



2022 Global Energy Landscape: Will the crisis continue?

December – 2021

CEO Roundtable White Paper

The Al-Attiyah Foundation



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INTRODUCTION



2022 GLOBAL ENERGY LANDSCAPE: WILL THE CRISIS CONTINUE?

The Abdullah Bin Hamad Al-Attiyah International Foundation for Energy and Sustainable Development provides robust and practical knowledge and insights on global energy and sustainable development topics, communicating these for the benefit of the Foundation's members and community.

CEO Roundtable Series

H.E. Abdullah Bin Hamad Al-Attiyah founded the CEO Roundtable Series as a platform for knowledge exchange and to encourage critical dialogue for the Foundation's Members, in the quest towards a sustainable energy future. The quarterly events, which have been hosted in Qatar for 5 years, are highly anticipated networking sessions, as well as an opportunity for our Members' CEOs to examine essential matters of energy and sustainable development.



INTRODUCTION

As 2021 drew to a close, the Foundation held two events to take stock of an eventful year.

At the CEO Roundtable and Webinar, both titled "2022 Global Energy Landscape: Will the crisis continue?", key figures from the oil and gas industry convened to provide their analysis of the past year, forecasts for 2022 and expertise on key trends as the coronavirus pandemic impacts the energy industry and hastens the transition to renewables.

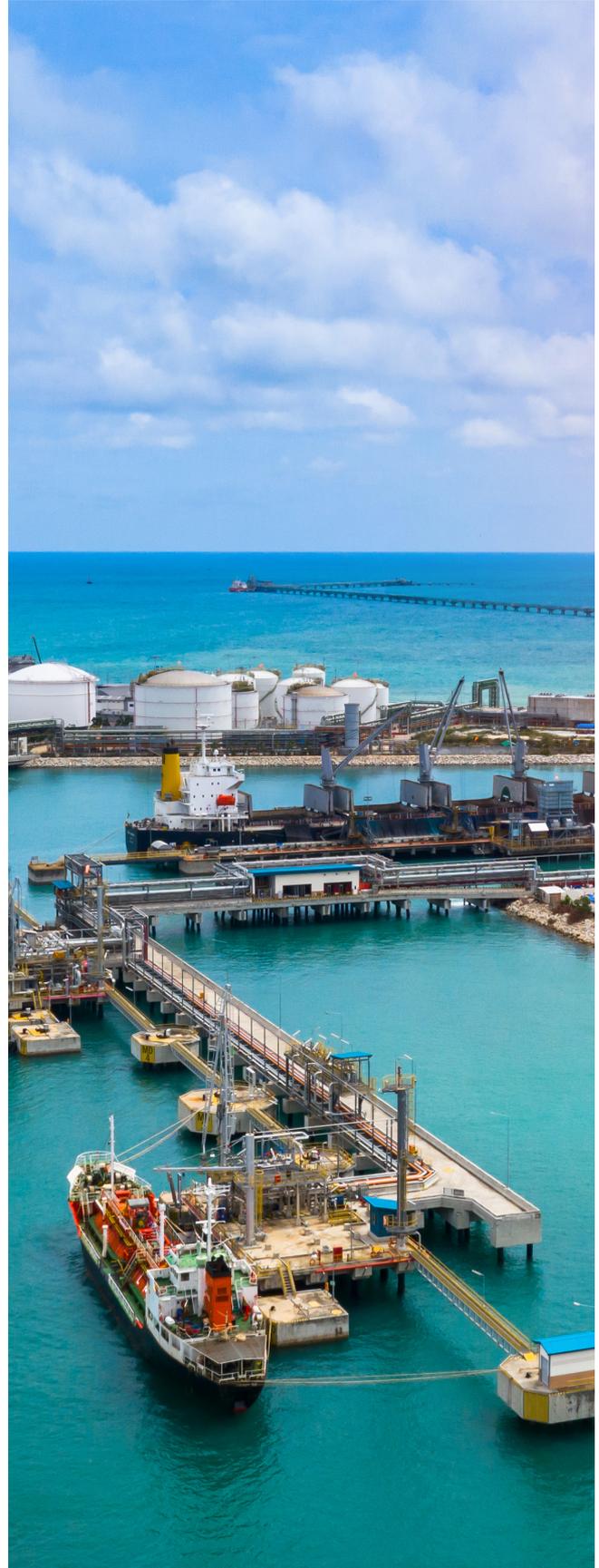
The quarterly CEO Roundtable has been the flagship event of the Foundation since its formation in 2015. The latest, held on December 1, 2021 was the second instalment of its new "hybrid form," with CEOs, other invited guests and expert speakers joining either virtually through video link or physically at the venue.

