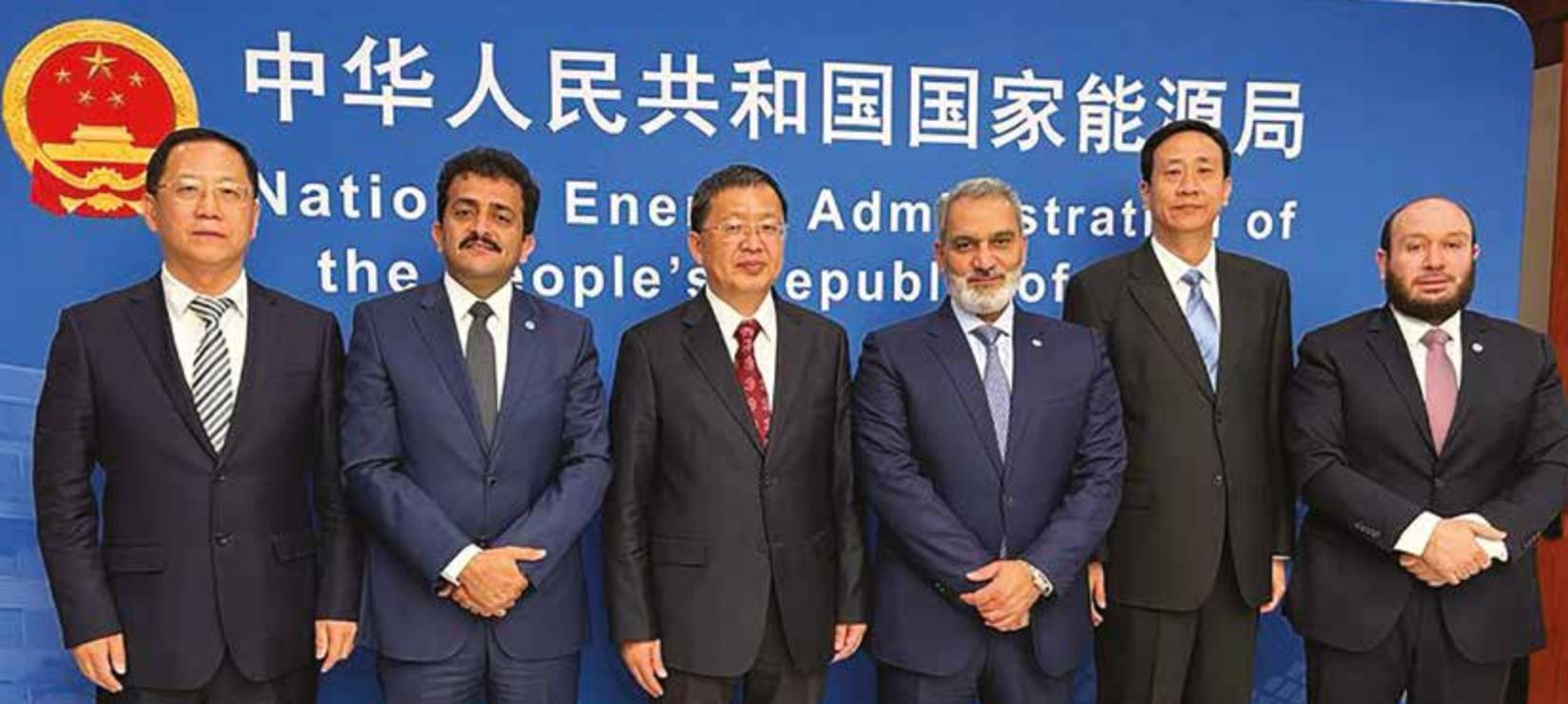
Investment and stability

To meet the demand needs of the future, he added “it is absolutely pivotal that the global oil industry attracts adequate levels of investments. The WOO reports that the global oil sector will need cumulative investment of \$12.1 trillion through to 2045.

“We need this investment to also encourage the development of technologies that will reduce the environmental footprint of the oil industry. Oil will continue to remain a critical part of the energy mix for the foreseeable future and it is therefore important to use technologies such as Carbon Capture Utilization and Storage, the Circular Carbon Economy framework and hydrogen to unlock a low-emissions future. We believe that China and Chinese technologies can play a great role on this front.”

He also stressed that “oil market stability is a prerequisite for an investment-enabling environment. For this





High-ranking officials attending the OPEC-China Energy Dialogue.

reason, OPEC Member Countries and ten non-OPEC oil producing countries participating in Deceleration of Cooperation (DoC) have been engaged since 2017 in concerted efforts to contribute to oil market stability. We meet regularly, analyse market developments and take action as appropriate, in the interests of both producers and consumers.”

SDG commitments

Al Ghais also highlighted the UN’s Sustainable Development Agenda, and recalled that the President of the People’s Republic of China, Xi Jinping, had chaired the High-level Dialogue on Global Development in June of last year.

He said that “what was a particularly pleasing outcome of this meeting was the practical measures President Xi outlined to expedite the implementation of the UN’s Sustainable Development Agenda.”

He stated that OPEC has a special interest in Sustainable Development Goal (SDG) 7, which seeks to ensure affordable, reliable, sustainable and modern energy for all. He added that the statistics on energy access are concerning, with approximately 733 million people worldwide not having access to electricity and 2.4 billion people using inefficient and polluting cooking systems.

For this reason, he added, “President Xi’s commitment to forging ‘High-quality Partnerships for a New Era of Global Development,’ is an extremely important

component of the global community achieving the ambitious SDG’s.”

Presentations

The agenda also saw presentations delivered by both parties.

The Chinese side provided presentations on ‘Strengthening oil & gas cooperation to overcome international market fluctuations’; ‘The important role of technologies in future energy development’; ‘Prospects for oil trade’; and, ‘Areas of cooperation between OPEC and China’.

From OPEC’s perspective, Dr Ayed S Al-Qahtani, Director, Research Division, OPEC, and Dr Abderrezak Benyoucef, Head, Energy Studies Department, OPEC, were in attendance. They presented on a follow-up to the 5th High-level meeting of the dialogue, the global energy outlook across all timeframes and an update on the DoC and Charter of Cooperation.

The discussions proved productive and the meeting further strengthened the relationship between OPEC and China, with Al Ghais underscoring the importance of it going forward.

“The ancient China proverb tells us ‘With one heart and one mind, we can accomplish everything we aspire for.’ OPEC is committed to working with China in pursuit of our mutual goal of stability in the oil market, which supports global economic growth and sustainable development.”



OPEC SG stresses the importance of adequate oil industry investment at 30th Annual Middle East Petroleum & Gas conference (MPGC)

*The 30th Annual Middle East Petroleum & Gas conference (MPGC) took place on 22–23 May 2023, in Dubai, the UAE. It was hosted by the Emirates National Oil Company (ENOC) and S&P Global Commodity Insights. The event took place under the Patronage of His Highness **Sheikh Ahmed bin Saeed Al Maktoum**, Chairman of the Dubai Supreme Council for Energy, President of the Dubai Civil Aviation Authority, and Chairman & Chief Executive, Emirates Group. OPEC Secretary General **Haitham Al Ghais** delivered remarks on the topic ‘Oil markets – investment, security, and transitions’. The OPEC Bulletin’s **Mathew Quinn** files this report.*

Re-think, re-strategize and re-boot: The Middle East energy markets in transition

MPGC is one of the leading regional events of its ilk. It provided an extremely useful platform for the OPEC Secretary General to highlight OPEC’s views on recent market developments and look at some of the key issues in the oil industry today.

The SG began his remarks by paying tribute to his Emirati hosts and the outstanding work the nation had done in the field of climate leadership, saying, “The President of the United Arab Emirates (UAE), His Highness Sheikh Mohamed bin Zayed Al Nahyan, announced at the beginning of the year that 2023 will be the ‘Year of Sustainability’. This reflects the country’s longstanding commitment to sustainable practices and international cooperation to address the challenges of our time. The culmination of the ‘Year of Sustainability’ will be Dubai’s hosting of COP28, which represents a moment of tremendous pride for OPEC.”

The SG stressed that the UAE has repeatedly shown climate leadership, particularly through its ‘Net Zero by 2050’ strategic initiative and investing \$40 billion in the renewables industry to date. Astonishing progress has been achieved in a relatively short period of time. He also commended the approach being taken by COP28 President Designate, His Excellency Dr Sultan Ahmed Al Jaber, who has called for a positive, pragmatic and above all, realistic approach to the climate challenge.

The SG outlined the prognosis of the World Oil Outlook regarding future demographic and economic changes that will prompt a rise in both energy and oil demand. Oil will continue to be a significant component of the energy mix. The global oil sector will need cumulative investment of \$12.1 trillion through to 2045. Investment is also urgent to account for annual decline rates, which amount to about five per cent in the industry, the SG said.

He then outlined the “very real and dangerous consequences of divestment or underinvestment



His Highness Sheikh Ahmed bin Saeed Al Maktoum (l); with Haitham Al Ghais, OPEC Secretary General.



Haitham Al Ghais, OPEC Secretary General.

in the oil industry: Underinvestment causes market volatility. Underinvestment endangers energy security. Underinvestment imperils economic growth. Underinvestment jeopardizes sustainable development.”

The SG continued by saying that, “Given these high stakes, as an industry, we need to speak with

one voice and louder than ever before on the harmful realities of underinvestment. Indeed, the antidote is international cooperation based on mutual respect, multilateralism and constructive dialogue, not constant and inconsistent criticism. He added, “For its part, OPEC has sought to do this through our partnership with ten non-OPEC producers under the banner

of the ‘Declaration of Cooperation’, as well as our international energy dialogues with many partners, including many key consumers globally.”

Importance of technology

The SG outlined the important role of technology in the energy transitions, saying, “OPEC believes that the challenge before us must be accurately diagnosed. It is about reducing greenhouse gas emissions and not the misguided narrative of replacing one energy source with another. Technological innovation will play a critical role in realizing this objective. This is why our Member Countries invest heavily in hydrogen projects, carbon capture utilization and storage facilities, and the circular carbon economy.”

Sofitel, also known as the Obelisk, was the venue for the event in Dubai City.



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He emphasized the achievements of the UAE in this regard. The Al-Reyadah CCUS facility has 800,000 tonnes per year of CO₂ capture capacity. Work is ongoing to increase this capacity by 500 per cent to approximately five million tonnes per year by 2030.

The SG concluded his remarks by appealing for objectivity in discussions on the climate challenge. He said, “Obviously, I cannot claim to speak on behalf of everyone here, but I believe that the industry must recognize and be proud of what it has been doing in terms of ensuring global energy security and reducing emissions across the board. Energy security for all and decarbonization must go hand-in-hand. This requires major investment in all energies. This is the truth that needs to be spoken.”

Presentation by Director, Research Division

In an “All-Star” Analysts session, Dr Ayed S Al-Qahtani, Director, Research Division, presented ‘OPEC’s views on the global oil market: short to long term’, highlighting that all sources of energy will be needed to support anticipated global economic growth. Moreover, oil will retain the highest share in the global energy mix over the forecast period to 2045. He added that adequate and timely investment in the energy sector is critical.





Dr Ayed S Al-Qahtani, Director of the Research Division at OPEC (c).

COP28 will be a milestone

The significance of the MPGC event was enhanced by the UAE hosting COP28. OPEC has repeatedly affirmed its pride in the UAE acting as President of the Conference of the Parties. A press release issued shortly after the MPGC, stated, “The UAE is a recognised global leader in tackling the challenges related to energy, climate change and sustainable development. Not only in words, but also in its actions with major investments into the development and deployment of renewables

and technologies focused on reducing greenhouse gas emissions. Dr Al Jaber is a well-respected and renowned global energy leader. As Chairman of Masdar and Group CEO of the Abu Dhabi National Oil Company (ADNOC), he has guided Masdar into becoming a global leader in renewables and continues to lead ADNOC on an unprecedented decarbonization path, with ADNOC today having some of the lowest emissions per barrel of oil produced globally.”



All pictures, unless otherwise credited, are courtesy S&P Global.



OPEC bulletin 5-6/23

Hybrid Multi-Disciplinary Training Course held



*Dr Ayed S Al-Qahtani,
Director, Research
Division.*

This year's 23rd Multi-Disciplinary Training Course (MDTC) — held from 23–25 May — attracted a total of 49 attendees, 27 of who were in person and 22 online, from 10 OPEC Member Countries.

The three-day event provided an intensive insight into the day-to-day functioning of the OPEC Secretariat, along with the work that is done at the Organization in support of oil market stability. From an internal perspective, it covered the role of the Office of the Secretary General; the Legal Office; the Finance and Human Resources Department; the Public Relations and Information Department and

the Administration and IT Services Department.

In addition short sessions were held on: introduction to the Petroleum Studies Department; the world economic outlook; the main determinants of oil demand and supply; product markets and refinery operations; stock movements and supply/demand balance; modelling; crude oil price movement; introduction to the Energy Studies Department; the energy and oil demand outlook; the liquids supply outlooks; oil movements and refining outlook; recent developments in global energy policies; the role of energy in sustainable development; introduction to the Data Services Department and energy data collection.

“All of these offices have specific jobs, but none of them work in isolation. We are all part of a great, interactive team, supporting and cooperating with each other. This is one reason the Secretariat has become a true Centre of Excellence in the energy world,” stated Ayed S Al-Qahtani, Director, Research Division (DRD) in his opening remarks.

Al-Qahtani added that the oil industry is “dynamic, exciting and fulfilling and plays a crucial role in the wellbeing of mankind. This commodity built our societies as we know them and continues to be the main provider of energy worldwide, allowing the

lights to stay on, the car to start and food to be produced. It is in the medicines we consume, the clothes we wear and the furniture we sit on.

“We must not forget what oil has brought to humanity, and what it will continue to bring in the future. It has the potential to pull millions out of poverty and greatly improve their standard of living. And, in consideration of one of the biggest overarching topics of our time — climate change — it can and must be produced and used in a way that protects the environment and future generations.”

He added the oil industry is famous for its innovation, technological brilliance and highly educated and skilled workers, and has so much to offer in the energy transition. “We can bring our assets to help develop greater energy efficiency, cleaner oil production and other technological breakthroughs that will offer important solutions for an energy transition that is fair and inclusive.”

The past year or so, during which many parts of the world saw increased energy insecurity, has shown that a stable and thriving oil industry is as important during the energy transition as it ever was. Skyrocketing energy prices, inflation and hyperinflation have touched everyone on the planet and caused many countries to re-evaluate their energy policies to prioritize energy, said Al-Qahtani.

“Thus, we see that energy insecurity leads countries to turn away from their climate change goals and grasp whatever energy sources are available, often those that are much more polluting,” he added.

“Energy insecurity and high energy prices have also affected industries, which in turn affects economies. It additionally takes the regular supply of energy out of the hands of the world's poorest. So you see, a stable oil market, including sufficient investment for future supplies, goes hand-in-hand with energy security and economic stability.”

He added that OPEC's goal to ensure a stable and secure supply of affordable energy is what led to the formation of the Declaration of Cooperation in 2016. This group pulled together to use relationships established over six years, along with hard work, to overcome difficult situations that have arisen over the past few years, including a severe market downturn in 2015–16 and the COVID-19 pandemic.



Members of OPEC Management address participants of the MDTC.

“My dear friends, you are at ground zero in the energy world at OPEC in terms of its importance on the energy landscape as a think tank and within the international energy dialogue,” stated Al-Qahtani.

“Addressing market instability over the past few years has included meeting with our dialogue partners more often and branching out to new partners. We now have dialogues with many consuming and producing countries.”

This is on top of the regular meetings the Organization holds with many other international organizations, including the International Energy Agency and the International Energy Forum, industry leaders, academics and more, he said.

“OPEC has been around for well over 60 years now, which speaks volumes about its longevity. Over these years, the institutional knowledge of our Organization has grown and matured,” stated the DRD.

“Although we are currently navigating very challenging times, our research shows that the oil industry is going to be around for a long time and will continue to be the biggest contributor to the energy matrix until at least 2045, which is as far as our predictions go in our flagship publication, the World Oil Outlook.”

In his closing remarks, Abdulmonem Allafi, head of the Finance and Human Resources Department and MDTC Task Force

Lead stated that the MDTC has become an integral part of the Secretariat’s programme to support the development of human resources in our Member Countries.

“We consider this kind of intensive training dedicated to learning about OPEC and the global oil market vital to young professionals in our Member Countries.

“As an industry, and as OPEC, we need to make sure our voices are heard. This is an industry that has made a huge and positive difference to humanity, and can do so in the future” through delivering energy in a secure and efficient manner and at the same time helping reduce emissions, he said.

