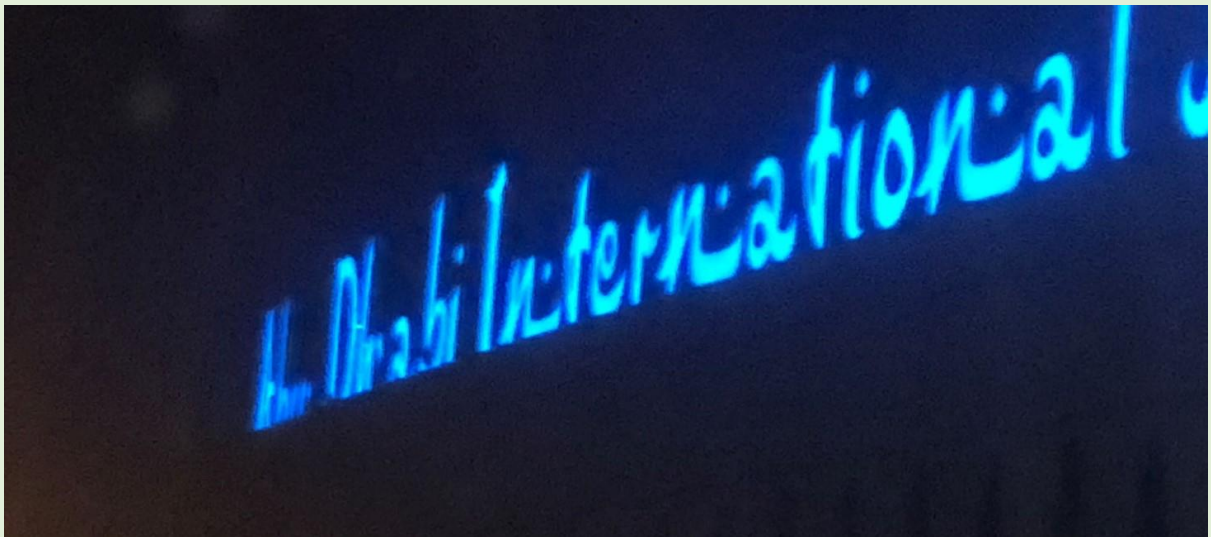


Abu Dhabi

Hydrogen, and the Energy Transition



It is late evening and I'm looking out of the baking heat of the desert.



I just enjoyed a remarkable bird's eye view of Abu Dhabi, the Gulf and especially 'Masdar City' as we touched down.







I'm here in the wake of yesterday's announcement that the United Arab Emirates' biggest clean-power producer is planning to double capacity this year, helping bolster the country's green credentials ahead of a key climate conference.





Masdar, the Abu Dhabi-based company which operates projects from the UK to Asia, is targeting boosting global capacity to about 40 gigawatts by the end of the year, Chief Executive Mohamed Jameel Al Ramahi said yesterday. Acquisitions will be a significant part of its strategy of hitting 100 gigawatts by the end of the decade.

“We are at the right trajectory to achieve the 100-gigawatt target that we set ourselves by 2030,” Al Ramahi said. “By the end of the year,



my expectation is that we will double our capacity.”



Masdar operates solar power plants in the UAE, OPEC’s third-largest oil producer. The company is also one of the biggest clean-energy investors in the UK, including in the London Array offshore wind project with which I had tangential involvement over 15 years ago with both Shell and later Eon.







This year it bought wind and geothermal businesses in Europe, Africa, and Asia, giving it stakes in projects valued at about \$6 billion and adding about 3.4 gigawatts of capacity.

“We need to do acquisitions to reach the 2030 capacity goal,” Al Ramahi said. The company will target “different technologies and different geographies with different partners. It’s a large target and it requires a lot of capital.”



Africa and fellow MENA states are well placed and Masdar means business, The UAE, the first Gulf state to declare a target to reach net zero carbon emissions by 2050, is hosting the UN's COP28 climate conference later this year.



Masdar's capacity target for this year includes facilities that are operating or in construction. It also includes what Al Ramahi calls a secure pipeline of projects that it plans to go ahead



with, but those in an early planning stage aren't, he said. The 2030 target of 100 gigawatt is based on the gross capacity of projects that Masdar will have stakes in by that time.

The company earlier this year sold its first green bond, a \$750 million issue. It plans to raise cash roughly twice annually by selling securities.

Abu Dhabi is therefore a key location for engaging with global stakeholders.

The heat, which comes up as well as down is intense but, as I look out, I have a great view of Masdar City which is adjacent to the airport complex here.







It claims to be the world's first sustainable city, and particularly pleasing that involved in the design of it was British architect Sir Norman Foster, who was also instrumental in the design of the rather streamlined Enercon Wind turbines. Their curious egg-shaped hub represented a sea change as designer turbines around about 20 years ago.

Abu Dhabi represents the spiritual home of the oil and gas industry, but the transition is



real and acknowledged. I've been taking calls and engaging with key personnel within ADNOC in recent years.



The climate change issue is a challenge - and a case of how to make it work for the countries here in the Emirates. The strategies to deal with it are gaining impetus and attention and there are signs of progress on the ground.

Solar prices, for example, plummeted and are scarcely believable from where they were two decades ago and with electricity 'feedstock' comprising around 70 % of many hydrogen



projects that is reflected in the price of Green Hydrogen

I shared key moments of COP 26 with the community, broadcast live from the 'blue zone' in Glasgow a couple of years ago while there with UNIDO.



Although it was convened less than two years ago, we are in a different world. We've had to deal with the remnants and aftermath of the COVID crisis and a major European war - which still rages - and impacts the energy sector.



In the background progress is being made in the United Arab Emirates. An alliance has been formed Abu Dhabi Future Energy Co., (Masdar), AND Siemens Energy will develop a facility to make green hydrogen at Masdar City.



Munich-based Siemens Energy is already building a hydrogen demonstration plant at the Mohammed bin Rashid Al Maktoum Solar Park in neighbouring emirate of Dubai.





Some Middle Eastern states that built their fortunes on oil are seeking to develop hydrogen as fuel, given a shift among some of their buyers toward less-polluting alternatives to crude. Saudi Arabia's energy minister has said he wants the kingdom - the world's biggest oil exporter - to become the largest shipper of hydrogen.



Furthermore, Mubadala Investment Company, ADNOC, and ADQ, signed a Memorandum of Understanding (MoU) to establish the Abu Dhabi Hydrogen Alliance.



Partners are collaborating to establish Abu Dhabi as a trusted leader of low-carbon green and blue hydrogen in emerging international markets. They will also work together to build a substantial green hydrogen economy in the UAE.



The Alliance is working up a roadmap to accelerate the UAE's adoption and use of hydrogen in major sectors such as utilities, mobility and industry, through their respective



operating companies and, significantly, international partners.

Mubadala, ADNOC and ADQ will align on their approach to international markets, for projects developed under the Alliance, to position Abu Dhabi as a reliable and secure supplier of hydrogen and its carriers to customers around the world as demand grows.

Let's see whether the national airline Etihad, seizes opportunities around Hydrogen, Ammonia and Sustainable Aviation Fuel. It would seem inconceivable they would not as it's under their nose - I'm looking out at it right now from their key operational base and nascent hydrogen economic cluster. I'll keep you informed; Feel free to join me;

<https://bit.ly/3h7BjAF>



## Hydrogen Abu Dhabi