The insightful discussion was followed a day later by the Webinar, held in partnership with Refinitiv, where the same topics and themes were discussed, but by a different panel of experts.

H.E. Abdullah bin Hamad Al-Attiyah opened the CEO Roundtable with a welcome message by video link, in which he also touched on the key events of the year, initiating the first talking points of the discussion.

Both events examined the outlook for the global energy sector for 2022 and beyond as sustained oil and gas price volatility, supply-demand imbalances, and conflicting short-term and long-term priorities herald an era of unprecedented uncertainty in the industry.

Renewables' capacity, although increasing, will only meet half the expected 4% increase in global electricity consumption in 2022, according to the International Energy Agency



(IEA), with the rest provided by hydrocarbons. Consequently, carbon emissions from burning coal and gas – which declined in 2019 and 2020 – are likely to increase by 3.5 percent in 2021 and by 2.5 percent in 2022, the IEA forecasts.

Such estimates cast doubt on whether the world is ready to transition away from fossil fuels, especially when electricity shortages are raising prices and some consumers are still struggling with reduced incomes due to the pandemic.

Energy shortages due to supply-demand imbalances come at a time when investment in upstream production is only slightly above 2020's fifty-year low and prices could surge should Europe suffer a second successive long, harsh winter, panellists warned.

Even prior to the pandemic, European gas prices had been volatile as oversupply of liquefied natural gas (LNG) plagued the market. The outbreak of COVID-19 then caused all commodity prices to crash.

"The level of uncertainty in commodity markets during 2020 was probably as high as any of us could ever remember," participants noted, and the broad consensus was for prices to remain bearish throughout 2021. However, global economic activity recovered faster than expected, boosting demand for hydrocarbons worldwide while unplanned LNG outages lowered output, further lifting fossil fuel prices. Meanwhile, European wind-based electricity production fell 6% in 2021 versus last year despite an 8% increase in capacity as the continent's winds ebbed.



INTRODUCTION

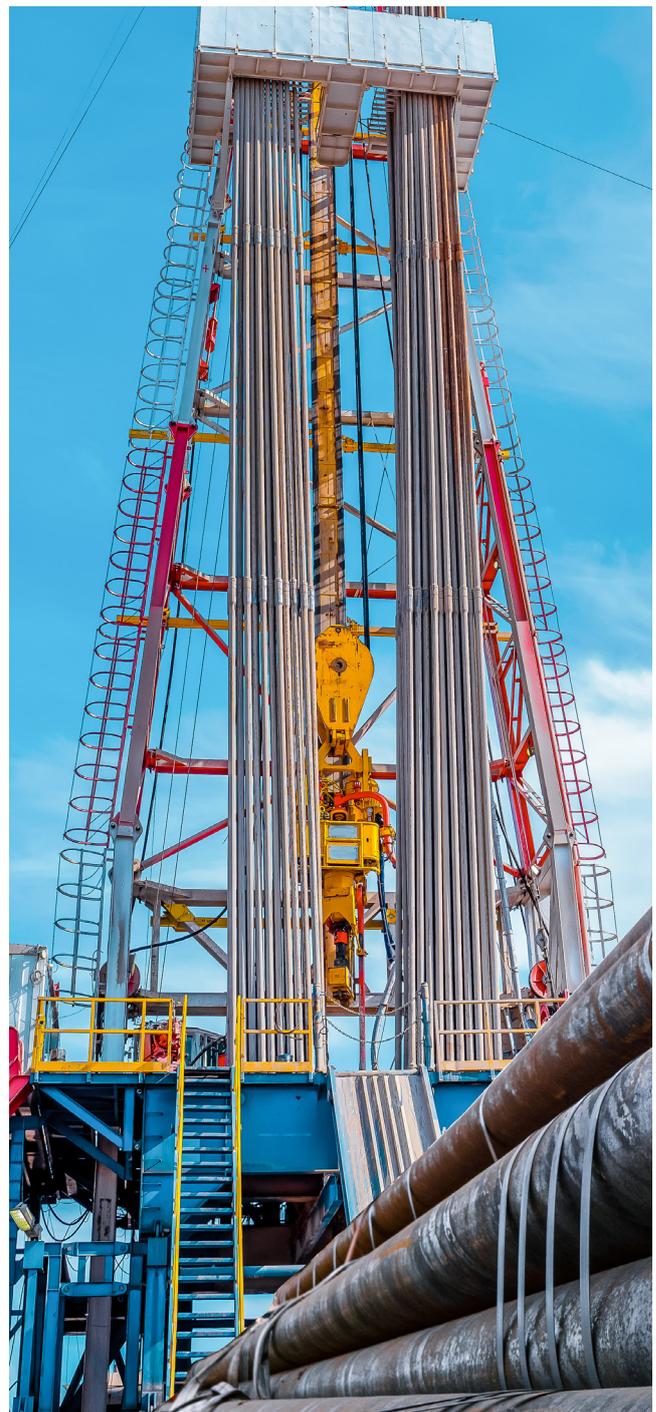
A webinar poll asked the audience what the most critical factor influencing energy market dynamics will be over the coming months. Among respondents, 76.9 percent said the recovery of economies and GDP growth trends, 15.4 percent cited a pick-up in weather-driven electricity consumption, and 7.7 percent chose the return of coal generation.