“I have no doubt the resources and expertise of our industry can be harnessed to help develop cleaner and more efficient technological solutions, such as carbon capture utilization and storage, hydrogen, and the Circular Carbon Economy. These can all help contribute to a reduction of emissions as part of unlocking a low-emissions future.

“A key part of this future is also those people I see in front of me today. You are uniquely qualified to speak on behalf of this industry, harness the latest technologies and innovations, apply them to helping adapt and enhance this industry in the decades to come and to make a meaningful and sustainable contribution to our Member Countries and the world at large.”

Participants gather for a commemorative group picture.



A stroll through the Fisogni Museum of the Petrol Station



*No single object symbolizes the role of petroleum in modernity and how it transformed everyday life than the petrol pump. The Fisogni Museum of the Petrol Station, located just outside Milan, Italy, is dedicated to the preservation of the history of the petrol pump. Museum Curator, **Marco Mocchetti**, takes OPEC Bulletin readers on a descriptive tour of the Museum.*



Guido Fisogni.

The collection, belonging to collector Guido Fisogni, was awarded by Guinness World Record in 2000 for being the world's largest collection of vintage gas pumps, ranging from 1892 to the present day.

The museum, entirely private, originates from Guido Fisogni's activity. Back from military service in 1961, Guido founded a construction company specialized in building petrol stations — in Italy and in Europe — on behalf of oil companies. "When I demolished the old ones" — explains the founder, now 82 years old — "instead of throwing everything away, I started keeping one piece per type, collecting pumps, signs, gadgets... whatever was related to oil companies."

The first museum was exhibited in his company in 1966 and the collection grew over the years, reaching over 6,000 pieces, large and small, and thousands of archival documents. "At the time, the Museum was also an important advertisement for my business," he explains.

Fisogni sold his company in 2000 and the Museum was closed for about 15 years due to lack of space, before reopening its doors in Villa Castiglioni in Tradate (near Milan), the historical family mansion transformed into a museum and location for corporate and private events. In addition to Guido, today there is also his son Nicolò, who administers the Museum, to preserve this precious historical heritage.

Among the most important pieces in the Museum are some design pieces, such as the pumps designed by Eliot Noyes for Mobil and by Marcello Nizzoli for

Agip, along with Benito Mussolini's personal pump, once installed in Rome and attributed to the architect Marcello Piacentini.

There are also many graphics and advertisements realized by the greatest Italian and foreign graphic designers of the 20th century (Nizzoli, Seneca, Lamm, Loewy...), as well as thousands of signs, gadgets, toys and curious objects.

Among the documents, the most important are the vintage advertisements, the collection of over 3,000 postcards depicting service stations, and a part of the historical archive of Bergomi (Italian pump producer during the 20th century), with original projects of petrol stations from 1909 to the 1960s. The documents and the vintage materials kept in the archive are often used by university students, scholars and simple enthusiasts for historical research and articles. The Museum team, too, is active in writing free articles for magazines from archival materials.

By visiting the Museum, it is possible to discover unexpected curiosities and anecdotes concerning the world of fuel distribution, usually told directly by the founder.

"The first to sell gasoline in Italy — explains Guido — were the pharmacists, because they already sold petroleum products against lice and baldness! At the beginning of the 1900s it was a different world, and things that today are unimaginable happened. The Oleoblitz company sold its lubricants in yellow cans with olive branches.

A Tokheim antique fuel dispenser from 1910 can be viewed at the museum.



Wikimedia Commons

A historic Italian "Benzina Pura" fuel dispenser.



Many people mistook motor oil for olive oil and (being illiterate) bought it for cooking. After several collective stomachaches, they had to change the logo by adding three arrows with the colours of the Italian flag.”

“The first pumps” — adds Guido — “worked manually, it was necessary to pump the fuel into the glass cylinders, and then the petrol fell into the tank by gravity through the hose. Around 1930 electric pumps were introduced, and the way of refuelling changed radically. The oldest piece we have is an 1892 pump from Switzerland, while the newest is a 2020 electrical recharging column.”

There are many curious facts displayed in the Museum: from BP, which in Italy in the 1930s had to sell its fuels as “Benzina Purissima” (pure fuel) instead of “British Petroleum” (because of the fascist prohibition on the use of the English language), to the Mobil Oil Pegasus, turned in the direction of Moscow during the Cold War years.

“One of the strangest pieces in the collection — Guido continues — is a Swiss self-service pump from the 1970s. It has 170 keys: each customer had his own key and totalizer, and he paid at the end of the month. All based on trust!”

The collection also preserves thousands of advertising gadgets, which reconstruct a century of marketing history. Lighters, keychains, ashtrays, but also can openers, Christmas decorations, toys and even sewing thimbles. “Even the smallest piece has an oil company logo on it. One of the most interesting is an Esso can opener with a drawing of a wolf dog. Before the Tiger of the 1960s [the one from “Put a Tiger in your tank!”], in fact, Esso used other mascots, such as the wolf, which

came from Standard Oil, and then the little Oil Drop Man, shaped as a drop of oil.”

The part dedicated to tyres is also important, and mainly has gadgets related to the Michelin Man. “Especially in the past, gas stations also sold tyres, and, therefore, there was all the merchandising linked to this sector.

“I started my collection almost by accident” — Guido remembers — “recovering a 1930s pump found abandoned in a sand quarry in 1961. The owner considered it scrap, and he told me that I was doing him a favour by taking it away. Since then, I have never stopped collecting objects: a gas pump, a sign, a gadget. The older pumps, the mechanical ones, are all restored, repainted with the original colours and theoretically working. Initially I fixed them myself; my company was small, we were three: I drove the van with two workers. After ten years I already had 110 employees, so I had to hire a specialized mechanic, who restored all the pieces I recovered for 40 years. Everyone called me crazy, but in the end I was right, and in 2000 I received the Guinness World Record for the largest collection in the world! In truth, the record should be updated, we have more pieces now. Maybe there’s some company which wants to help us organize an event for a new certification...”

Shortly afterwards, however, Guido sold his company and the Museum remained closed until 2015. After moving to Tradate, Nicolò, Guido’s son joined his father in managing the Museum: “We want to continue



Wikimedia Commons

The courtyard of the Fisogni Museum, located in the Villa Castiglioni, boasts an impressive collection of industrial signs.



Wikimedia Commons



with the enhancement of the collection, trying to make it well known both in Italy and abroad. Unfortunately, resources are always an issue. Organizing private and corporate events in the historic villa that houses the Museum is certainly important for making the Museum autonomous from an economic point of view. We have a little e-commerce and we rent our pumps for cinema and TV productions... after all, gas stations appear in tons of movies! We also loan them for travelling exhibitions. Furthermore, we are always open to collaborations and sponsorships with companies, especially in the oil sector, which want to help us by supporting our reality. An important upgrade we have planned is the reorganization of the archive (which still lacks a complete inventory), with the digitization of the most important documents. We are also going to open a little art section, with some artwork relating to oil and petrol.”

The collection is also part of some museum networks dedicated to the theme of design and industrial museums (MUDE and MIVA networks), and has recently participated in the International Oil Show in Tehran, as part of a collaboration with the local Gas Station Museum. In past years, the Museum has also participated in some sector fairs (fuel distribution, aftermarket...) and vintage car fairs in Italy (Bologna, Verona, Milan...).

Pieces of the Fisogni Museum are also exhibited in Triennale Milano, in the National Museum of Science and Technology in Milan and in Mille Miglia Museum in

Brescia. It is also part of the “Museum of Tourism” network, an international, widespread museum dedicated to the history of tourism, with “rooms” in many countries around the world.

The Museum can be visited every day by reservation and by free virtual tour (information on www.museo-fisogni.org). It is easily reachable from Milan and Malpensa Airport, and it is stored in the rooms of Villa Castiglioni Fisogni, an ancient family mansion owned in the 1800s by Cesare Castiglioni, Italian patriot who fought alongside Garibaldi. The location is the perfect place for gatherings of classic car lovers and corporate events.

Tin toys of vintage gas pumps are also featured in the expansive collection.



Discover Malaysia!



The COVID-19 pandemic had a severe impact on the global tourism industry. As the sector recovers, countries have developed innovative measures and strategies to attract visitors. This is certainly the case with Malaysia, one of the countries participating in the ‘Declaration of Cooperation.’ The OPEC Bulletin reports on how the country is re-launching its tourism industry post-COVID and presents many of the stunning sites the country has to offer global visitors.

The recently launched ‘Tourism Malaysia Marketing Plan 2022–26’ provides a comprehensive account of the country’s plans to increase visitor numbers.

The Plan describes the natural beauty and majesty of Malaysia, which includes lush jungles and rainforests, diverse flora and fauna, picturesque beaches and modern, vibrant cities. And these are just a few of the many reasons that make Malaysia an ideal travel destination.

A recovering industry

According to the United Nations’ World Tourism Organization (UNWTO), “In 2019, global international tourist arrivals reached 1.5 billion (bn) a year on the back of a decade of uninterrupted growth. Hand-in-hand with this growth, tourism became one of the world’s major socioeconomic sectors.

In 2019, export revenues from tourism amounted to \$1.7 trillion (tn), equivalent to 28 per cent of global

trade in services and seven per cent of overall exports of goods and services. The direct economic contribution of tourism amounted to \$3.5 tn in 2019 or four per cent of global GDP.”

The pandemic upended this decade of growth in the tourism sector. The results were startling. By April 2022, 96 per cent of global destinations had travel restrictions in place, and 50 million tourism jobs were lost in 2020. Accumulated GDP losses directly related to tourism amounted to \$4 tn in 2020–21.

The challenge facing countries is restoring confidence, attracting travelers again and building a recovery in the sector. In this regard, Malaysia has bold plans.

Important economic sector

In 2019, Malaysia’s tourism industry contributed 240.2 bn Malaysian ringgit to GDP, involving 3.6 million workers. Under Malaysia’s Tourism Marketing



Kuala Lumpur skyline, featuring the Petronas towers.

Plan, the country seeks “to invigorate domestic tourism and intensify the promotion of tourist hotspots and destinations among domestic tourists.” It has also detailed promotional strategies for different regions throughout the world.

For the Southeast Asian market, Tourism Malaysia aims to effectively communicate the diversity of Malaysia’s tourism product offerings, increase visitors’ length of stay and local expenditure, and attract return visitors.

The strategy also seeks to increase the number of visitors from the rest of Asia and from African markets. For the American, European and Oceania markets, Tourism Malaysia aims to promote Malaysia as a destination of excellence and continue to make the tourism sector a pillar and contributor to the development of the country’s economy.

Malaysia, Truly Asia

As the Tourism Malaysia corporate website explains, the slogan “Malaysia, Truly Asia” captures and defines the essence of the country’s unique diversity. It sums up the distinctiveness and allure of Malaysia that make it an exceptional tourist destination. There is only one place where all the colours, flavours, sounds and sights of Asia come together — Malaysia.”

Various ethnic groups have helped make Malaysia a rich melting pot of cultures and traditions. This includes Malay, Chinese, Indian and various other ethnic groups.

With 13 states, three federal territories and a population that currently stands at more than 28 million, Malaysia is proud to celebrate its rich heritage and diversity. The following is a flavour of what each state, as well as the federal territories have to offer.

View of the Prime Minister’s office from the Seri Gemilang Bridge in the planned city of Putrajaya.





The Masjid Sultan Salahuddin Abdul Aziz Shah, also known as 'The Blue Mosque,' located in Selangor.



A Minangkabau style building at the Negeri Sembilan State Museum.



Kuala Lumpur

Kuala Lumpur is renowned for the towering skyscrapers, heritage sites, theme parks and shopping opportunities that make the Malaysian capital one of Asia's most dynamic cities.

Its skyline is iconic, featuring the towering Petronas Towers, the famous twin skyscrapers, and Merdeka 118, which at 678.9 meters is the world's second-tallest building.

The city successfully combines old and new, and is a vibrant mix of races and cultures — a truly global metropolis.

Selangor

The state of Selangor is home to urban centres such as Petaling Jaya, Subang Jaya, Sunway and Klang, and also offers a diverse range of attractions.

These include the Masjid Sultan Salahuddin Abdul Aziz Shah, otherwise known as 'The Blue Mosque.' The mosque's interior reflects traditional Malay design elements, while its dome displays intricate Islamic calligraphy.

Another unforgettable experience that the state can offer is Kampung Kuantan Firefly Park, which is known to be among the few places in the world where one can see a spectacular display of light emitted by firefly colonies.

Putrajaya

Putrajaya is described as Malaysia's 'Intelligent Garden City' as it uniquely fuses nature with town planning and infrastructure development.

The historical city of Melaka, a UNESCO World Heritage Site.

The pink dome of the Putra Mosque is one of the most architecturally distinctive components of the city.

Putrajaya is the administrative capital of the country and the location of the Prime Minister's Office, the office of the Deputy Prime Minister and Chief Secretary to the Government.

Negeri Sembilan

Famed for its Minangkabau culture, which is preserved by the Adat Perpatih, an age-old matrilineal social system, Negeri Sembilan is synonymous with the world famous and unique Minangkabau architecture, with its famous upswept roof designs.

The state includes Port Dickson, which has approximately 18 km of beautiful sandy beaches. The Negeri Sembilan State Museum Complex is a terrific way of seeing traditional Minangkabau design.

Melaka

Melaka is a state situated on the west coast of Peninsular Malaysia, along the historic Strait of Malacca.

The city of Melaka is a UNESCO World Heritage Site. As UNESCO's website states, "The influences of Asia and Europe have endowed the town with a specific multicultural heritage that is both tangible and intangible. With its government buildings, churches, squares and fortifications, Melaka demonstrates the early stages of this history originating in the 15th-century Malay sultanate and the Portuguese and Dutch periods beginning in the early 16th century."

Johor

The etymology of Johor comes from 'Jauhar', an Arabic word that can be translated to precious stones.

Johor sits at the south of the Malay Peninsula. The causeway links it to Singapore.

The State contains luscious rainforests, beautiful beaches and is home to some world-renowned golf courses. For nature lovers, the Endau-Rompin National Park is home to many exotic flora and fauna, including elephants, deer, tapirs, long-tail macaques, white-handed gibbons and jaguars.



A spectacular waterfall seen in the Endau-Rompin National Park in Johor.

Perak

On the western coast of the Malay Peninsula lies the State of Perak, which was once famed for the world's richest tin deposits. Now it is renowned for cave temples and rainforests, including the Royal Belum, home to some endangered species such as the Seladang, the Asian Elephant and the Malaysian Tiger.

The Tin Dredge of Tanjung Tualang is an interesting reminder of the State's history in tin mining.

Penang

Nicknamed the 'Pearl of the Orient,' Penang fuses old and new, east and west, and has something to offer every visitor. The iconic Penang Bridge links the island of Penang and Seberang Perai on the mainland.

Popular sites to visit include the Penang National Park, Chowrasta Bazaar and George Town, a world heritage site. ESCAPE

Side view of a Malaysian Seladang; these can be found in the Royal Belum in the rainforests of Perak.





Penang Bridge.

is a theme park hosted in a natural environment and includes the world's longest outdoor water slide, stretching up to 1,111 m.

Kedah

Kedah is located in the northwestern part of Peninsular Malaysia and has been described as the most ancient state in Malaysia, boasting a history that dates back to the 5th century AD.

The Bujang Valley Archaeology Museum exhibits its archaeological collections, showcasing ancient trading routes. The beauty of Kedah's forests can be

experienced by visiting the Tree Top Walk in Sedim River Recreation Park, which is described as the world's longest canopy walkway.

Perlis

Perlis is the smallest state in Malaysia and is the northern gateway for the country. It has scenic countryside with plenty of fruit farms to visit, as mangos thrive in the state.

For the adventurous, there is the Snake and Reptile Farm where visitors can take photos with snakes. Gua Kelam, or the Dark Cave, located in Gua Kelam Recreational Park, is also a must-see.

Aerial view of the world's longest outdoor water slide hidden in the trees, with swimming pools, at a water theme park in Penang.





The Bujang Valley hosts a popular archeological museum in Kedah.

Pahang

Pahang is the largest state in Peninsular Malaysia and is situated on its east coast. Two-thirds of the state is covered by rich rainforest, making it replete with exotic wildlife and lush greenery.

Animal sanctuaries, lakes and parks make it the ideal location for nature seekers and adventurers. In addition, the Kota Gelanggi Caves are a natural marvel, as is Taman Negara Sungai Relau (Sungai Relau National Park), which is popular for jungle walks, bird watching and night safaris.

