



The Race To Net Zero

September – 2021

CEO Roundtable White Paper



The Al-Attiyah Foundation



The Al-Attiyah Foundation is proudly supported by:



INTRODUCTION

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.

Despite the excitement, widescale change to the entire economy is required if the goals of the 2015 Paris Agreement are to be met and the temperature rise kept "well below" 2°C above pre-industrial levels by the end of the century (2100).



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

It is in this context that the Al-Attiyah Foundation hosted its latest CEO Roundtable titled "The Race to Net-Zero."

Attendees were generally optimistic, citing the progress already made in curbing emissions, the expectations from the upcoming COP26 conference in Glasgow, and several exciting technological breakthroughs that could spur positive developments in the fight against irreversible impacts of human-induced climate change.

The theme of the CEO Roundtable centered around the widely held scientific belief that the world has to reach a state of net-zero carbon dioxide emission (equivalents) by 2050 in order for the temperature increase to be below 20C above pre-industrial levels. Rises above that temperature will, it is believed, cause irreversible damage to the planet's ecosystem.

OPENING OF THE CEO ROUNDTABLE

"The Race to Net Zero" was the first Al-Attiyah Foundation roundtable held in a hybrid format. The majority of guests attended in person while the expert speakers, based across the world, joined virtually and beamed on a large screen to the rest of the participants that were physically present at the venue.

The moderator for this session, the Reuters Editor at Large, Mr. Axel Threfel, travelled to Doha from the United Kingdom to attend in person.



To start the roundtable, His Excellency Abdullah Bin Hamad Al-Attiyah, Chairman of the Board of Trustees, welcomed the participants and highlighted the importance of the theme for discussion.

"The Race to net-zero is gathering momentum, with many major economies and large corporations, announcing their aspirations to achieve net-zero emissions," His Excellency said in his keynote opening speech.

"The fast-growing pace of the race to net-zero is such that any company, especially energy companies, would ignore it at its own peril. It is, therefore, appropriate that we have chosen this topic for this resumed CEO discussion session."



SCENARIOS AND FORECASTS

The discussion started with talk of the Shell Energy Transformation Scenarios. The scenarios are split into three categories, Waves, Islands and Sky 1.5. The different initial recovery responses of the three scenarios to the crises of 2020, were explored and how and when these responses will reach net-zero emissions were expounded.

In Waves, the initial response to the crises of 2020 is to repair the economy – wealth first. Other underlying societal and environmental pressures receive less attention initially until their relative neglect provokes backlash reactions.

In Islands, governments and societies decide to focus on their own security, with a new emphasis on nationalism threatening to unravel the post-war geopolitical order.

Of the three, only Sky 1.5 has a pace and timing for energy decarbonisation that is fast enough to limit global warming to 1.5°C above pre-industrial levels by the end of this century. Its initial response to the crises of 2020 is to focus on responding to the pandemic and related challenges to public well-being – health first. Lessons learned from shared best practices, alignments of diverse interests and institutional improvements help create a pathway to the health not only of people and society, but also of the environment, including meeting the stretch goal of the Paris Agreement – accelerated decarbonisation now.