Although Brent crude has retreated from mid-October's seven-year high of around \$85, oil prices should remain around \$70 in early 2022 according to Wood Mackenzie forecasts. Such robustness comes despite OPEC likely increasing oil production by 400,000 barrels per day, as urged by the United States. Yet it was believed that output will not rise by that amount due to producers' capacity constraints.

"The reaction to (coronavirus variant) omicron shows how jumpy the markets were ... that the oil market, at least, had got ahead of itself (and) was ready for a fall." So steep was the recent decline in crude prices that markets appeared to be pricing in a return to the pandemic's peak in early-to-mid 2020 when international travel halted and much of the world's population was in lockdown.

Wood Mackenzie forecasts world oil consumption will average 98.9 million barrels per day in the first quarter of 2022, which would be around 500,000 below pre-pandemic levels. Upstream investment should recover over the next few years but will not reach pre-pandemic levels. "It's this diminished level of investment that leads us to believe that oil and gas prices will probably remain quite elevated and quite volatile throughout this decade," it was noted.

The recent surge in oil prices preceded 2021 United Nations Climate Change Conference (COP26), which concluded on November 12, but the conference's focus on decarbonisation had already started to limit fossil fuel investment, particularly in coal. That, in turn, contributed to the price rally across other commodities.



DECARBONISATION

At COP26, an agreement was reached relating to the all-important Article 6 on carbon markets that will make the Paris Agreement fully operational. However, a Supervisory Body will be set up to oversee its operational implementation.

"The critical thing is how you translate pledges into policies and regulations? And then how do you get the finance in place to implement that? We have to turn our attention to the implementation side of this and not just lofty pledges," a participant at the CEO Roundtable stated.

Ahead of or at COP26, numerous countries committed to reaching net zero in the second half of this century including China, India and Saudi Arabia. "That all needs to be translated into short-term goals and actions that will make a difference up to 2030. We're seeing a lot more action on phasing out coal and financing for fossil fuel projects," it was noted.

Yet the energy transition is causing confusion, especially in developing countries which are being told by the likes of Europe that they cannot develop fossil fuel-based power plants even as the continent expands its own oil and gas production. This could become a point of contention in a lot of developing countries who may question why they cannot grow their economies through the oil and gas industry when their carbon dioxide emissions remain relatively low (Africa only causes about 3% of global carbon dioxide emissions) and the finance for transition has yet to be made available from the larger emitters.

The energy transition has not been a primary driver of the energy price crisis, but "it's beginning to limit the maneuverability of companies to respond short term and to

contain some of those price rises. Politicians unsurprisingly remain committed to decarbonisation, pointing to the importance of renewables to lower exposure to global prices.

"But 2021 has really brought into very sharp focus, just how difficult a balancing act of addressing the climate challenge and access to reliable and affordable energy, will continue to be. And that will become more challenging throughout the decade."

When asked what the biggest challenge for energy sector stakeholders will be in 2022, 41.2% of the Webinar audience members, said rising energy prices, 35.3% said lack of new investments in energy technologies, 17.6% said low return on investments on existing technologies, and 5.9% said carbon reporting requirements.



DECARBONISATION

It was thought that China, India and the Asia-Pacific region will be the biggest source of new energy demand but will also make significant progress in reducing carbon emissions, but there was general pessimism if the required levels of cuts will be sufficient to secure the 1.5C reduction that is needed.