Terengganu

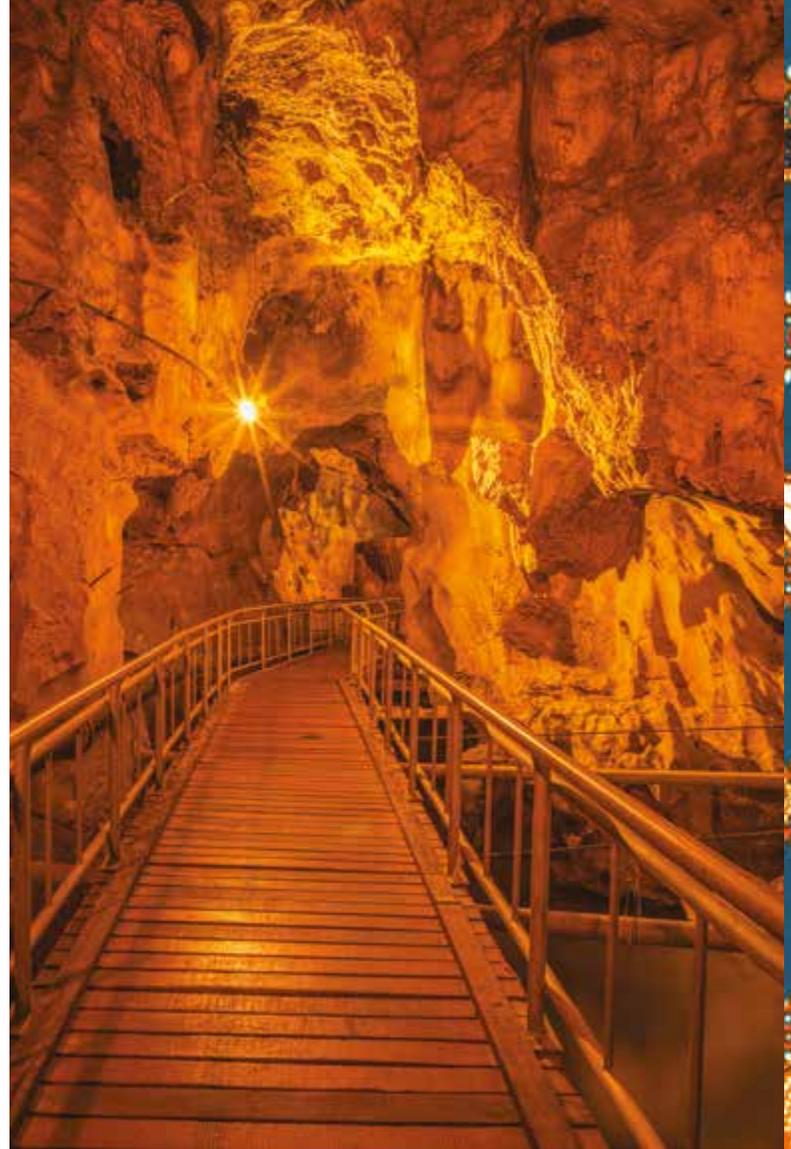
Known as the ‘Gem of the East Coast’, Terengganu is rich in culture and heritage. It is also a natural paradise with

its white beaches, rivers and beautiful waterfalls. Of these, don’t miss the spectacular Chemerong waterfall. The region is also known for its strong tradition of handicrafts.

Scuba diving and snorkeling are popular activities, especially in Pulau Kapas, Pulau Gemia and Pulau Redang.

Kelantan

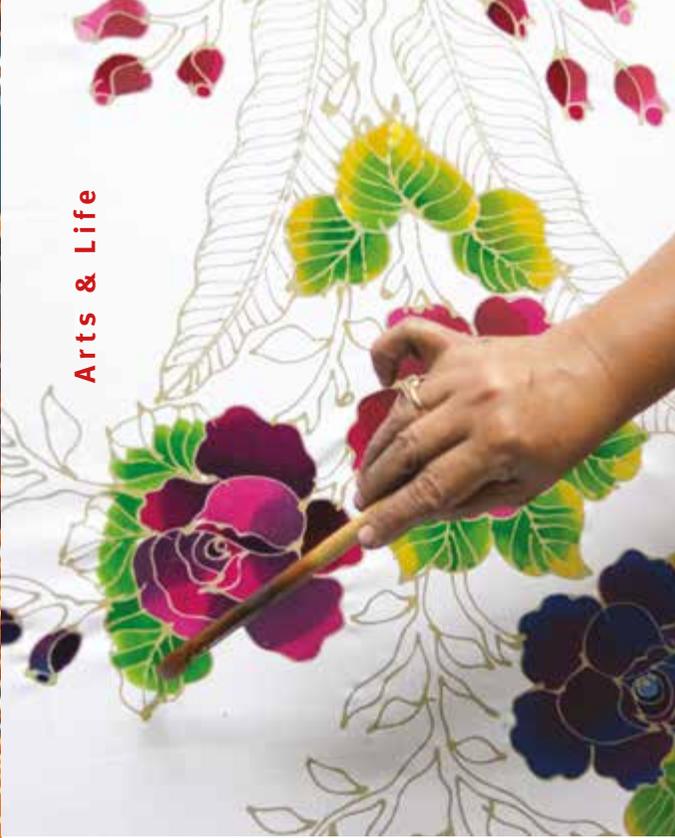
Known as the ‘Cradle of Malay Culture’, Kelantan is situated in the northeast of the Malay Peninsula and is



Gua Kelam, the Dark Cave, can be visited in Perlis.

Sunset over a tea plantation in Cameron Highlands, Pahang.





A batik maker uses watercolors to paint fabrics. Batik-making is part of Malaysian culture and a tourist attraction in Kelantan.



Mount Kinabalu viewed from the summit of the nearby Maragang Hill in Sabah.

the location of Malaysia's most ancient archaeological discoveries.

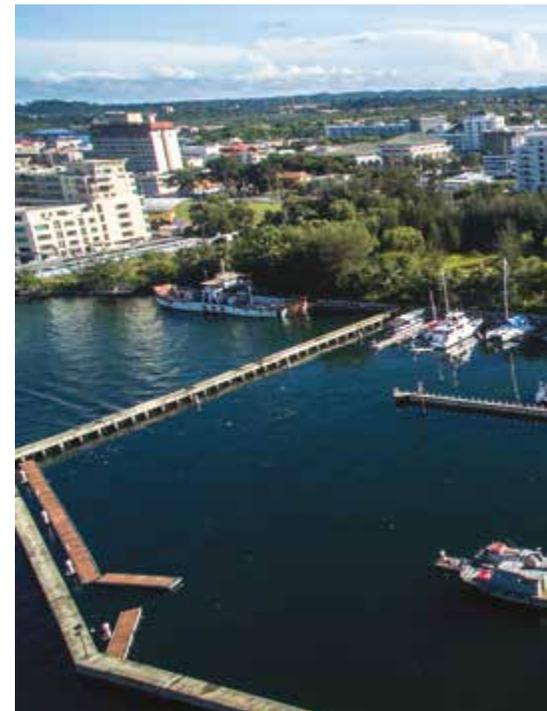
The State is also famed for its arts and crafts, which are still very much in demand. The Handicraft Village and Craft Museum (Kampung Kraftangan) is a highlight, and visitors can also see local cottage industries that are located along the stretch of road that leads to Pantai Cahaya Bulan. Tourists will find a wide variety of home-made goods produced by local artisans.

Sabah

Located on the northern portion of Borneo, in the region of East Malaysia, Sabah is an ideal location for eco-adventurers.

Kinabalu Park is a UNESCO World Heritage Site. As UNESCO's website states, "it is dominated by Mount Kinabalu (4,095 m), the highest mountain between the Himalayas and New Guinea. The Park has a very wide range of habitats, from rich tropical lowland and hill

A beautiful beach in Pantai Kekabu, Terengganu.





Rare rock formations seen in Gunung Mulu National Park, a UNESCO World Heritage Site located in Sarawak.

rainforest to tropical mountain forest, sub-alpine forest and scrub on the higher elevations.

It has been designated as a Centre of Plant Diversity for Southeast Asia and is exceptionally rich in species, with examples of flora from the Himalayas, China, Australia, Malaysia, as well as pan-tropical flora.”

Other highlights from the state include the Sepilok Orangutan Rehabilitation Centre.

Sarawak

Sarawak, the largest of the 13 states in Malaysia, is located on the northwest of Borneo.

Adorned with tropical rainforests, it is home to the world’s largest cave chambers. The large number of hornbill birds led to the title of ‘Land of Hornbills.’

The Gunung Mulu National Park is a UNESCO World Heritage Site and has been described as “a treasure

trove of natural wonders, which include complex cave networks and rare geological formations.”

The Niah National Park is home to millions of bats and swiftlets, as well as Neolithic paintings and Paleolithic artefacts.

The state is also home to Malaysia’s Petroleum Museum.

Labuan

Labuan is a federal territory that includes Labuan Island and six smaller islands, located off the coast of Sabah in East Malaysia.

Homestays are a popular option for visitors, providing a unique opportunity to experience firsthand the lifestyle of the locals. Beautiful sun-kissed beaches and water villages provide exciting opportunities for relaxation and discovery. 



All pictures are courtesy of Shutterstock.

Yachts and boats in the marina, close to the Waterfront Hotel and the Financial Park Building in Labuan.

Women in OPEC: 43 years of serving OPEC with a smile

*Diana Lavnick, who recently retired after serving nearly 43 years at OPEC — making her the longest-serving staff member in the history of the Organization — shares some of her stories and highlights with the OPEC Bulletin’s **Maureen MacNeill.***

With a grin on her face, and a laugh in her voice, Diana imparts stories and memories she carries with her from her lifetime career at OPEC. She has seen Secretaries General come and go, as well as many Heads of Department of the Public Relations and Information Department (PRID), where she worked her entire career.

“The month before I left every morning when I was driving into the office all these memories were going through my mind and so many flashbacks were coming up. Every day I remembered something else that happened in the almost 43 years. Forty-plus years is a long time.”

Diana remembers how a tiny advert in one of the local newspapers led her to OPEC and her lifelong workplace.

“It said that they were looking for clerk typists. So I applied and when I applied I was 18, I don’t know if you were an adult at that time at the age of 18. Someone didn’t know if I could sign my contract or not or if my parents had to do that.

“I was working at a shipping company after business college in September, and two months later applied at OPEC. Then they offered me the job and by then I had already turned 19 so I started in April 1979. By the way I was born the same year OPEC was founded, in 1960!”

Diana remembers practicing for her typing test on an old typewriter at home that wasn’t even electric, though they had electric typewriters in the office. She spent her entire career in PRID, where she

saw technology evolve at an incredible pace over four decades.

“When I joined, everything was done on electric, old typewriters. At that time we didn’t have systems like today with desktop publishing programmes.”

By the time she left, Diana had been responsible for layout and production of the Organization’s flagship publication, the OPEC Bulletin, for much of her career. With technology, the magazine and other publications became progressively easy to produce, she adds.

“At first, photos and laid-out pages were on film and developed in the darkroom we had at the former premises,” says Diana.

“The Head of Department when I was hired was Hamid Zaheri, he was Iranian. He wanted to know if I wanted to work on these machines they had. I agreed, as I always wanted to learn new things, so they sent me on a two-day training course at IBM here in Vienna.”

Next, they were typing the SG’s speeches on composers (the first Secretary General Diana worked under was Rene G. Ortiz from Ecuador). They were the only machines or equipment that could be used to correct text at that time.

“You could save text on magnetic cards and then you had to run it to make corrections, you can’t even imagine working on equipment like that anymore.”

At first, she typed in and corrected a lot of SG speeches, as well as working on Annual Statistical Bulletin (ASB) tables, for which she and a colleague had to type in every figure from a printed version acquired

from statistics. Then they had to proofread everything and correct it again.

“It was much more work than it is now ... Now we just copy and paste the figures we receive from statistics.

“The first couple of issues of the OPEC Bulletin were done on typewriters, then on the composers... I took over the Bulletin around 1981. Since then I’ve been doing the OPEC Bulletin. Over the years it changed so much both technically and layout wise.”

The first word processing system in the Department was the Wang system, which doesn’t exist anymore, she says.

“For the typesetting we had to learn a code-driven system where you had to put in extremely long codes to have the columns or typeface change, for every little change.

“After that we got the Apple Macintosh units, which were introduced by one of our officers at that time in PRID, Kemal Saiki — he was an Apple freak.”

With that, visual desktop publishing started in PRID, at which time Diana went more into typesetting. Saiki got Apple computers in place, which rapidly accelerated desktop publishing.

There were different programmes (for layout) at that time, first many versions of Pagemaker, then QuarkExpress. Simultaneously, Pagemaker was being developed, which was then taken over by Adobe and Adobe had InDesign, which remains the premiere programme today for desktop publishing, she clarifies.

“I did a lot of training over the years, OPEC offered some, and I did a lot myself. I did HTML training in order to understand the background better. I wanted to know how everything works. PRID was setting up its first website, which was based on HTML,” says Diana.

“The Bulletin production process has changed so much over the years. I was doing the production side, and there was always one graphic designer working in the team and an editor.

“Nowadays all the editors are contributing and there is a rotating editorship,” she adds. “The last editor she worked intensively with, Jerry Haylins, was sole editor for about ten years. Prior to Jerry it was Keith Jinks, who was the editor for around 15 years.

What made her stay six weeks short of 43 years?

“I always enjoyed doing my work. Even though you are doing the Bulletin every month ... it’s always different. I enjoyed it so much. It had so many different aspects.”

She adds that in the 1980s she was also travelling a lot with OPEC and attending many OPEC Ministerial conferences abroad.

“I did the press accreditation at many conferences in the 1980s and 90s, in Bali, Jakarta and Geneva and Brioni in former Yugoslavia (in 1986). The son of Tito invited us to the island,” she laughs, “it was a beautiful cultural experience.

“Later PRID was restructured and job descriptions were clearly redefined. The design team was created of which I was a part of and the accreditation taken over by another team, so that meant no more travelling for me.”

The restructuring took place around 2009 when OPEC moved to its new headquarters on Helderstorferstrasse 17 in Vienna’s first district.

Always friendly and competent at work, Diana is also

Diana Lavnick.



remembered for the many years she dedicated to her second job at OPEC — working for the Social Committee, which built bonds and team spirit over decades among OPEC and sister organization OPEC Fund for International Development (OPEC Fund) staff.

“(Former Secretary General from October 1984 to December 1985 and again from July 1988 to June 1994) Dr Subroto was very supportive of the Social Committee. He was SG and the SG is in charge of the Social Committee. He participated I think in every event we did. He was always present.

“We had gatherings at his residence, he invited everyone there to celebrate Eid or other occasions. He got the Indonesian Embassy involved in some of our activities.”

She adds a couple of performances were held with ladies from the Indonesian Embassy, which were rehearsed with them and their children.

“It was also a very nice experience. He was very kind-hearted and he loved tennis. He was a member of the Social Committee tennis club. When we were in Indonesia at the OPEC Conferences he got some of the OPEC staff to play tennis with him.”

Diana loved accounting at school and says it may have been part of the attraction to the Social Committee, which she became part of when Nigerian James Audu was head of PRID in around 1987.

“He took over the chairmanship of the Social Committee and asked me to take care of the organizational and administrative matters. Although it was a voluntary job, I accepted because he wanted me to do so.”

The Social Committee was officially established at the beginning of the 1980s by Mohamed Mimouni after random ski trips were held for staff and organized sports activities began, such as squash and soccer games and tournaments against the Austrian police team.

“I really enjoy organizing activities and like getting people together, and with the Social Committee sometimes if the atmosphere amongst staff was not that great, we had a lot of activities and people got together and the kids got together and it made everyone happier,” she says, adding it is an integral part of bonding and team-building.



Diana Lavnick (r) with Maureen MacNeill.

She organized up to 2–3 ski trips per year, among other activities. On her last ski trip this February to Bad Aussee, the bus let out a cheer when she announced it would be the final trip she organized. Some of the adults on that trip were children on trips she had organized in earlier years.

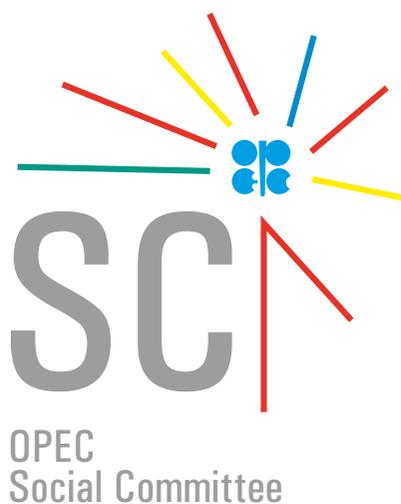
The highlight of Social Committee events over the years was a year-end gathering held at the pyramid in Vösendorf, says Diana. Diana and former OPEC AV Assistant, Diana Golpashin rehearsed with children from September until December, with the help of a professional choreographer.