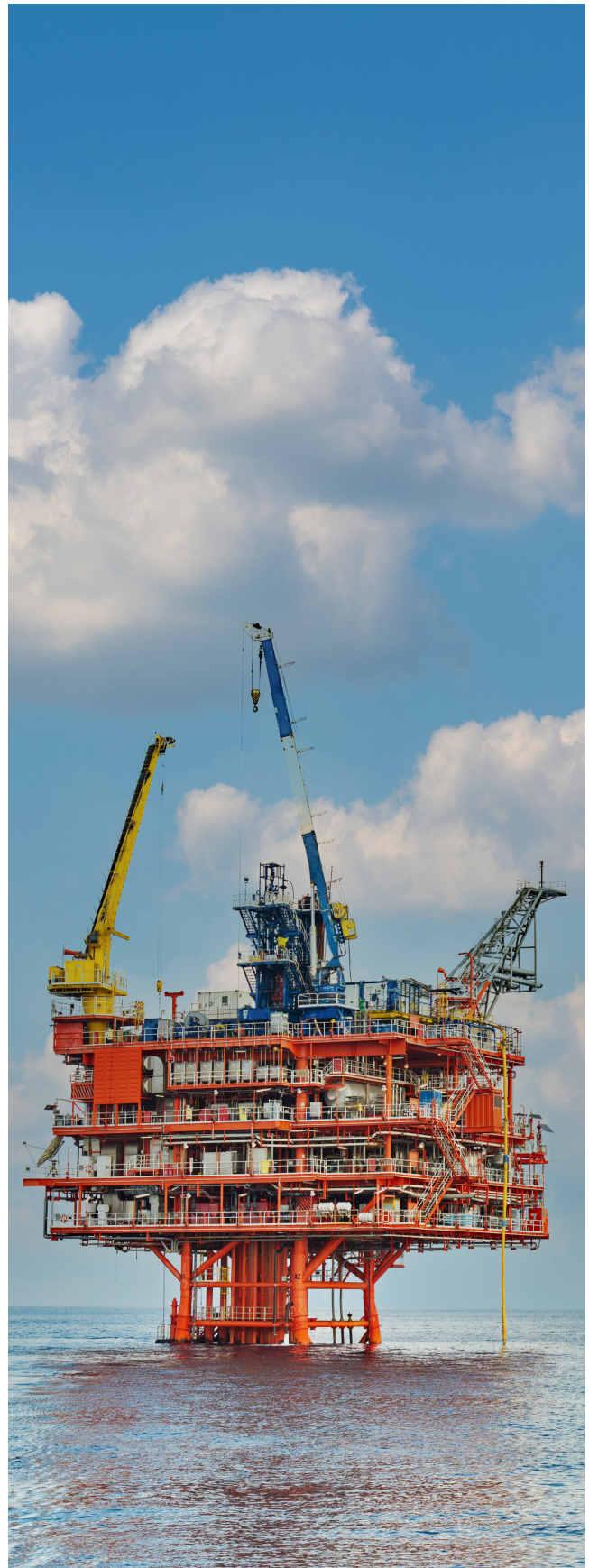
SCENARIOS AND FORECASTS

It was emphasised that companies will have to engage with scenarios of their own and study the environmental consequences and common themes within them. It is important that companies seek to address climate change in their own unique ways and develop scenarios and support plans for their climate actions, within the framework of the Paris Agreement.

The topic soon turned to the IEA's possible scenario to net-zero emissions by 2050. One key element of the scenario is a call for no new fossil field development from 2020, which proved a controversial subject among attendees. The IEA scenario also called for the mass deployment of clean energy technologies over the next decade.

It was highlighted that in order to attain the targets set in the IEA scenario, major investment in renewables-based power with increased spending on electricity grids and battery storage, is needed to ensure reliable electricity supply.

Many speakers expressed the views that this scenario is highly impractical on various grounds such as time scales, the possibility of many countries not being able to afford the change to non-fossil fuels and the ever-increasing demand for energy.



GOVERNMENTS AND VOLUNTARY EMISSIONS

A recurring theme in the discussion was how governments and institutions have adopted various roles and strategies in the race to net-zero. In Europe, governments have taken a lead with increased regulations, enshrining emission commitments in law.

Many major companies across the world have also pledged voluntary commitments to climate change, driven by shareholder and investor pressure.

It was stated that voluntary commitments and agreed trading arrangements have overtaken government policies in defining the progress towards net-zero emissions. It was mentioned that the new Chinese Emissions Trading System will cover more emissions than the whole of the emissions from the European Union.

Speakers agreed that strong leadership was required both by governments and companies and it was vital that this is highlighted at COP26.



COP 26 AND ARTICLE 6

The UK will host the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow from the 31st of October through to the 12th of November 2021. The COP26 summit will bring parties together to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change. All the speakers recognised this meeting was key to the race to net-zero. In particular, the "Rule Book" for how emissions are to be counted has to be finalised and agreed. Speakers were generally optimistic that progress can be made. The Al-Attiyah Foundation will follow the discussions on Article 6 at COP26 closely and intends to prepare a synthesis paper that elaborates on the key elements of any agreed "Rule Book" setting out the modalities for collaborative mitigation efforts.



THE TRANSITION CONUNDRUM

Increasing energy demands, particularly in the less developed economies, was a key topic of conversation. Improvements in standards of living are correlated with energy consumption. Until a worldwide transition to a low fossil fuel economy is in place, it appears inevitable that emissions would continue to increase. If customers demand fossil fuels, then they will be provided. If customers demand clean energy, then clean and net-zero emission fuels would be produced, notwithstanding any prevailing technological challenges.



FINANCING THE TRANSITION TO NET ZERO

It was recognised that financing an energy transition in itself was expensive. Many of the technologies needed by 2050 only exist now as small-scale demonstrations. Here the fossil fuel companies must take a lead.

