COP28: A destination for pragmatic solutions or climate sell-out?

Murray Fox November 2023 CRIPPS+ LEADERSHIP ADVISORS*



COP28: Bringing everyone to the conversation

Key Headlines

- "The world needs maximum energy...minimum emissions" Sultan Al Jaber, President COP28
 and energy companies with big balance sheets will be part of the solution, "Put us to
 work," ExxonMobil Chairman and CEO, Darren Woods, said at the APEC Summit.
- The 'energy trilemma' how do governments justify cost, sustainability and security when green hydrogen is equivalent to \$400/barrel of oil?
- Everyone wants to be the first to be second! Who will pay for the future with multiple uncertainties principally no accurate future production cost or demand curve?
- <u>It maybe the traditional energy companies with the tools and capital, but it is not the previous executives, the Cripps Leadership Advisors view.</u>

As the global climate conference heads to Dubai, Big Oil, now rebranded as Big Energy, is keen to position themselves as part of the solution rather than the problem. Sceptics see this as protecting their interest, but others see it as a pragmatic acceptance of the realities of our complex and unequal world.

One thing is clear: attendees at the recent Cripps Leadership Advisors Energy Transition dinner in London certainly had plenty to discuss.

This year, COP28 is being held in oil-rich Dubai under the stewardship of president-designate Sultan Ahmed Al-Jaber. The appointment of Mr Al Jaber may have raised a few eyebrows, even more if the leaked documents this week are to be believed but, as CEO of the Abu Dhabi National Oil Company (ADNOC), which plans to almost double its current output of 2.7 million barrels per day by 2027, and chairman of Masdar, a renewable energy firm with ambitions to ramp capacity to 100GW by 2030, is he the embodiment of how old energy is feeding into new energy and delivering a new vision of effective climate action in practice?

While COP26 technically barred oil and gas companies from proceedings, Mr Al Jaber is an advocate for their inclusion, and anyone working on new energy solutions will understand why. Right now, creating – and funding – new greener energies and technologies is difficult, but if everyone comes together these challenges can be overcome.

Mr Al Jaber states he is seeking "...a pragmatic, realistic and solutions-oriented approach that delivers transformative progress for climate and low-carbon economic growth.".

"The world needs maximum energy... minimum emissions," he said in an address at the Abu Dhabi International Petroleum Exhibition and Conference in October 2023, adding that the world needs all the solutions it can get. "It is oil and gas and solar, and wind and nuclear, and hydrogen plus the clean energies yet to be discovered, commercialised and deployed."

Even seasoned climate campaigners, such as US presidential envoy John Kerry, have been cautiously optimistic. Kerry said Mr Al Jaber's "unique combination" of roles would "help bring all of the necessary stakeholders to the table to move faster and at scale".



Faster, bigger, smarter - The 'energy trilemma'

There's no doubt that action on climate change needs to step up a gear. Direct hydrocarbon subsidies hit US\$1 trillion last year, four times the six-year average, coal consumption was up 3.4 per cent and developed countries are still shirking on their commitments to not only reduce their own emissions but to fund losses suffered by the poorest countries hardest hit by climate change.

The challenge is that billions of people in the least developed countries still don't even have access to reliable affordable energy. For green energy to be effective as possible, it needs to meet the three points of the 'Energy Trilemma': affordability, security and sustainability.

While the urgency of the climate crisis grows harder to ignore, access to affordable energy in developing markets and simultaneously, the cost-of-living crisis in many developed countries, gives governments a dilemma, subsidise decarbonisation or go for public votes.



This trilemma will undoubtedly be a major talking point at COP28. Two years ago, at COP26, Western countries pledged billions of dollars to achieve global climate goals, but these unfulfilled promises are stoking resentment and scepticism at a time when global cooperation is needed more than ever.