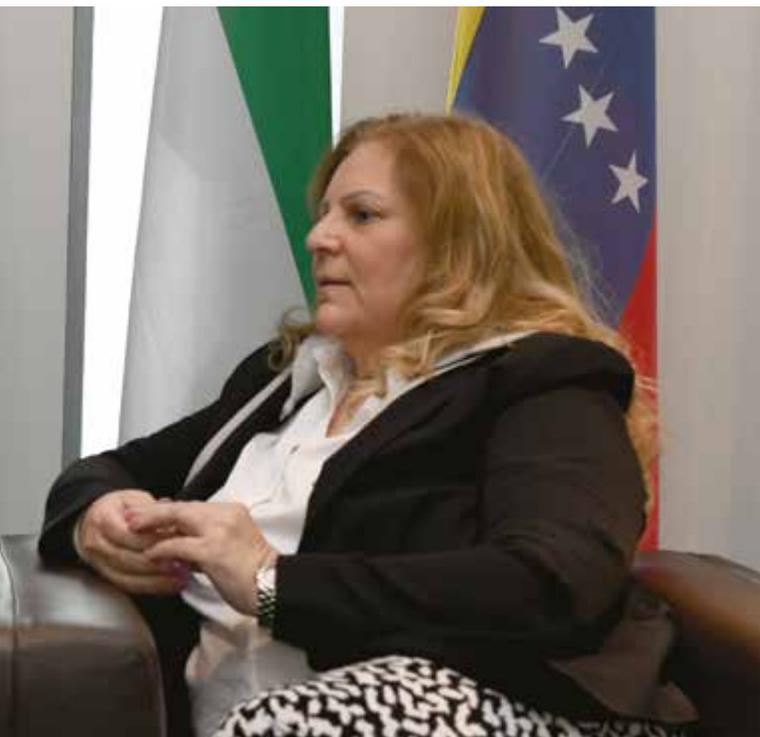
“We had a huge show on stage with many of the OPEC kids performing. In my opinion that was the nicest event we ever organized. I think the only person around now who attended that event is (current OPEC staff member) Martey Korley, his kids were toddlers at that time.”

Diana says that one collects a lot of memories in over 40 years. She remembers a head of PRID called Yusufu Turundu who was famous for his signature. “When he left he gave us a full description of what his signature means and what it’s all about, including the meaning of each of his children in the signature.”

Over the years, Diana says she got on very well with all Heads of Departments.

“I think it’s important wherever you work to have nice colleagues and a good working atmosphere. You can also create that for yourself. I really try to get on and always got on with all the editors with whom I was





working very closely. I was very happy and when asking people (outside of OPEC) if they liked their job, I seemed to be the only one who loved my job.

“Till the end I really enjoyed it. My job was creative and even though in a way you’re doing the same thing, it’s doesn’t get monotonous.”

Sometimes the ‘OPEC Family’ was a very strong concept, says Diana, adding once again that the job and environment are always what people make of it.

“It depends on how you approach people, how you are towards people and how open you are. I really love all cultures and that’s why I love travelling because I like to see how other people are and how they live.”

The international component was definitely part of the added value for Diana at OPEC, along with the English-speaking environment. “I don’t think I would have ever been happy in a German company.”

She laughs when she talks about a training held once at OPEC about communication between different cultures. “It’s like somebody says something and the other person understands something completely different.

“I think working in an environment like this you have to find a way for yourself to manage to work together with everyone. My philosophy is to get along with everyone.”

Diana states that security was never really an issue for her, despite having many of the world’s most important oil ministers regularly descend on the Secretariat for Meetings of the Conference and later Declaration of

Cooperation meetings. After 9/11 some were a little scared, she adds, as shortly after that, a Conference was held. However, in general she never felt unsafe.

“The police are there when conferences are on, there is always a lot of police. I think they are doing an excellent job in taking good care of our safety.”

She adds that from her perspective, OPEC’s reputation is much better than it used to be. When she started everyone called OPEC a ‘cartel’, and the Organization was often a scapegoat, which has diminished today.

The many campaigns and student briefings over the years, which did not exist in earlier days, have had an obvious effect over time, states Diana.

The new building to which OPEC moved in 2009 is very state-of-the-art and nicer than the old building, which was along the Danube canal, she says, “... but in the old building we had more of a family atmosphere. In the old building, we had three floors and it was like a circle and you had the feeling you knew what was going on in the whole building. Here it feels more separated. It’s like every department or floor is another company, people don’t know each other as well.”

Despite changing circumstances, Secretaries General and heads of departments, Diana always felt appreciated and respected in her work environment, in both buildings.

Now that she is free, with many memories of her career at OPEC, she plans to travel a lot and attend many concerts.

“I’m going to a concert tonight, I’ve booked for several concerts. Without music I couldn’t live, music is my daily adrenalin. Of course my family is number one, but music and cars — I love cars and oldtimers. I once owned an E-Type Jaguar, a Lotus Super Seven, and an old Ford Mustang ... and had many other cars, mostly convertibles,” she laughs.

Diana states that although leaving OPEC was a strange feeling the first week, she got over it quickly.

“It’s like losing a person in a way. That’s why I spent the first week of my retirement in Amsterdam and didn’t have much time to think about it. Forty-three years is a long time coming to the office every day ... its like your backbone is missing in a way.”

Now she just intends to enjoy her retirement. 

Lift off

for Saudi Arabian astronauts

On Sunday, 21 May, the Kingdom of Saudi Arabia made history when two of its citizens – including the first Arab female astronaut – blasted off with two other astronauts from NASA’s Kennedy Space Centre in Florida on the Ax-2 mission to the International Space Station (ISS). The OPEC Bulletin reports.



The launch of a SpaceX Falcon 9 rocket from the Kennedy Space Center with Saudi Arabian astronauts Rayyanah Barnawi and Ali Alqarni, and US astronauts Peggy Whitson and John Shoffner, marked the first mission in the Kingdom’s Human Space Flight programme, which was launched by the Saudi Space Commission (SSC). The programme is an integral part of the Kingdom’s Vision 2030.

In a press release, the SSC said: “This aims to empower national capabilities in human spaceflight geared towards serving humanity and benefiting from the promising opportunities offered by the space industry, as well as contributing to scientific research in many aspects such as health, sustainability and space technology.”

Prior to the launch, the SSC and NASA held a press conference, with Advisor at SSC, Eng Mashael Al-Shamimari, attending. She underscored the importance of the launch to the country. She said: “The Saudi citizens throughout the Kingdom are excited about this scientific mission of the two Saudi astronauts,” adding that the special exhibition ‘Saudi toward Space’ will also be launched in Riyadh, Jeddah and Dhahran, in conjunction with the scientific mission of the Saudi astronauts.

Firsts

Barnawi, Saudi Arabia’s first female astronaut and the first female from the Arab world, said in a video

Vertical view of the SpaceX Ax-2 Dragon & Falcon 9.



Astronaut and biomedical scientist Rayyanah Barnawi is focusing on biomedical research during the Ax-2 mission.

released by Axiom Space that the space flight is a “dream come true”.

She added: “I never thought that I would ever be going to space ... It is an overwhelming feeling. It honestly feels like I am representing all Saudis’ ambitions, all female and all researchers as well. It is a big honour to be able to go to space, and at the same time, do the things that you love the most.”

Barnawi has multiple degrees in biomedical sciences. She has spent over nine years as a research lab technician for the Stem Cell and Tissue Re-engineering Program at the King Faisal Specialist Hospital and Research Centre in Riyadh. During the Ax-2 mission, she is focusing her attention on stem cell and breast cancer research.

Alqarni served as mission specialist on the Ax-2 mission. He has more than 12 years of flying experience on multiple aircraft. He has primarily piloted the F-15SA in service to the Royal Saudi Air Force.



Ali Alqarni served in the Royal Saudi Air Force before becoming a mission specialist on the Ax-2 mission.

In comments related to the Ax-2 mission, Alqarni credits a visit to NASA’s Johnson Space Centre, while training with the US Air Force as a member of the Royal Saudi Air Force, for fuelling his interest in space. It was the moment that fed his imagination, and with the support of the SSC, he is now an inaugural member of the Saudi National Astronaut Program.

Michael Suffredini, President and CEO of Axiom Space, congratulated all the astronauts following the launch and said: “This journey is the culmination of long hours of training, planning, and dedication from the crew and the entire Axiom Space team, our partners at SpaceX, and of course, a credit to NASA’s vision to develop a sustainable presence in low-Earth orbit.”

Mission focus

The Ax-2 mission is Axiom Space’s second all-private astronaut mission to the ISS, which the company sees as marking another pivotal step toward Axiom Station, the world’s first commercial space station and successor to the ISS.

The ten-day mission for the four-person astronaut crew included conducting more than 20 different experiments while aboard the space station, covering a breadth of science and technology specialty areas to inform future human spaceflight and improve life on Earth.

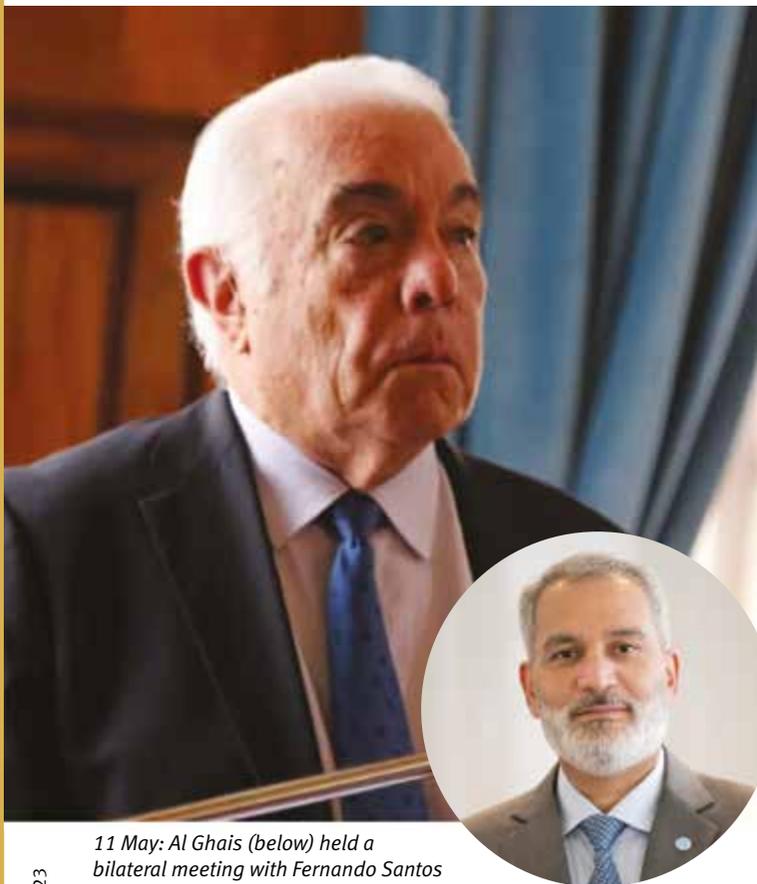
The main crew of the Ax-2 mission inside the Dragon spacecraft (l-r): Rayyanah Barnawi; John Shoffner; Peggy Whitson; and Ali Alqarni.

All pictures are credited to SpaceX.



OPEC Secretary General's diary

*In the course of his official duties, **Haitham Al Ghais**, OPEC Secretary General, visits, receives and holds talks with numerous dignitaries. The following records some of those events.*



11 May: Al Ghais (below) held a bilateral meeting with Fernando Santos Alvite, Minister of Energy and Mines of the Republic of Ecuador, via videoconference.



12 May: Al Ghais (l) welcomed Ryuta Mizuuchi, Ambassador of Japan to Austria, to the OPEC Secretariat in Vienna.



21 May: Al Ghais (r) received Jasem Mohamed Al-Budaiwi, Secretary General of the Gulf Cooperation Council, at the OPEC Secretariat.



1 June: Al Ghais (r) with Larbi Latroch, new Ambassador of Algeria to Austria and the Permanent Representative.



2 June: Al Ghais (l) held a meeting with Antonio Oburo Ondo, Equatorial Guinea's Minister of Mines and Hydrocarbons.



5 June: Al Ghais (r) met with Mayen Wol Jong, Undersecretary of the Ministry of Petroleum of South Sudan, at the OPEC Secretariat.



Saudi Arabia and Netherlands sign MoU to collaborate on green energy

Green hydrogen production has received a boost after the signing of a memorandum of understanding (MoU) between Saudi Arabia and the Netherlands on 11 May to cooperate in developing clean gas and expediting the global pursuit to reduce the carbon footprint.

The MoU was signed on the sidelines of the World Hydrogen Summit in Rotterdam.

During the event, Prince Abdul Aziz bin Salman Bin Abdulaziz Al Saud, Saudi Arabia’s Minister of Energy, said that the Netherlands could be the primary destination for the Kingdom’s hydrogen from renewable energy sources to Europe.

The minister also added that the Netherlands and Germany would be Saudi Arabia’s “natural partners” in the green hydrogen trade.

“You are putting facilities on the ground, you are building storage and pipelines, you have a plan,” said the minister, Reuters reported.

Green hydrogen is expected to play a crucial role in catalyzing the ongoing energy transition.

Saudi Arabia is currently developing a \$5 billion green hydrogen project in NEOM, powered by renewable energy, to supply 650 tons of carbon-free hydrogen daily. The plant will see its first production in 2026.

The project will export hydrogen in the form of liquid ammonia to the world market for use as a biofuel that feeds transportation systems.

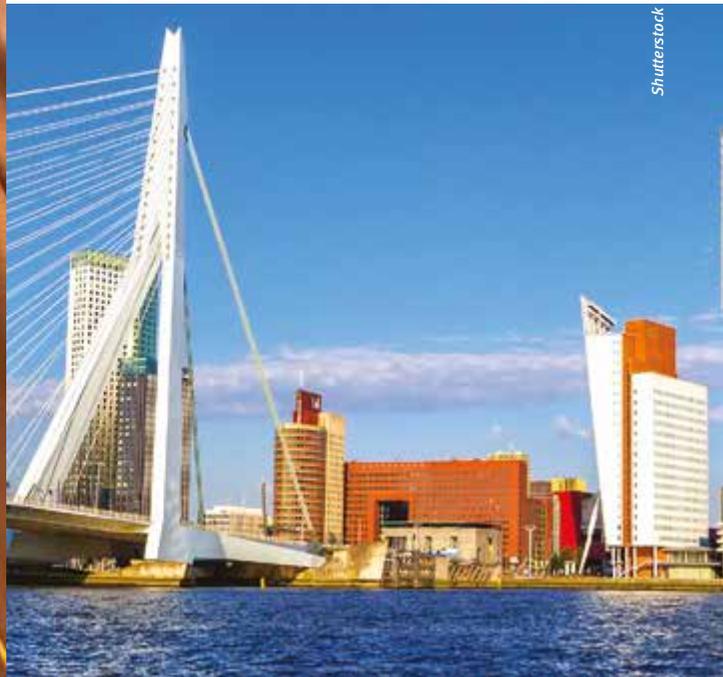
Earlier in April, the Saudi minister met with Dutch Foreign Minister Wopke Hoekstra to discuss the possibility of making the port of Rotterdam the gateway for clean hydrogen exports from Saudi Arabia to Europe.

The meeting also touched on the Kingdom’s efforts in clean energy and climate change through its local and regional frameworks — the Saudi Green Initiative and the Middle East Green Initiative.

Affirming its progress in renewable energy production, Saudi Arabia’s SABIC Agri-Nutrients in May exported its first shipment of low-carbon ammonia to India.

According to a Saudi Press Agency report, the firm has shipped 5,000 tons of low-carbon ammonia to India, in line with its long-term cooperation with the Indian Farmers Fertilizer Cooperative Limited. 

Prince Abdul Aziz bin Salman Bin Abdulaziz Al Saud, Saudi Arabia’s Minister of Energy.



The Nieuwe Maas river in Rotterdam.

Dangote Refinery begins operations

Nigeria's long-awaited Dangote Refinery, based in Lagos, began operations on 22 May. The 650,000 b/d oil processing facility has been designed to process crude oil grades from Africa, Asia and America.