However, it is not just a matter of a power plant for electrification but the whole of the infrastructure needed to support that change. In many countries it is thought that such a shift will be impossible.

THE POSITION OF QATAR IN ENERGY TRANSITIONS

Speakers acknowledged that Qatar is well placed to transition to cleaner energy sources. It is a major LNG producer and one of the non-subsidised lowest cost producers in the world. Some of its LNG will now be "green" either by carbon capture or by offset purchases. It is also a producer of hydrogen for refinery use or in the production of ammonia and methanol. These two chemicals are now considered viable options for the indirect transportation of hydrogen.

Qatar also has ample resources of solar radiation so the possibility of production of "green hydrogen" exists using electricity generated from solar plants to produce hydrogen by electrolysis.

Speakers and guests also spoke of the 2022 FIFA World Cup to be hosted in Qatar, highlighting the efforts being made to make this a Carbon Neutral event. To this end, offsets are being purchased so that travel to the World Cup

could be made carbon neutral. Over 20% of the buses used will be battery driven. The new solar powered generation plant will be running, and all new buildings and stadiums have been designed to be energy efficient.

CONCLUSION

To close the Roundtable, H.E. Al-Attayah thanked the speakers and guests for their attendance and contributions to the discussion and said he is very much looking forward to next meeting that is scheduled for early December.

"Our three experts who joined us virtually this morning provided much food for thought with their inputs. I am sure we all agree on the importance of the subject of net-zero emissions. We are grateful for your continuing support and contribution to the Foundation, even during the difficult pandemic period," His Excellency said in his closing address to attendees.



WEBINAR SPEAKERS

Moderator:



Mr. Axel Threlfall,
Editor at Large,
Reuters.

Speaker:



Dr. David Hone, Chief
Climate Change
Advisor at Shell
International.

Speaker:



Mr. Dirk Forrester,
President and CEO
of the International
Emission Trading
Association (IETA);

Speaker:



Mr. Tim Gould,
Chief Energy Advisor
at the International
Energy Association
(IEA).

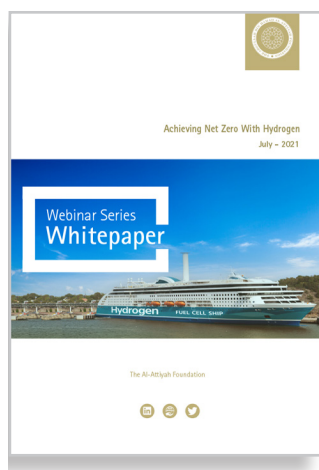
Speaker:



Ms. Kay Harrison,
Climate Change
Ambassador at the
Ministry of Foreign
Affairs in New
Zealand.

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



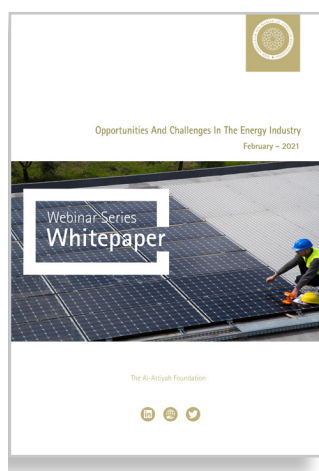
July – 2021

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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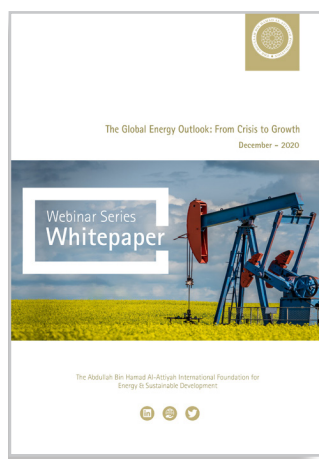
February – 2021

Opportunities And Challenges In The Energy Industry

In 2020 and continuing into 2021, the Al-Attiyah Foundation hosted a webinar series, in partnership with Refinitiv, to explore key trends and insights, in the wake of the continuing impact of the coronavirus pandemic on the energy industry, and the increasing debate on the need to transition to renewable energy.



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December – 2020

The Global Energy Outlook: From Crisis to Growth

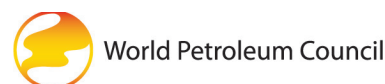
The Al-Attiyah International Foundation for Energy and Sustainable Development, in partnership with the Financial Times, held a webinar on "The Global Energy Outlook: From Crisis to Growth", on Tuesday, 8 December 2020. The purpose of the webinar was to reflect upon the highs and lows of 2020, and what might unfold in 2021.



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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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