In the absence or uncertain future demand, only companies that can take a long term (20+ years) view on financing and marketing can find justification in their investment models. As attendees at the energy transition dinner pointed out, it is only the legacy fossil fuel companies that have the deep pockets and market knowhow to deliver some of these transitional technologies in the current cost climate.

The much-hyped hydrogen economy, for example, is skewered by current cost estimates of around USD\$220 per barrel for blue hydrogen and USD\$400/barrel for green hydrogen, compared to a current oil price of USD\$80 a barrel¹.

https://www.wits.ac.za/news/latest-news/opinion/2022/2022-09/green-hydrogen-sounds-like-a-win-but-cost-and-transport-are-problems.html



Finance roadblocks

The gathered experts at the energy transition dinner agreed that the need for a global move to green energy is matched with distinct challenges in financing. Stop-start subsidies continue to skew market dynamics and make it difficult to build confidence in emerging clean tech. Europe's fragmented approach to carbon tax has seen its momentum shift to the slow lane in contrast to President Biden's IRA, which has turbo charged investment in the US. With an election year looming, there are question marks over the scheme's future, creating yet another overhang of uncertainty for investors.

The result is a financing roadblock. Applying existing energy financing protocols, such as 20-year offtake deals, doesn't work when it comes to new energies, where the infrastructure, market, policy regime and cost curve have yet to be determined.

"Looking for the perfect outcome is creating challenges, not solutions," said one industry observer, noting that there is plenty of capital but a scarcity of investable projects and a certain amount of pragmatism by governments and policy makers is needed to get the ball rolling.

"No one wants to be the first mover, they all want to be the fast follower."

The clock is ticking

Over the last 200 years, we have seen a series of energy transitions, driven by the twin engines of necessity and invention.

While previous energy transitions took between 50 and 100 years to bed down, with the outgoing energy source often co-existing with the new for a number of decades, this time the world has a dead-stop date of 2050 to reach net zero and rely on energy systems that have yet to be built.

It's a new paradigm, one for which the economic models have yet to be built, so it's perhaps unsurprising that several people noted at the dinner that "no-one wants to be the first mover, they all want to be a fast follower." With time fast-running out to get to net zero by 2050, waiting for more companies – and investors – to decide to follow clean energy pioneers is not a luxury that we have.



A history of energy transition

Deforestation

Deforestation helps drive the switch to coal.

1859 - Drilling

First oil well drilled.

1939-1945 - Oil Century

World War II drives further demand for oil and becomes the biggest source of energy in 1950.

1990 - IPCC

First IPCC report highlights need for global cooperation on climate change.

2019 - New Sources

The world got 16% of its energy from low-carbon sources – either nuclear or renewables.

The Age of Biomass

Biomass (manure, crop residues, wood) plus human and animal labour as well as wind and water, power life.

1885 - King Coal

The first steam engine begins the demand for coal. In 1885 coal finally surpasses wood as the largest source of primary energy in the US.

1896 - Transport

Henry Ford's first car hits the streets of Detroit. Cars grow in popularity, and oil demand is boosted by World War I in 1914-1918.

1965 - Out at Sea

First North Sea gas field is discovered.

2015 - Paris Agreement

Net Zero gains legal status In the Paris Agreement, which begins the shift towards net-zero emissions.

2050

What will happen?

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Funding the future



This hesitancy means only those with the deepest pockets can take the first step — and typically that means Big Energy and national oil companies, which can afford to take a longer financing view rather than taking a gamble on subsidy regimes and as-yet uncertain market demand. It means they can bear to take on the technology and commercial risks in the short to medium term while they buy time to make the economics work on the longer term.

Big energy is already a significant spender on clean energy, but is faced with a rate of return challenge when satisfying shareholders – is the general public, who are the ultimate shareholders in pension fund investments in Shell, BP and its peers, prepared to take a lower return to enable greater investment into the energy transition? We have already seen big energy companies step back from new energy strategies developed only one to two years ago and seen market capitalisation benefit as a result, or in BP's case, it has languished against its peers by being more resolute in its transition strategy. As we see the hysteria witnessed in clean energy company valuations in the last few years returning to normal, we are seeing more clarity of thought. In this transition the world cannot simply jump to the end game and skip a generation.