The refinery will deliver about 38 million litres of petrol, diesel, kerosene and aviation fuel to Nigeria daily, thus meeting 100 per cent of the fuel supply requirements of the country, including Euro-V quality gasoline, diesel, kerosene and aviation jet fuel, along with having a surplus of each of these products for export, together with polypropylene.

The refinery should support the establishment of 26,716 fillings stations, create 100,000 direct and indirect jobs, and provide a \$21bn market for Nigerian crude oil annually, supporting government efforts to make Nigeria self-sufficient in the local refining of crude oil, thus saving on foreign exchange.

"The refinery is designed to use the latest technology to comply with stringent guidelines and regulations to protect the local environment, and at the same time produce the latest

environmentally friendly petroleum products for worldwide markets," a document from the refinery company stated.

"Dangote is one of the few companies in the world executing a petroleum refinery and a petrochemical complex directly as an engineering, procurement, and construction (EPC) contractor. Globally, apart from three companies, no individual owner has done the complete EPC contract for a petroleum refinery," it stated.

The Abuja Chamber of Commerce and Industry recently said that it was delighted to celebrate the momentous achievement of Aliko Dangote, the Chairman of Dangote Refinery, for investing in the development of the largest refinery in Africa.

"ACCI recognises the importance of this investment in creating new jobs, improving Nigeria's economy, and boosting the country's oil and gas industry. This investment is expected to attract foreign capital and significantly reduce Nigeria's reliance on oil imports," the chamber stated.

"The Dangote Refinery is also expected to provide a platform for technological and industrial development, with the promotion of local content in the oil and gas industry." 



An entrance view to the state capital Abuja.



IR Iran and Oman aim to jointly develop Hengam

IR Iran and Oman have signed an agreement to jointly develop the shared Hengam offshore oilfield in the Strait of Hormuz.

The deal is "aimed at preparing a Master Development Plan (MDP) for the joint oilfield, and different scenarios for further development and bilateral cooperation on the exploitation of the field", SHANA, the Iranian Oil Ministry's news service, reported. "This is the first agreement on cooperation between IR Iran and a neighbouring country in a shared field."

The cooperation document was inked by IR Iran's Minister of Oil Eng Javad Owji and Omani Minister of Energy and Minerals Salim bin Nasser Al-Aufi on the first day of the official visit of Oman's Sultan Haitham bin Tariq al-Said to Tehran.

The agreement to develop the Hengam oilfield, which straddles IR Iran and Oman's



Eng Javad Owji, Oil Minister of Iran.

offshore waters, follows a bilateral memorandum of understanding signed last year.

A development contract is pending and will be signed after the MDP preparation, SHANA added.

The Hengam oil and gas field lies 70 kilometres offshore IR Iran and is operated by the Iranian Offshore Oil Company.

Owji said last year that a joint technical committee was being formed to develop the next phases of the oilfield between IR Iran and Oman in a seamless manner.

However, in a fresh impetus to the development, Owji said last year that "joint exploitation, in contrast to competitive exploitation, will be mutually beneficial to both countries, as this method leads to less damage to the reservoir and allows for more extraction". 



Salim bin Nasser Al-Aufi, Oman's Minister of Energy and Minerals.





International energy organizations, officials offer full support to UAE COP28 Presidency

International energy organisations and officials have affirmed their unwavering support to the United Arab Emirate’s (UAE) inclusive approach to this year’s COP28 and its President-Designate, Dr Sultan Ahmed Al Jaber, Minister of Industry and Advanced Technology, according to Emirates news agency WAM

“The UAE is a recognised global leader in tackling the challenges related to energy, climate change and sustainable development. Not only in words, but also in its actions with major investments into the development and deployment of renewables and technologies focused on reducing greenhouse gas emissions,” said OPEC in a statement.

“Dr Al Jaber is a well-respected and renowned global energy leader. As Chairman of Masdar and Group CEO of the Abu Dhabi National Oil Company (ADNOC), he has guided Masdar into becoming a global leader in renewables and continues to lead ADNOC on an unprecedented

decarbonisation path, with ADNOC today having some of the lowest emissions per barrel of oil produced globally,” added the statement.

Announcing his full support for the UAE in hosting the global event, Secretary General of the Gas Exporting Countries Forum, Eng Mohamed Hamel expressed his belief that the UAE would succeed in hosting COP28 and producing significant and noticeable results for the future of climate action.

“UAE is a pioneer in combating climate change, advancing practical financial and technological solutions for sustainable development, and combining a balanced approach between economic development, social progress, and environmental protection,” he added.

He highlighted the “exceptional” experience of the COP28 President-Designate in the areas of tackling challenges related to energy, climate change and sustainable development.

According to Joseph McMonigle, Secretary General of the International Energy Forum, the UAE has made a significant contribution to global advocacy for climate and environmental action.

Jamal Issa Al-Loughani, Secretary General of the Arab Petroleum Exporting Countries, said that “The UAE’s hosting of COP28 in November 2023 will play a significant role in advancing international efforts to address climate challenges and achieve energy sustainability.”

The African Petroleum Producers’ Organisation’s hailed the UAE’s outstanding efforts in ensuring COP28 will be a “comprehensive platform for all international energy stakeholders to map out a doable and realistic course for a successful energy transition.”



Dr Sultan Ahmed Al Jaber, UAE’s Minister of Industry and Advanced Technology.



ADNOC launches \$1 million decarbonization technology challenge



ADNOC has launched a competition to find innovations to help reshape the global energy landscape in light of the energy transitions. The Decarbonization Technology Challenge is being supported by Amazon Web Services, bp, Hub71, and the Net Zero Technology Centre.

The competition was launched at the UAE Climate Tech Forum in Abu Dhabi, where over 1,000 global policymakers, innovators, and industrial leaders met to drive technological solutions for decarbonization.

Ten finalists will be invited to pitch their innovations to a panel of judges in December 2023. Winners will receive up to \$1 million (AED3,670,000) in piloting opportunities with ADNOC. Winners will also gain access to state-of-the-art research and innovation facilities in Abu Dhabi.

Scale-up companies specializing in carbon capture utilization and storage, new energies, oil and gas emissions reduction, digital applications and advanced materials for decarbonization, and nature-based solutions are being encouraged to apply.

Musabbeh Al Kaabi, Executive Director, Low Carbon Solutions and International Growth Directorate, ADNOC said: “We are delighted to launch the Decarbonization Technology Challenge alongside our partners. ADNOC has earmarked \$15 billion for landmark decarbonization projects by 2030, including carbon capture, electrification, new CO₂ absorption technology and enhanced investments in hydrogen and renewables. We look forward to nurturing companies with the most promising innovations that can help transform, decarbonize, and proof the global energy sector.”



Musabbeh Al Kaabi, Executive Director of ADNOC.

It supports ADNOC’s strategy to utilize cross-sectoral partners to find fresh and meaningful solutions to accelerate a responsible and fair energy transition. 

Qatar interested in developing Iraqi energy projects



Deputy Prime Minister for Energy Affairs and Minister of Oil of the Republic of Iraq Hayan Abdulghani Abdulzahra Alsawas confirmed that the State of Qatar is interested in participating in obtaining rights for oil and gas exploration in his country.



The Minister told Qatar News Agency that the Qatar Economic Forum, where the announcement was made, provided an opportunity to announce a number of energy projects that Iraq wants to develop in the coming period, especially the fifth and sixth

Hayan Abdulghani Abdulzahra Alsawas, Iraq’s Deputy Prime Minister for Energy Affairs and Minister of Oil.

rounds, which include 19 blocks in the Western part of the country.

Alsawas said that he discussed a number of projects in Iraq with Qatar’s Minister of State for Energy Affairs and President and CEO of QatarEnergy Saad bin Sherida Al Kaabi, calling on international companies to participate in these rounds, given the role these investments would play in generating electricity and securing financial resources for Iraq.

Qatar Energy agreed to own a 25 per cent stake in an Iraqi project to develop natural gas called the Gas Growth Integrated Project. The project’s coalition is 30 per cent owned by Basra Oil Company, 45 per cent by TotalEnergies, and 25 per cent by QatarEnergy. 

Visits to the Secretariat

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 present on the Organization and the oil industry. Here we feature some snapshots of such visits.



23 May

Students from the University of Vienna, Austria.



26 May

Students from the University of Francisco Marroquin, Guatemala City, Guatemala.



30–31 May

Lecturers and students from King Fahd University of Petroleum and Minerals of the Kingdom of Saudi Arabia.

OPEC

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Hanoi Central Transport Hospital



OPEC Fund



OPEC Fund



Hanoi Central Transport Hospital

In the field

A new bridge in Viet Nam is just the latest example of the OPEC Fund's growing role in the region, which also earned it an invitation to the latest Ministerial Conference of the Greater Mekong Subregion.
By Axel Reiserer, OPEC Fund



OPEC Fund



PMU/Dam Vac Bridge Project

Visiting the Central Transport Hospital in Hanoi (top left/above); Jaafar Al-Mahdi (top centre); at the 25th Ministerial Conference (top right); Sarah Bougara; and the visit to the Dam Vac bridge.



PMU/Dam Vac Bridge Project

Building a bridge to Asia



The OPEC Fund is stepping up its engagement in Southeast Asia, a dynamic region of huge potential, yet also significant development gaps. The most recent example is the newly opened Dam Vac bridge, which crosses a lake north of the capital Hanoi and significantly improves connectivity in the entire region. With the provision of \$21.8 million, the OPEC Fund contributed 85 per cent of the \$25.5 million total project cost.

The Vietnamese authorities extended an invitation to the OPEC Fund for the first mission to the country since the start of the COVID-19 pandemic and this provided a welcome opportunity for Jaafar Al-Mahdi, Director for Public Sector Operations in Asia and the Pacific, to re-engage with local partners on the ground. Participating in the opening ceremony in December he said: “This bridge is a milestone in the development of Viet Nam’s infrastructure. More than 100,000 people are expected to benefit from better and faster travel connections.”

In addition, the project will also benefit the environment. Sarah Bougara from the Young Professional Development Program, who accompanied Mr Al-Mahdi, explains: “The initial scope of Dam Vac bridge project is complete. The remaining fund savings will be used to construct a road linking the lakeside road to the Dam Vac bridge and to dredge the lake’s bed, which will help reduce flooding and enhance the surrounding environment.”

The 295-meter reinforced concrete arch bridge connects the urban regions in the north with the rural regions in the south of Vinh Yen City, the economic and cultural centre of Vinh Phuc province. Due to its strategic location the authorities attach great attention to the development of the mountainous region. Industry, agriculture and tourism form the backbone of the local economy, which in the period 2000–13 registered average growth of 17.2 per cent, according to official data. These spectacular rates were a mix of pent-up demand and the authorities’ successful effort to attract foreign direct investment.

The OPEC Fund signed its first project in Viet Nam in 1978 when it provided \$7 million to a fisheries development program. Over the years, the engagement grew to the current total of 21 loans for more than \$280 million across all sectors. Additionally, trade financing has become more and more important due to Viet Nam’s growing economic role as an international trading hub.

“Viet Nam is one of the most dynamic economies that we know,” Mr Al-Mahdi said. “However, moving from rapid growth to sustainable development is a long-term effort where institutions such as the OPEC Fund still have an important contribution to make.”

The close relationship was also demonstrated by the fact that the delegation was invited to meetings at the Ministry of Finance and to visit another OPEC Fund-supported project, the Central Transport Hospital in Hanoi. The hospital received a loan from the Fund in 2010 for the acquisition of high-tech equipment, including an MRI machine, emergency, surgical and maternity wards with over 200 beds. The hospital provides quality care for over 700 patients daily, and an additional 80 patients per day in emergency care.

The growing role of the OPEC Fund in Southeast Asia was also reflected in the first invitation to attend the 25th Ministerial Conference of the Greater Mekong Subregion (GMS) in Luang Prabang, Lao PDR, as an

observer. Country Manager Driss Belamine represented the institution and reported: “The event was a golden opportunity to meet with colleagues from our partner countries and peer development banks.”

The GMS is a natural economic area bound together by the Mekong River, covering 2.6 million square kilometres and with a combined population of around 326 million, excluding China. It is formed by Cambodia, the People’s Republic of China, Lao PDR, Myanmar, Thailand and Viet Nam.

With a vision to develop a more integrated, prosperous, sustainable and inclusive subregion, the GMS Economic Cooperation Program supports the implementation of high-priority subregional projects in priority sectors. Significant progress was achieved in the implementation of the previous GMS Regional Investment Framework 2022, which at the end of its term had 63 per cent of the 205 projects completed or commenced and \$59 billion (bn), or 76 per cent, of the total required funding secured. The 25th Ministerial Conference saw the endorsement of the new GMS Regional Investment Framework 2023–25.

The Asian Development Bank (ADB) is supporting the further integration with a focus on upgrading production and exports, transforming cities into engines of growth and improving the quality of road infrastructure and connectivity. The OPEC Fund — often partnering with the ADB — to date has committed more than \$1.1 bn to the countries of the region in the transport, education, agriculture, health and energy sectors.

“This bridge is a milestone in the development of Viet Nam’s infrastructure.”

— Jaafar Al-Mahdi, OPEC Fund,
Director for Public Sector
Operations in Asia and the Pacific

Forthcoming events

UNITI Mineral Oil Technology Forum, 4–5 July 2023, Stuttgart, Germany Details: UNITI Bundesverband mittelständischer Mineralölunternehmen e.V., Jägerstraße 6, Berlin 10117, Germany. Tel: +49 30 755 414-300; fax: +49 30 755 414-366; e-mail: info@uniti.de; website: www.uniti.de/veranstaltungen/formate.

East Russia Oil and Gas Forum, 5–6 July 2023, Vladivostok, Russia. Details: Vostok Capital, Unit C, Toronto House, Surrey Quays Rd, London, UKSE16 7AJ, UK. Tel: +44 207 394 3090; e-mail: events@vostockcapital.com; website: https://eastrussiaoilandgas.com/en.

8th OPEC International Seminar, 5–6 July 2023, Vienna, Austria. Details: OPEC Secretariat, Helfferstorferstrasse 17, 1010 Vienna, Austria. Tel: +43 1 211 12 33 12; mobile: +43 676 37 92 612; fax: +43 1 216 43 20; website: https://seminar.opec.org.

Gas India Expo, 6–8 July, Greater Noida, India Details: Indian Exhibition Services, 6th floor, B-605, Tower-B Noida One IT Park, Sushil Marg, Sector 62, Uttar Pradesh, 201309, India. Tel: +91 98 10 82 50 90, +91 98 11 91 33 76; e-mail: ashish@gasindiaexpo.com; event@ies-india.com; website: http://gasindiaexpo.com.

World Gas Summit 2023, 6–8 July 2023, Greater Noida, India. Details: Indian Exhibition Services, 6th floor, B-605, Tower-B Noida One IT Park, Sushil Marg, Sector 62, Uttar Pradesh, 201309, India. Tel: +91 98 10 82 50 90, +91 98 11 91 33 76; e-mail: ashish@gasindiaexpo.com; event@ies-india.com; website: http://gasindiaexpo.com.

NOG Energy Week Conference and Exhibition, 9–13 July 2023, Abuja, Nigeria. Details: Details: dmg :: events, 6th floor, Northcliffe House, 2 Derry Street, London W8 5TT, UK. Tel: +44 20 36 15 28 73; fax: +44 20 36 15 06 79; conferencemarketing@dmgevents.com; website: www.nogenergyweek.com.

International Conference and Exhibition on Liquefied Natural Gas, 10–14 July 2023, Vancouver, BC, Canada. Details: Details: dmg :: events, 6th floor, Northcliffe House, 2 Derry Street, London W8 5TT, UK. Tel: +44 20 36 15 28 73; fax: +44 20 36 15 06 79; e-mail: registration@lng2023.org; website: www.lng2023.org.

Mexico Oil and Gas Summit, 12–13 July 2023, Mexico City, Mexico (virtual event). Details: Mexico Business Events, Av. Paseo de la Reforma 180, piso 20, Col. Juárez, Cuahutémoc, 06600, Ciudad de México, México. Tel: +55 52 63 02 00; website: https://mexicobusiness.events/oilandgas/2023/07.

Energy Next, 18–19 July 2023, Sydney, Australia. Details: Reed Exhibitions, Gateway House, 28 The Quadrant, Richmond, Surrey TW9 1DN, UK. Tel: +55 11 46 59 00 12; website: e-mail: energy-next@rxglobal.com; www.energynext.com.au.

Thailand Oil and Gas Roadshow, 20–21 July 2023, Rayong, Thailand. Details: Fireworks Media (Thailand) Co., Ltd., Promphan 2 Office and Residence, 8th floor (Office Zone, Room 807) 1 Soi Lat Phrao 3, Lat Phrao Road, Jompol, Chatuchak, Bangkok 10900, Thailand. Tel: +66 25 13 14 18; e-mail: info@fireworksthailand.com; website: www.oilgasroadshow.com.