A greater reliance on intermittent renewable energy sources such as wind and solar will require better options to store excess electricity for use during fallow periods. Currently, batteries can only store energy for a matter of hours and so are inadequate for long-term energy storage. An alternative is to use excess electricity to make hydrogen through water electrolysis. Yet storing this hydrogen remains costly and problematic.

More positively, in the likes of North America and the Middle East peak energy consumption is in the summer – to power air-conditioning – when solar electricity production is also at its highest, so there is less need for long-term storage unlike in Europe where consumption peaks in winter. "When the energy price crunch or supply crunch comes, countries, governments, and consumers (focus) on short-term needs and the long-term goal of de-carbonisation is forgotten," it was noted.

Yet it was also highlighted that there were huge increases in renewable electricity capacity in the likes of China, Vietnam, and Australia, despite the Australian government being largely protective of its coal sector. "Russia really stands out as a major hydrocarbon power that hasn't taken the climate issue seriously yet – it's remarkable when you see other major oil producers like Saudi Arabia, UAE, U.S. and so on, are taking it seriously."

CONFLICTING MESSAGES

International oil companies are receiving mixed signals from investors. Publicly, shareholders want firms to invest in new technologies to reduce their carbon emissions, but equity markets are rewarding those companies which have reduced spending to maximise profits. "If you're sitting in a boardroom, it's a pretty mixed message to try to turn into a strategy". Yet listed companies' shareholders are "pushing for low-cost barrels, low carbon barrels and fast monetisation options".

"It's a question of cost, commitment, project management, and getting the required government support. Unfortunately, we didn't get that in the (2010s). Now in Europe, the Middle East and North America, we're seeing a great upsurge of interest in carbon capture and storage", a guest remarked.

In 2022, the energy sector faces extraordinary challenges to meet the often-conflicting demands of customers, shareholders, and policymakers, but the trend is inexorably towards a lower-carbon world.



CEO ROUNDTABLE SPEAKERS

Moderator:



Mr. Axel Threlfall,
Editor at Large,
Reuters.

Speaker:



Professor Paul Stevens,
Fellow at Chatham
House.

Speaker:



Mr. Alan Gelder, VP
Refining at Wood
Mackenzie.

Speaker:



Mr. Jim Herbertson,
Technical Director
IPIECA.

Speaker:



Mr. John Kemp, Senior
Market Analyst at
Thompson Reuters.

WEBINAR SPEAKERS

Moderator:



Mr. Axel Threlfall,
Editor at Large,
Reuters.

Speaker:



Murray Douglas, Head,
EMEARC Markets &
Transitions, Wood
Mackenzie.

Speaker:



Dr Valérie Marcel,
Associate Fellow,
Chatham House.

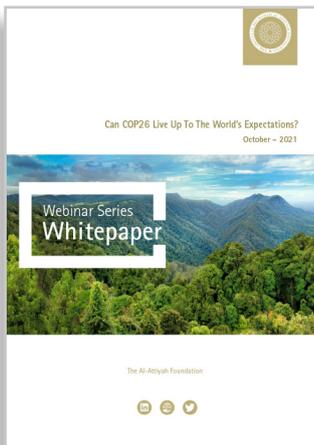
Speaker:



Robin Mills, Founder,
Qamar Energy.

PAST ISSUES

Have you missed a previous issue? All past issues of The Al-Attiyah Foundation's Research Series, both Energy and Sustainability Development, can be found on the Foundation's website at www.abhafoundation.org/publications



October – 2021

Can COP26 Live Up To The World's Expectations?

The race towards carbon neutrality by mid-century has certainly gathered momentum in the years since the Paris Agreement, with about 70% of the global economy now covered by firm or indicative net-zero targets.



(QRCO.DE)



September – 2021

The Race To Net Zero

The race towards carbon neutrality by mid-century has certainly gathered momentum in the past few years. Net-zero carbon aspirations are now increasingly common for countries, sub-national regions and companies, with about 70% of the global economy now covered by firm or indicative net-zero targets.



(QRCO.DE)



July – 2021

Achieving Net Zero With Hydrogen

To continue delivering interactive content during the COVID-19 pandemic, the foundation started a webinar series in partnership with Refinitiv. In the series, internationally renowned experts offer their unrivalled knowledge and opinions as we discuss key trends in the energy industry, and debate the need to transition to cleaner resources.



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OUR PARTNERS

The Al-Attiyah Foundation collaborates with its partners on various projects and research within the themes of energy and sustainable development.





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