Part of this focus has to be on natural gas, according to the attendees of the energy transition dinner, who agreed gas remains a valuable bridging technology to a cleaner future. Rather than going all-out for hydrogen, which will bring its own issues related to pipeline repurposing and storage², there are quicker wins to be had. For example, increasing the percentage of biofuels in gasoline or sustainable aviation fuel is a proven route to displacing fossil fuels in hard-to-abate sectors. There's also vast potential in using captured carbon and green hydrogen to make drop-in synthetic fuels that don't require engine or network modifications³ and CH4-like synthetic methane to power utilities and homes that doesn't require prohibitive levels of investment in brand new infrastructure⁴.

²https://acer.europa.eu/Official documents/Acts of the Agency/Publication/Transporting%20Pure%20Hydrogen%20by%20Repurposing%20Existing%20Gas %20Infrastructure Overview%20of%20studies.pdf and https://www.nrel.gov/docs/fy13osti/51995.pdf

https://publications.parliament.uk/pa/cm5803/cmselect/cmtrans/159/report.html

⁴https://www.reuters.com/business/sustainable-business/tokyo-gas-begins-synthetic-methane-trial-using-green-hydrogen-2022-06-24/



A clean break or a common cause?

Given the urgency of the crisis and the scale of the problem, the hope is that Mr Al Jaber is right to pull together a congress of all the talents at COP28. It is only by combining the resources and expertise of legacy producers with the innovation and drive of the new energy pioneers that timely and effective solutions will be found. COP28, then, will either be the start of something entirely new, or it will be more of the same.



The objective of this transition is not just to bring on new energy sources, but to entirely change the energy foundations of what today is a \$100 trillion global economy—and do so in little more than a quarter century. It is a very big ambition, and nothing on this scale has ever been attempted up to now.

Daniel Yergin, Journalist, Fossil Fuel Age⁵

The Cripps Leadership Advisors Viewpoint – Leaders in Energy Transition

As we head into COP28, there are hopes that this will finally be the moment world leaders commit to pragmatic and effective solutions to the "energy trilemma" of our age: affordability, sustainability and security.

One thing is clear: the outcomes are going to come down to leadership in order to navigate competing interests, legacy inertia and ensure climate action doesn't condemn the poorest people on the planet to further hardship. The cost-of-living crisis in the wake of the Russia/Ukraine war means there's little headroom to exert a green premium on already pressed households.

What also needs to be noted is that previous energy transitions took the best part of a century to bed down, but this one is running out of road. COP28 will reveal just how serious the industry is about staying the distance and delivering on its Net Zero promises.

Leaders need to be creative and collaborative, comfortable in uncertainty and effective in motivating teams, aligning boards, investors and stakeholders as they step down the path of transition that will ebb and flow with challenge and opportunity in equal measure. We outline the key traits, competencies and experience of an Energy Transition Leader in a previous paper which you can <u>read on our website</u>.

Cripps Leadership Advisors is passionate about bringing together industry experts, finance leaders and policy-makers at our exclusive invitation-only events, to create opportunities for debate, discussion and networking with the people who have the insight and resources to bring real solutions to the table.

Contact: Murray Fox, Director – mfox@cripps.global | +44 (0)7714 901 483

⁵ https://www.imf.org/en/Publications/fandd/issues/2022/12/bumps-in-the-energy-transition-vergin

CRIPPS+ LEADERSHIP ADVISORS°



Contact

London HQ

7 Cavendish Place London W1G 0QB

+44 (0)20 7440 8999

cripps.global

Houston

Suite 1100 - 12 Greenway Plaza Houston, Texas 77046

+1346 250 1528