Nigeria Annual International Conference and Exhibition, 31 July 31– 2 August 2023, Lagos, Nigeria. Details: SPE International, 4th floor West, America House, 2 America Square, London EC3N 2LU, UK. Tel +44 20 80 78 67 10; e-mail: spelon@spe.org; website: www.naice.spenigeriacouncil.org.

SPE Subsea Well Intervention Symposium, 8–10 August 2023, Galveston, TX, USA. Details: Society of Petroleum Engineers, 10777 Westheimer, Suite #335, Houston, TX 77042, USA. Tel: +1 713 779 95 95; fax: +1 713 779 42 16; e-mail: spehou@spe.org; website: www.spe.org/events/en/2023/symposium/23ssi/subsea-well-intervention.html.

International Conference on Petroleum, Oil and Gas Sustainability, 11–12 August 2023, Colombo, Sri Lanka. Details: Global Academic Research Institute, 87/23 A, Kohilakotuwa Rd, Neelammahara, Maharagama, Colombo, Sri Lanka. Tel: +94 77 39 40 838; e-mail: helpdesk@gariteam.com; website: www.naturalresourceconference.globalacademicresearchinstitute.com.

Oil and Gas and Petrochemical Accounting and Performance Measurement, 14–18 August 2023, Vienna, Austria. Details: Oxford Management Centre, Europe Office, John Eccles House, Robert Robinson Ave, Oxford Science Park, Oxford OX4 4GP, UK. Tel: +971 50 985 01 74; e-mail: info@oxford-management.com; website: https://oxford-management.com/course/oil-gas-and-petrochemical-accounting-performance-measurement.

PE Energy Transition Symposium, 22–23 August 2023, Houston, TX, USA. Details: Society of Petroleum Engineers, 10777 Westheimer, Suite #335, Houston, TX 77042, USA. Tel: +1 713 779 95 95; fax: +1 713 779 42 16; e-mail: spehou@spe.org; website: www.spe.org/events/en/2023/symposium/23ets/energy-transition-symposium.html.





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2022

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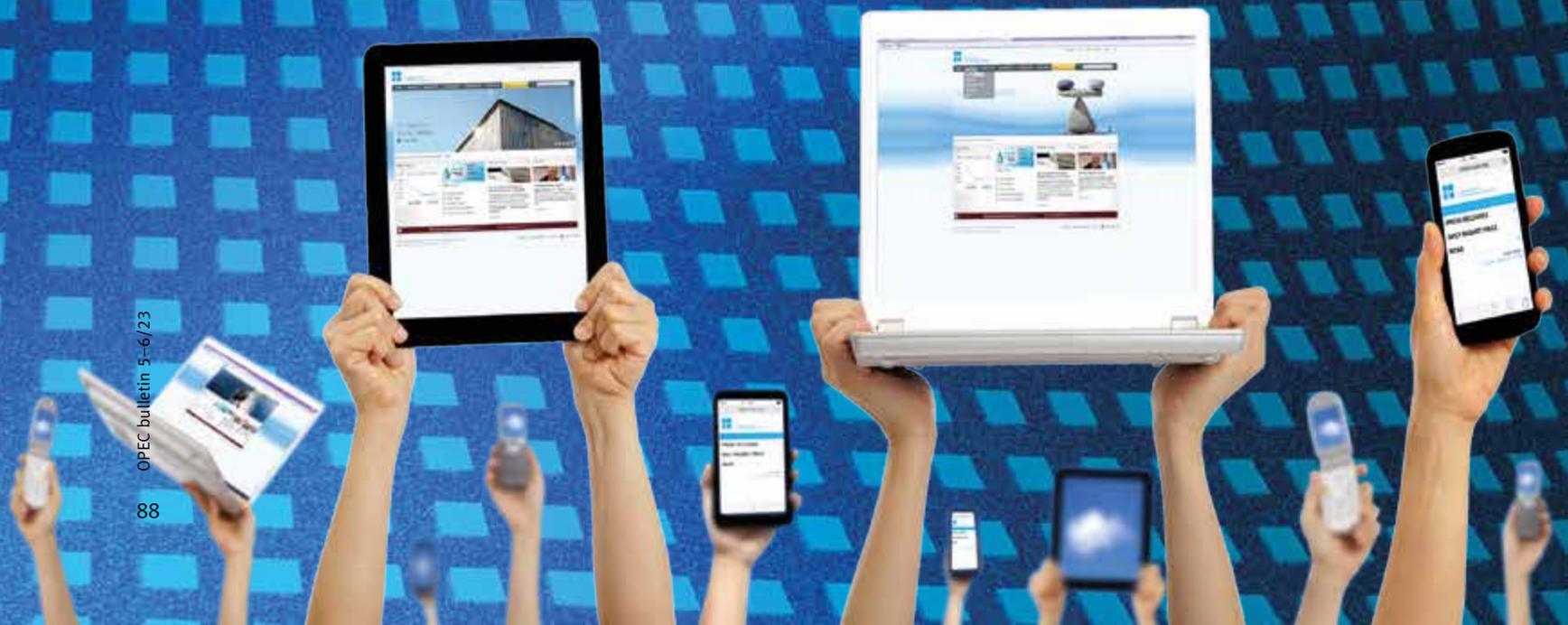
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Non-OPEC oil supply development

May 2023

In 2022, non-OPEC supply is estimated to have increased by 1.9 million barrels per day (mb/d) year-on-year (y-o-y). Out of this, US liquids production increased by 1.2 mb/d, mainly on the back of light tight oil production and increased natural gas liquids (NGLs) output from non-conventional basins. US light tight crude production increased by 500,000 b/d, with the Permian constituting the main source of growth, increasing by 600,000 b/d, supported by a relatively lower breakeven price and higher drilling rig activities, while output in the Bakken and Eagle Ford declined. Liquids supply in Russia rose by around 230,000 b/d. Canada, Guyana, China, Brazil and Oman also contributed to production growth in 2022. These developments were partially offset by supply declines totalling around 500,000 b/d, mainly from Norway, Thailand and the UK.

Capital spending for oil and gas exploration and production (E&P) in non-OPEC countries increased by \$72 billion (bn) y-o-y in 2022 to \$431 bn. It is expected to rise by around ten per cent y-o-y in 2023. On a country level, E&P spending for 2023 is forecast to increase in Norway, Brazil, the US and Canada by 26 per cent, 15 per cent, 12 per cent, and eight per cent, y-o-y, respectively.

The year 2022 proved to be an extraordinary period for the energy market, with most oil and gas companies witnessing healthy profits. However, the ratio of investment to cash from operations was exceedingly low, since many international oil companies continue to focus on capital discipline to improve their balance sheets. Overall investment levels for non-OPEC supply in 2023 are expected to be just above pre-pandemic levels. However, this is still significantly below the high of \$747 bn in 2014.

For 2023, non-OPEC liquids supply is forecast to grow by 1.4 mb/d y-o-y. There remains substantial uncertainty, however, regarding geopolitical developments in Eastern Europe and the potential impact on Russian oil supply. Moreover, US liquids supply developments will continue to hinge on the degree of capital discipline employed by companies and the extent to which cost inflation impacts oil production.

Liquids' output in the OECD is expected to increase by 1.5 mb/d y-o-y in 2023, mainly on the back of production increases in the US, Norway and

Canada. US crude oil and condensate production is anticipated to grow by 700,000 b/d, with NGLs and biofuel production also expected to rise. In the US, the oil rig count has rebounded from 490 units in January 2022 to 591 units in the last week of April 2023. Moreover, US core oil frac operations continue to stay above 1,000, on a monthly basis.

Canadian oil production, particularly Alberta's oil sands, is forecast to grow by 200,000 b/d y-o-y in 2023. Production growth in the North Sea and OECD Europe countries is also projected at around 200,000 b/d, mainly supported by the ramp-up of the second phase of Norway's Johan Sverdrup field development.

In the non-OECD region, Latin America is forecast to be the key driver for liquids supply. Output in the region is set to increase by 400,000 b/d y-o-y in 2023, mainly from five offshore startups in Brazil and stable production at the Liza floating production storage and offloading vessels (FPSOs) in Guyana. Liquids output in Kazakhstan and China is also expected to rise y-o-y, by around 110,000 mb/d and 70,000 b/d, respectively.

Uncertainties to the forecast remain large, especially given ongoing geopolitical developments in Eastern Europe. Moreover, high inflation levels, coupled with supply chain issues and monetary tightening by major central banks may also impact the cost of oil production and upstream sector investment levels. Given the uncertainties ahead, OPEC Member Countries and countries participating in the Declaration of Cooperation (DoC) will continue to closely monitor market developments over the remainder of the year, to help safeguard a stable and balanced market for the benefit of both consumers and producers.



MOMR ... oil market highlights

May 2023

Crude oil price movements – In April, the OPEC Reference Basket (ORB) increased by \$5.68, or 7.2 per cent, month-on-month (m-o-m) to average \$84.13/b. The ICE Brent front-month contract rose by \$4.16, or 5.3 per cent, m-o-m to \$83.37/b, and the NYMEX WTI front-month contract increased by \$6.07, or 8.3 per cent, m-o-m to average \$79.44/b. The DME Oman front-month contract rose by \$5.13, or 6.5 per cent, m-o-m to settle at \$83.47/b. The front-month ICE Brent/NYMEX WTI spread narrowed by \$1.91 m-o-m to average \$3.93/b. The futures forward curves of ICE Brent, NYMEX WTI and DME Oman strengthened across the month. Hedge funds and other money managers raised bullish positions in ICE Brent and NYMEX WTI in April.

World economy – World economic growth is estimated at 3.3 per cent for 2022 and forecast at 2.6 per cent for 2023, both unchanged from the previous month's assessment. The global economy continues to navigate through challenges including high inflation, higher interest rates in the US and the Euro-zone, and high debt levels in many regions. The US economic growth forecast for 2023 remains unchanged at 1.2 per cent, following growth of 2.1 per cent for 2022. The Euro-zone's economic growth forecast for 2023 remains at 0.8 per cent, after growth of 3.5 per cent for 2022. Japan's economic growth forecast for 2022 remains at one per cent for both 2022 and 2023. China's economic growth forecast remains at 5.2 per cent for 2023, compared with three per cent for 2022. India's 2022 economic growth estimate is unchanged at 6.7 per cent, and the forecast for 2023 remains at 5.6 per cent. Brazil's economic growth estimates for 2022 and 2023 are unchanged at 2.9 per cent and one per cent, respectively. Russia's growth is also unchanged across both years, with an estimated contraction of 2.1 per cent for 2022 and a smaller forecast contraction of 0.5 per cent for 2023.

World oil demand – The world oil demand estimate for 2022 remains unchanged from last month's assessment, with a growth of 2.5 mb/d y-o-y. In the OECD, oil demand was adjusted slightly downward for 4Q22, amid data showing a demand decline in OECD Americas. This was entirely offset by a slight upward revision to the estimation for non-OECD countries. For 2023, the forecast for world oil demand growth remains broadly unchanged at 2.3 mb/d, with the OECD projected to grow by almost 100,000 m/d and the non-OECD expected to grow by about 2.3 mb/d. Within the regions, slight downward

adjustments in 1Q23 for the OECD were offset by upward revisions to the non-OECD.

World oil supply – Non-OPEC liquids supply is estimated to have grown by 1.9 mb/d in 2022, broadly unchanged from the previous month's assessment. The main drivers of liquids supply growth for 2022 were the US, Russia, Canada, Guyana, China and Brazil, while the largest declines were seen in Norway and Thailand. For 2023, the forecast for non-OPEC liquids production growth also remained unchanged from last month's assessment, at 1.4 mb/d, y-o-y. The main drivers of liquids supply growth are expected to be the US, Brazil, Norway, Canada, Kazakhstan and Guyana, while declines are expected primarily in Russia. Uncertainties remain, primarily related to the potential of US shale oil output and unplanned field maintenance in 2023. OPEC NGLs and non-conventional liquids are estimated to have grown by 100,000 b/d in 2022, to average 5.39 mb/d, and are forecast to grow by 50,000 b/d to average 5.44 mb/d in 2023. OPEC-13 crude oil production in April decreased by 191,000 b/d m-o-m to average 28.60 mb/d, according to available secondary sources.

Product markets and refining operations – Refinery margins dropped to their lowest level to date in April, following mild gains in the previous month. Product output in the Atlantic Basin rose as refinery runs recovered and the peak maintenance season approached an end. Moreover, weaker US diesel export opportunities, amid expectations of ample middle distillate arrivals into Europe, weighed on product markets and crack spreads. In Asia, softening product exports contributed to weakness across the barrel except for residual fuel, which benefitted from firm domestic requirements and lower imports. Global refinery processing rates recovered in April, gaining 918,000 b/d, according to preliminary estimates.

Tanker market – Dirty freight rates experienced a correction in April across all reported routes. Aframax saw the sharpest downturn, falling by as much as 66 per cent on the Caribbean-to-US East Coast route. Suezmax spot freight rates were next, with rates on the US Gulf Coast-to-Europe route down 36 per cent. Very large crude carriers (VLCCs) rates also declined, down 24 per cent on the Middle East-to-East route and 23 per cent lower on the West Africa-to-East route. Clean spot freight rates showed a mixed performance, with a weaker market West of Suez outweighing the strong performance East of Suez.

Crude and refined products trade – Preliminary data shows US crude imports increased to 6.3 mb/d in April amid preparations for the summer driving season. US crude exports fell back from a record high to average a still strong 4.2 mb/d. In March, China's crude imports surged to a new record high of 12.4 mb/d following a wave of buying by Chinese refiners, including from long-haul sources. China's product exports declined in March from high levels to an average of 1.3 mb/d, with declines across light and middle distillates. India's crude imports fell from a ten-month high, averaging just under 4.9 mb/d in March. India's product exports strengthened further, averaging 1.5 mb/d. Japan's crude imports were eight per cent lower in March, averaging 2.5 mb/d. Japan's product exports, including LPG, came off a strong performance the month before to average 567,000 b/d in March. Preliminary estimates for April show OECD Europe crude imports were seasonally lower, while product imports picked up from lower levels in February and March, led by diesel.

Commercial stock movements – Preliminary March 2023 data shows total OECD commercial oil stocks fell m-o-m by 31.7 mb. At 2,808 mb, they were 195 mb higher than the same time one year ago, but 34 mb lower than the latest five-year average and 105 mb below the 2015–19 average. Within components, crude and product stocks decreased m-o-m by 4.9 mb and 26.8 mb, respectively. At 1,402 mb, OECD crude stocks were 119 mb higher than the same time a year ago and 2 mb higher than the latest five-year average. However, at this level, they were 60 mb lower than the 2015–19 average. OECD product stocks stood at 1,406 mb, representing a surplus of 76 mb from the same time a year ago. Nonetheless, this was 36 mb lower than the latest five-year average and 45 mb below the 2015–19 average. In terms of days of forward cover, OECD commercial stocks fell m-o-m by 0.6 days in March to stand at 61.7 days. This is 4.1 days above the March 2022 level, but 3.2 days less than the latest five-year average and 0.8 days lower than the 2015–19 average.

Balance of supply and demand – Demand for OPEC crude in 2022 remains unchanged from last month's assessment at 28.4 mb/d. This is around 500,000 b/d higher than in 2021. Demand for OPEC crude in 2023 also remains unchanged from the previous assessment to stand at 29.3 mb/d. This is around 800,000 b/d higher than in 2022. 

The feature article and oil market highlights are taken from OPEC's Monthly Oil Market Report (MOMR) for May 2023. 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 the OPEC Reference Basket and crude and oil product prices in general.

World oil market prospects for the second half of 2023

June 2023

So far, both the US and the Euro-zone have experienced steady economic growth this year. Meanwhile, India, Brazil and Russia saw economic growth that clearly surpassed expectations. Moreover, the positive effects of China's reopening have continued supporting global economic growth. However, global economic growth in 2H23 will continue to navigate through uncertainties, including elevated key-policy rates, persistently high core inflation and a continued tight labour market. Moreover, it is still unclear how the geopolitical conflict in Eastern Europe will be resolved.

Since the beginning of the year, the main economic support at the global level came from the services sector, especially travel and transportation, tourism, leisure and hospitality. On the other hand, the manufacturing sector's dynamic has been very much lacklustre. This trend is expected to continue into the summer holiday season in the northern hemisphere, supported by still-sufficient disposable income levels, particularly in advanced economies. China is also benefitting from pent-up demand in the services sector after around three years of lockdowns. However, as services sector-related spending tightens in 3Q23, inflation, financial tightening and rising geopolitical uncertainty may dampen the growth dynamic towards the end of the year.

Turning to the oil market, global oil demand is forecast to grow by 2.4 mb/d y-o-y in 2H23. For the year, world oil demand is forecast to grow by 2.3 mb/d. In the OECD, oil demand is estimated to increase by 200,000 b/d in 2H23 y-o-y, driven mostly by the US and Asia Pacific. However, OECD Europe is anticipated to be weak. In terms of products, jet kerosene and gasoline are anticipated to be the drivers of demand in the region, while diesel is expected to be subdued by weak economic activity and geopolitically induced supply-chain bottlenecks. Naphtha is also anticipated to remain in a contraction zone due to weak petrochemical margins. In the non-OECD, the opening of China and better-than-expected performance in other countries of the region are expected to drive oil demand. Improving driving mobility and air travel recovery, as well as improvements in manufacturing sector activity, are

projected to support jet/ kerosene, gasoline and distillate demand.

Oil demand in the non-OECD is forecast to grow on average by 2.2 mb/d y-o-y in 2H23, with China remaining the largest contributor to oil demand growth.

In terms of main products, jet fuel is expected to lead oil demand growth in the region, followed by gasoline and diesel, and supported by the "other products" category.

Following estimated growth of 2.2 mb/d y-o-y in 1H23, the non-OPEC liquids supply is forecast to grow by 700,000 b/d y-o-y in 2H23. For the entire year, the non-OPEC liquids supply is anticipated to grow by 1.4 mb/d y-o-y.

On a regional basis, the OECD liquids supply is expected to grow by 1.3 mb/d y-o-y in 2H23, mainly in the US, with a projected increase of 800,000 b/d, and additional incremental production is expected to come from Norway and Canada. However, liquids supply from the non-OECD region is forecast to drop by 700,000 b/d y-o-y in 2H23. Higher production from Latin America, Other Eurasia and China is forecast to be more than offset by lower output in Russia, amid uncertainty, particularly regarding US shale oil developments, which continue to dominate in 2H23.

Given the uncertainty in the world economy and global oil markets, the DoC countries decided in their 35th OPEC and non-OPEC Ministerial Meeting to continue their precautionary, proactive, and pre-emptive approach and hence maintain their production adjustments until end of 2024, while monitoring the market closely to support stability in the months to come.



MOMR ... oil market highlights

June 2023

Crude oil price movements – The OPEC Reference Basket (ORB) fell by \$8.31, or 9.9 per cent, m-o-m to average \$75.82/b in May. The ICE Brent front-month contract declined by \$7.68, or 9.2 per cent m-o-m to \$75.69/b, and the NYMEX WTI front-month contract declined by \$7.82, or 9.8 per cent m-o-m to average \$71.62/b. The DME Oman front-month contract declined by \$8.69, or 10.4 per cent m-o-m to settle at \$74.78/b. The front-month ICE Brent/NYMEX WTI spread widened by 14¢ m-o-m to average \$4.07/b in May. The futures forward curves of ICE Brent, NYMEX WTI and DME Oman weakened during the month, and hedge funds and other money managers heavily cut bullish positions in ICE Brent and NYMEX WTI.

World economy – World economic growth is estimated at 3.3 per cent for 2022 and forecast at 2.6 per cent for 2023, both unchanged from the previous month's assessment. While economic activities have been steady so far in 1H22, the global economy continues to navigate through uncertainties, including high inflation, higher interest rates in the US and the Euro-zone, and high debt levels in many regions. The US economic growth forecast for 2023 has been revised up by 0.1 per cent to stand at 1.3 per cent, following growth of 2.1 per cent for 2022. The Euro-zone's economic growth forecast for 2023 remains at 0.8 per cent, following growth of 3.5 per cent for 2022. Japan's economic growth forecast remains at one per cent for both 2022 and 2023. China's economic growth forecast remains at 5.2 per cent for 2023, following growth of three per cent for 2022. India's 2022 economic growth estimate is unchanged at 6.7 per cent, and the forecast for 2023 remains at 5.6 per cent. Brazil's economic growth estimates for 2022 and 2023 are unchanged at 2.9 per cent and one per cent, respectively. Russia's growth is also unchanged, with an estimated contraction of 2.1 per cent for 2022 and a forecast contraction of 0.5 per cent for 2023.

World oil demand – The world oil demand growth estimate for 2022 remained unchanged from last month's assessment, with y-o-y growth of 2.5 mb/d. For 2023, the forecast for world oil demand growth remained broadly unchanged at 2.3 mb/d. China, Latin America, and the Middle East have been revised up slightly, while OECD Europe, Other Asia and Africa have been adjusted slightly lower. The OECD is expected to grow by about 50,000 b/d and the non-OECD by about 2.3 mb/d in 2023.

World oil supply – Non-OPEC liquids supply is estimated to have grown by 1.9 mb/d in 2022,

broadly unchanged from the previous month's assessment. The main drivers of liquids supply growth for 2022 were the US, Russia, Canada, Guyana, China and Brazil, while the largest declines were seen in Norway and Thailand. For 2023, non-OPEC liquids production growth remains unchanged from last month's assessment at 1.4 mb/d y-o-y. The main drivers of liquids supply growth are expected to be the US, Brazil, Norway, Canada, Kazakhstan and Guyana, while declines are expected primarily from Russia. Uncertainties remain related to US shale oil output potential and unplanned maintenance in 2023. OPEC NGLs and non-conventional liquids are forecast to grow by 100,000 b/d in 2022 to average 5.39 mb/d and by 50,000 b/d to average 5.44 mb/d in 2023. OPEC-13 crude oil production in May decreased by 464,000 b/d m-o-m to average 28.06 mb/d, according to available secondary sources.

Product markets and refining operations

Refinery margins in the US Gulf Coast (USGC) declined for the second-consecutive month in May to their lowest level this year. This downturn – attributable to rising refinery product output levels – was considerably more limited than that seen in April, with most of the decline driven by transport fuels. In Rotterdam, margins showed solid gains backed by stronger gasoline and fuel oil markets. Lower feedstock prices provided further support and led to mild gains for Asian refining economics. Preliminary estimates indicate that the global refinery intake rose further m-o-m in May, increasing by 556,000 b/d to average 81.3 mb/d.

Tanker market – Dirty freight rates showed mixed movement in May. VLCCs experienced m-o-m declines on all monitored routes, with Middle East-to-East spot freight rates falling 27 per cent as long-haul tanker demand declined. Suezmax rates recovered some of the previous month's losses, with rates on the USGC-to-Europe route increasing 35 per cent. Aframax spot freight rates showed strong performance on the Caribbean-to-US East Coast route, which jumped 121 per cent, while Mediterranean routes saw mixed performance, with intra-Med rates up two per cent and Mediterranean-to-Northwest Europe rates down nine per cent. Clean freight rates showed declines on all reported routes, with the steepest losses on West of Suez routes.

Crude and refined products trade – Preliminary data shows US crude imports increased m-o-m in May to average 6.4 mb/d.

US crude exports exhibited a still strong performance, averaging 4.3 mb/d, although lower than the record level of 4.8 mb/d achieved in March. China's crude imports in April fell back from the high levels of the previous month, to average about 10.3 mb/d, although preliminary data shows a recovery in May to average 12.2 mb/d. China's product imports jumped 26 per cent to reach a record high of 2.2 mb/d, driven by inflows of liquefied petroleum gas (LPG), naphtha and fuel oil. In April, India's crude imports slipped further from the ten-month high seen in February to average a still robust 4.8 mb/d. India's product exports fell sharply from last month's high levels to average 1.1 mb/d. Japan's crude imports recovered in April from seasonal lows, averaging 2.9 mb/d. Japan's product exports, including LPG, continued to decline, averaging 378,000 b/d in April, the lowest since the same month last year. Preliminary estimates for May show OECD Europe crude imports declined seasonally, while tanker tracking data shows product imports remained close to year-ago levels.

Commercial stock movements – Preliminary April 2023 data saw total OECD commercial oil stocks up m-o-m by 30.2 mb. At 2,808 mb, they were 144 mb higher than the same time one year ago, but 74 mb lower than the latest five-year average and 119 mb below the 2015–19 average. Within the components, crude stocks fell by 500,000 b, while product stocks rose m-o-m by 30.6 mb. OECD commercial crude stocks stood at 1,384 mb in April. This was 77 mb higher than the same time a year ago, but 42 mb below the latest five-year average and 88 mb lower than the 2015–19 average. Total product inventories stood at 1,424 mb, representing a surplus of 66 mb above the same time a year ago. However, this was 32 mb lower than the latest five-year average and 30 mb below the 2015–19 average. In terms of days of forward cover, OECD commercial stocks fell m-o-m by 0.1 days in April to stand at 60.9 days. This is 2.9 days above the April 2022 level, but 3.3 days lower than the latest five-year average and 1.3 days below the 2015–19 average.

Balance of supply and demand – Demand for OPEC crude in 2022 remained unchanged from last month's assessment at 28.4 mb/d. This is around 500,000 b/d higher than in 2021. Demand for OPEC crude in 2023 also remained unchanged from the previous assessment at 29.3 mb/d. This is around 900,000 b/d higher than in 2022.



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

Crude/Member Country	2022					2023							Weeks 17–21/2023 (week ending)					
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Apr 28	May 05	May 12	May 19	May 26
Arab Light – Saudi Arabia	116.44	117.27	108.98	104.89	99.33	96.20	91.58	82.44	83.80	83.56	80.26	85.65	77.72	82.36	77.84	78.19	77.07	78.24
Basrah Medium – Iraq	111.91	115.56	105.36	97.66	91.16	89.45	85.66	76.07	77.82	78.33	75.33	81.75	73.32	78.60	73.51	73.71	72.78	73.86
Bonny Light – Nigeria	115.07	125.22	117.58	106.08	95.73	95.02	92.84	80.69	82.36	82.88	79.24	85.94	75.63	83.16	75.80	75.76	75.48	76.29
Djeno – Congo	105.68	116.11	105.18	92.17	82.37	85.66	83.65	72.93	75.41	75.05	70.84	77.45	68.37	74.67	68.54	68.50	68.22	69.03
Es Sider – Libya	113.18	124.96	114.03	101.17	90.47	93.91	91.25	77.53	81.01	81.45	77.39	84.00	75.32	81.22	75.49	75.45	75.17	75.98
Girassol – Angola	113.95	127.03	119.15	105.99	92.26	95.61	92.76	78.69	82.05	84.06	80.31	87.01	77.20	84.72	78.13	76.96	76.67	77.78
Iran Heavy – IR Iran	115.48	115.85	107.63	102.24	97.18	93.21	88.73	79.11	81.56	81.88	78.80	84.58	76.47	81.30	76.74	76.90	75.71	76.95
Kuwait Export – Kuwait	116.82	117.26	109.19	103.82	98.69	94.72	90.13	80.46	82.94	83.19	79.86	85.49	77.42	82.22	77.71	77.86	76.67	77.90
Merey – Venezuela	88.07	92.25	84.72	80.03	73.70	71.56	66.94	58.17	61.74	61.95	57.25	62.58	56.22	59.62	56.21	56.78	55.68	56.67
Murban – UAE	109.97	117.53	105.97	98.04	92.45	93.54	90.90	80.17	82.53	83.36	79.55	84.11	75.66	80.51	75.87	75.64	74.72	76.25
Rabi Light – Gabon	112.67	123.10	112.17	99.16	89.36	92.65	90.64	79.92	82.40	82.04	77.83	84.44	75.36	81.66	75.53	75.49	75.21	76.02
Saharan Blend – Algeria	115.28	128.31	115.83	104.22	92.72	95.66	93.60	83.03	83.76	84.05	80.29	85.40	76.42	82.62	76.59	76.55	76.27	77.08
Zafiro – Equatorial Guinea	115.25	127.10	116.60	103.50	90.72	93.61	92.12	80.28	81.29	82.24	79.29	85.90	76.82	83.12	76.99	76.95	76.67	77.48
OPEC Reference Basket	113.87	117.72	108.55	101.90	95.32	93.62	89.73	79.68	81.62	81.88	78.45	84.13	75.82	80.95	76.01	76.13	75.21	76.38

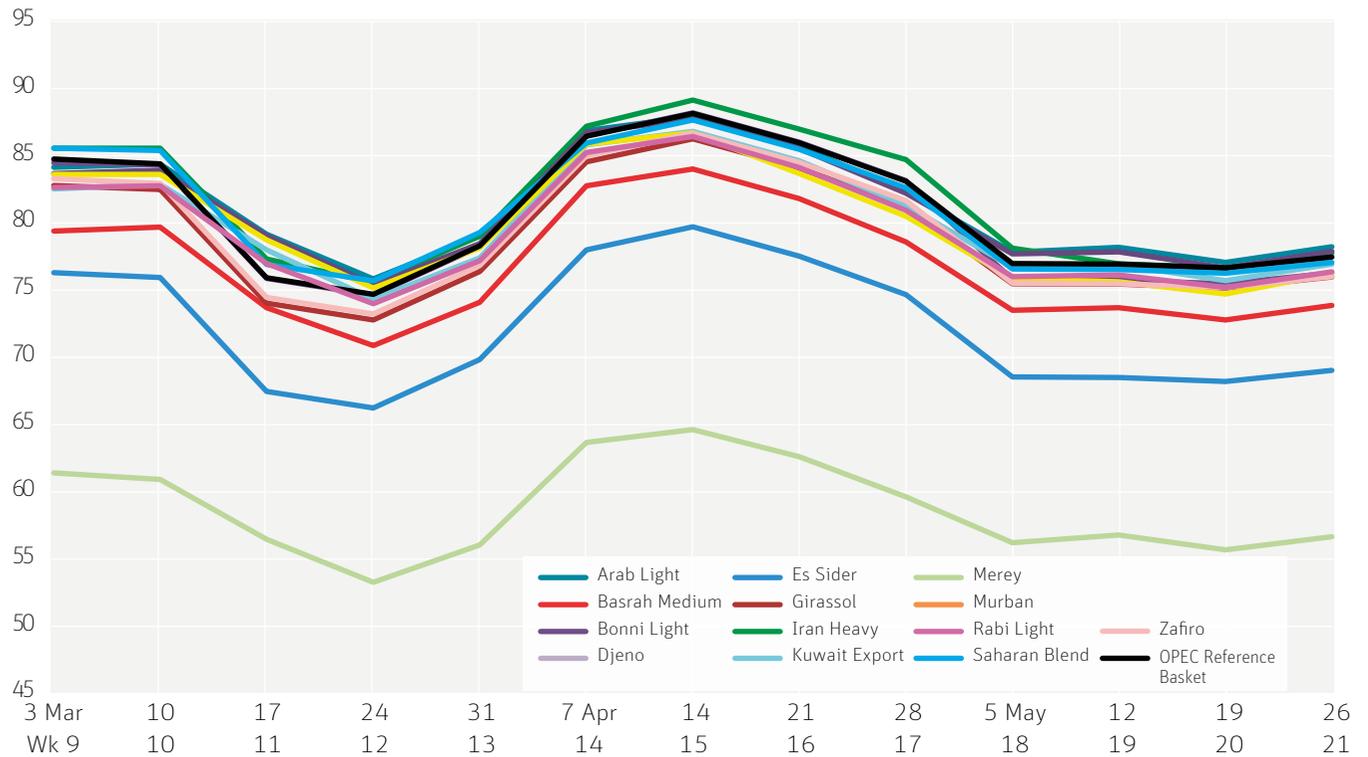
Table 2: Selected spot crude prices
\$/b

Crude/country	2022					2023							Weeks 17–21/2023 (week ending)					
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Apr 28	May 05	May 12	May 19	May 26
Arab Heavy – Saudi Arabia	115.53	115.91	107.84	101.95	96.89	93.12	88.58	78.51	79.56	79.89	76.71	84.09	76.27	80.82	76.56	76.71	75.52	76.75
Brega – Libya	114.03	125.96	114.53	101.52	90.52	93.81	91.50	77.93	81.41	81.65	77.44	83.75	74.77	80.97	74.94	74.90	74.62	75.43
Brent Dtd – North Sea	113.13	123.56	112.63	99.62	89.82	93.11	91.10	80.38	82.86	82.50	78.29	84.90	75.82	82.12	75.99	75.95	75.67	76.48
Dubai – UAE	107.83	112.89	102.87	96.33	90.98	91.04	86.12	77.09	80.75	82.05	78.42	83.40	75.13	80.30	75.44	75.50	74.31	75.50
Ekofisk – North Sea	117.46	130.39	120.37	105.29	93.02	96.02	94.32	83.22	85.67	85.67	80.40	87.31	77.49	84.72	77.09	78.19	77.42	78.23
Iran Light – IR Iran	107.82	118.61	106.76	92.07	82.45	86.95	85.71	73.42	76.79	78.68	75.64	82.75	74.19	80.62	73.07	75.21	74.50	74.91
Isthmus – Mexico	108.32	113.85	100.47	89.09	81.44	83.57	79.26	67.48	68.82	68.27	65.13	72.61	65.78	69.43	65.36	66.41	65.65	66.57
Oman – Oman	107.32	112.93	103.22	96.97	90.80	90.80	86.15	77.43	80.87	82.23	78.49	83.28	74.91	79.82	75.17	75.41	74.23	75.50
Suez Mix – Egypt	107.69	118.48	106.63	91.94	82.32	86.82	85.58	73.29	76.66	78.55	75.51	82.62	74.06	80.49	72.94	75.08	74.37	74.78
Minas – Indonesia	109.79	115.06	103.01	95.39	88.91	91.06	89.21	79.14	81.57	81.53	77.10	81.36	73.72	78.26	73.52	73.83	73.24	74.43
Urals – Russia	81.18	91.61	85.32	77.34	68.63	70.54	67.98	52.23	52.21	51.91	49.74	59.97	55.22	58.96	54.76	55.05	55.32	55.63
WTI – North America	109.86	114.36	100.25	91.57	84.00	87.26	84.15	76.50	78.19	76.81	73.37	79.44	71.64	76.34	71.16	72.07	71.64	72.63

Notes:
Brent for dated cargoes; Urals cif Mediterranean. All others fob loading port.
Sources: Argus; Secretariat's assessments.

Graph 1: Evolution of the OPEC Reference Basket spot crude prices, 2023

\$/b



Graph 2: Evolution of selected spot crude prices, 2023

\$/b

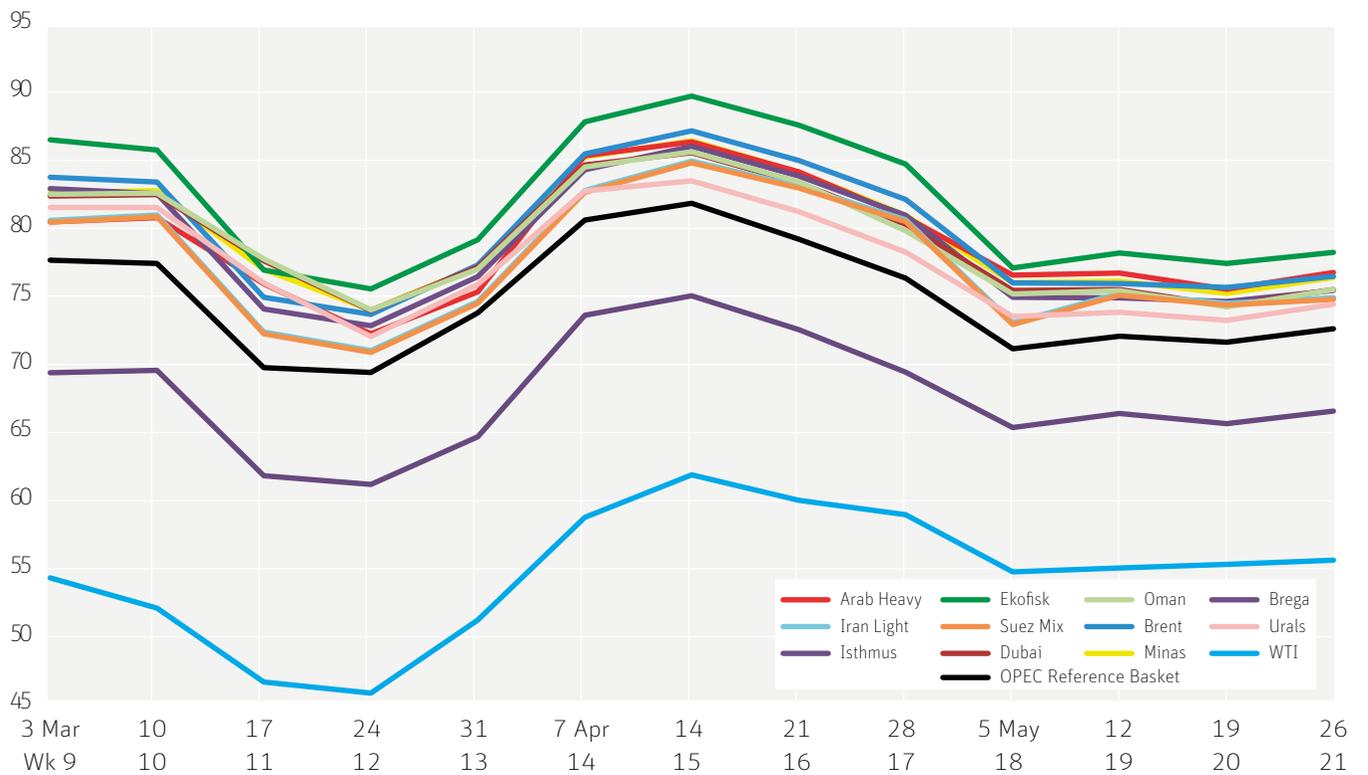


Table and Graph 3: North European market – spot barges, fob Rotterdam

\$/b

	naphtha	regular gasoline unleaded	diesel ultra light	jet kero	fuel oil 1 per cent S	fuel oil 3.5 per cent S
2022 May	98.23	166.14	160.81	152.37	100.66	95.41
June	88.76	188.54	178.57	179.29	100.23	89.69
July	84.65	158.02	147.64	153.29	89.26	70.77
August	72.98	137.45	143.04	143.00	90.31	75.00
September	69.03	124.73	135.02	139.42	82.58	62.10
October	74.30	137.02	139.35	162.90	82.06	59.29
November	73.87	127.89	132.26	134.93	74.32	60.78
December	65.57	110.33	121.12	120.72	64.77	55.92
2023 January	76.21	123.20	129.05	124.90	68.38	59.39
February	79.41	122.15	112.55	110.03	72.28	59.68
March	74.61	120.69	103.94	107.12	65.94	59.66
April	74.88	129.47	100.51	101.11	72.58	69.21
May	64.70	122.85	91.46	91.64	67.86	62.98

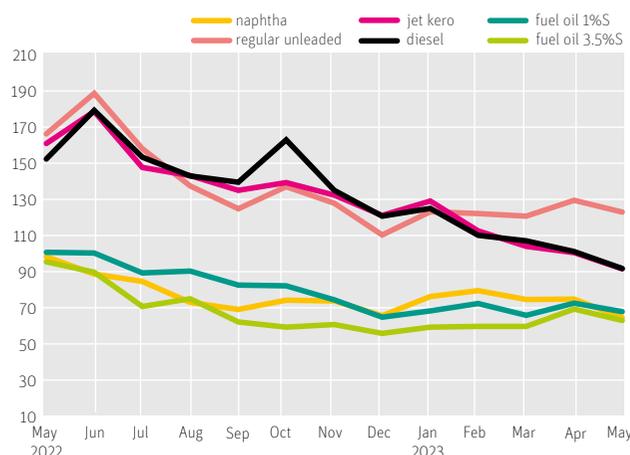


Table and Graph 4: South European market – spot cargoes, fob Italy

\$/b

	naphtha	premium gasoline 50ppm	diesel ultra light	fuel oil 1 per cent S	fuel oil 3.5 per cent S
2022 May	94.86	151.69	151.88	106.96	91.99
June	83.67	173.11	177.45	107.04	85.70
July	82.14	141.78	145.03	95.58	70.58
August	70.39	114.86	135.92	96.88	71.03
September	67.00	101.21	134.05	89.44	51.18
October	71.14	111.60	151.41	89.45	56.62
November	70.34	115.35	133.06	80.64	57.73
December	60.68	93.46	116.22	71.36	52.97
2023 January	73.95	102.57	126.21	74.50	54.67
February	76.70	102.34	110.96	76.71	55.16
March	70.23	104.28	107.97	70.91	58.18
April	71.54	107.49	102.24	77.13	67.38
May	63.28	95.96	92.25	72.46	62.35

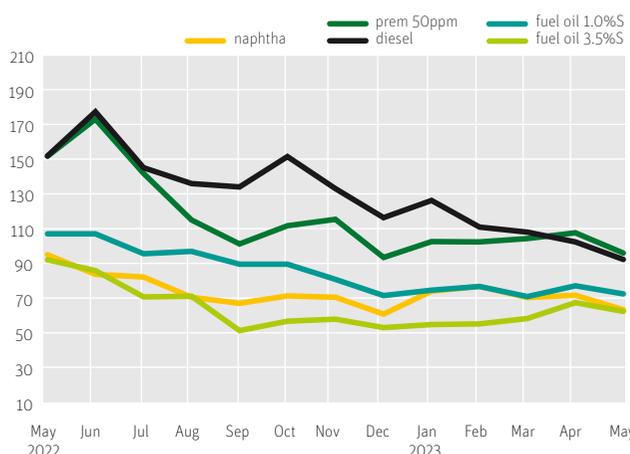
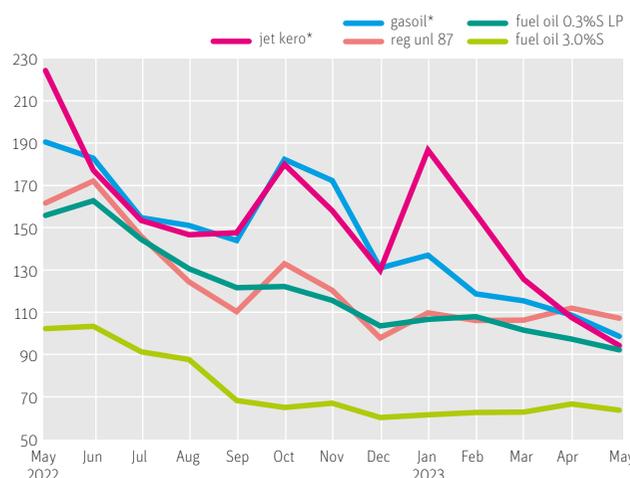


Table and Graph 5: US East Coast market – spot cargoes, New York

\$/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
2022 May	161.70	190.63	224.38	155.83	102.26
June	172.02	182.90	177.23	162.70	103.26
July	145.90	154.69	153.38	144.45	91.34
August	124.36	151.06	146.74	130.55	87.69
September	110.22	143.93	147.65	121.67	68.18
October	132.91	182.33	179.98	122.15	65.00
November	120.38	172.17	157.91	115.52	67.01
December	97.78	130.99	129.90	103.45	60.24
2023 January	109.67	136.95	186.70	106.68	61.47
February	106.11	118.74	156.57	107.83	62.51
March	106.26	115.37	125.55	101.52	62.71
April	111.95	108.59	107.56	97.31	66.55
May	107.12	98.56	94.23	92.24	63.65



* 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 un1 95	premium gasoline un1 92	gasoil	jet kero	fuel oil 180 Cst	fuel oil 380 Cst
2022 May	95.76	146.88	140.99	145.08	143.96	142.90	96.91
June	85.72	155.10	148.86	168.61	168.56	164.40	91.26
July	82.70	121.56	116.35	136.82	136.22	134.90	72.69
August	72.64	110.57	107.25	134.09	133.62	132.39	73.78
September	68.09	97.45	93.79	124.87	124.55	120.92	59.20
October	71.86	94.78	91.16	134.61	133.96	123.40	56.57
November	74.22	98.27	93.11	125.91	125.41	121.01	60.78
December	66.41	89.40	85.36	112.41	110.54	110.54	55.56
2023 January	72.52	98.83	95.49	113.98	111.94	115.07	57.98
February	76.98	99.36	95.86	103.71	101.05	106.77	61.18
March	73.19	98.59	94.25	98.85	95.33	98.86	64.39
April	71.54	100.14	96.52	96.91	92.91	96.78	71.74
May	62.25	90.29	85.69	88.51	86.37	88.59	65.98

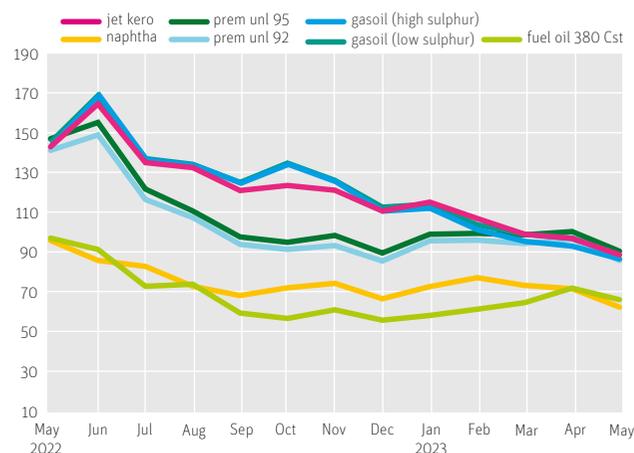
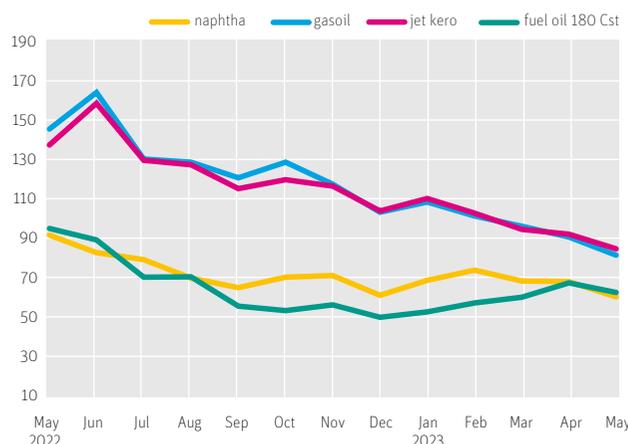


Table and Graph 7: Middle East Gulf market – spot cargoes, fob

\$/b

	naphtha	gasoil	jet kero	fuel oil 180 Cst
2022 May	91.59	145.46	137.27	94.91
June	82.56	164.03	158.55	89.14
July	79.01	130.25	129.49	70.09
August	69.59	128.58	127.26	70.31
September	64.83	120.62	115.16	55.41
October	70.20	128.57	119.73	53.12
November	70.93	117.34	116.48	56.07
December	60.88	103.25	103.86	49.80
2023 January	68.47	108.38	110.11	52.57
February	73.67	101.25	102.71	57.12
March	68.19	96.07	94.37	59.94
April	67.91	90.53	92.00	67.28
May	60.05	81.31	84.52	62.44

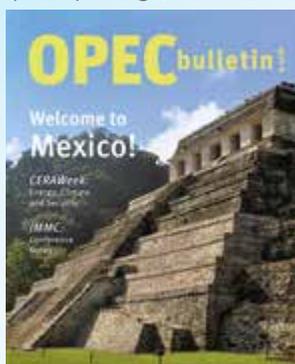


Source: Argus. Prices are average of available days.

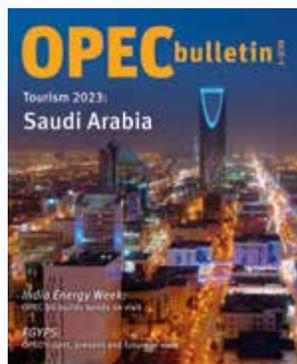
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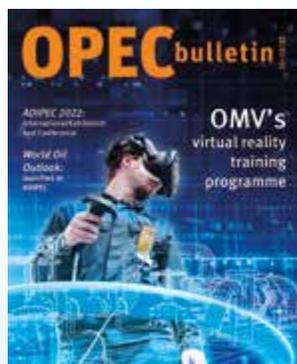
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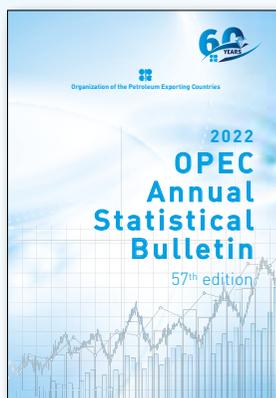


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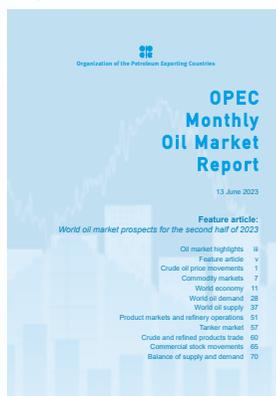
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