THE NEXT CHAPTER OF ENERGY IS CENTRED IN THE MIDDLE EAST By Belinda Scott and Chris Langner

Many historians attribute the population boom of the 20th century to humanity's ability to harness the energy of fossil fuels. Machinery that increased the productivity of everything, from agriculture to mining, and from textiles to chemical production, ran first on coal, then on oil.

It has not come for free. The price of this revolution can be seen in the skies of Mumbai and Beijing, to the point that the world is now grappling with how to deal with the biggest energy requirements in the history of humanity, while also controlling the emissions of carbon. One answer starting to appear more frequently is the use of hydrogen. In other words, world governments are looking at getting only the combustible component of hydrocarbons, without having to worry about the carbon left over.

It may come as a surprise to some, but the Middle East is likely to benefit from the next leg of the global energy revolution as much as it did from the first. The region is well-poised to become one of the leading producers of hydrogen.

Most hydrogen is currently produced from ammonia, a gas formed with three hydrogen atoms connected by one of nitrogen. Some of the biggest producers of ammonia, and the ones commanding the lowest cost, happen to be in the Middle East.

The trouble, however, is that while burning hydrogen releases no carbon,

producing ammonia is energy-intensive and creates roughly twice as much carbon as the amount of ammonia produced. The solution has been to use renewable energy to produce hydrogen.

Again, sunlight, one of the most environmentally-efficient ways of powering the production of ammonia, is widely available in the Middle East, with countries such as the UAE among the places in the world with the most exposure to sunlight.

It all sounds great, but the infrastructure to produce cheap hydrogen using renewable energy has to be built and paid for. This potential demand for financing of green projects, whether it is reducing flaring at some of the oil and gas producing units, or building the complexes producing the energy of the future, suggests sustainable finance is on the verge of a boom in the Middle East.

It has already been growing exponentially. After the inaugural Middle Eastern green bond by First Abu Dhabi Bank (FAB) in 2017, the market has started to take off in a significant way. Until last year, all the notes labeled green in the region had originated in the UAE, but this changed in a big way in 2020.

Egypt, which is already among the biggest producers of ammonia and where natural gas discoveries are fueling the growth of that industry, last year also sold the first sovereign bonds by a nation in the Middle East or Africa to be fully dedicated to projects in six eligible categories: pollution prevention and control, sustainable water and wastewater management, clean transportation, renewable energy, energy efficiency and climate change adaptation.



Saudi Electricity sold a US\$1.3 billion corporate green bond last year to help finance the roll-out of its energysaving smart meter. The issue is also in line with the Kingdom's Vision 2030 goal of becoming a low-carbon nation, which is also less dependent on oil production.

The United Arab Emirates has embedded the United Nations' Sustainable Development Goals into its long-term planning, and has drafted a federal law on climate change that establishes a framework to be followed by all seven Emirates. It is expected to start rolling out a new sustainable finance framework and a taxonomy for green instruments in 2021.

To support and help finance the UAE Green Agenda 2015-2030, the Abu Dhabi Global Market (ADGM) last year launched its sustainable finance initiative, which integrated sustainability into the framework of the ADGM and is aimed at creating a sustainable finance ecosystem. Similarly, Abu Dhabi sovereign wealth fund, Mubadala, has established a responsible investing arm, and has started to embed the principles related to the activity into its risk assessments.

In April, the Dubai Financial Market made a groundbreaking move as it launched the UAE ESG index, the first benchmark in the region focused on environmental and social governance. The index was developed in cooperation with S&P Dow Jones Indices and the Hawkamah Institute for corporate governance. It followed another initiative in February by the Abu Dhabi Securities Exchange, which announced a tie-up with index provider, FTSE Russell, to provide a number of sector-specific indexes, as well as indices of ESG and Sharia compliant companies.

Apart from launching the region's inaugural green bond in 2017, FAB is also doing its part, so much so that it was awarded the EuroMoney Award for the 'Region's Best Bank for Corporate Responsibility'. The bank is the only company in the UAE apart from DP World to earn an A rating from the Carbon Disclosure Project. FAB was also the architect of the first ever Green Private Placements from the region in 2019 and 2020.

In 2019, the Bank also made the first social development goals-linked loan in the region, for Etihad Airways. In addition, FAB arranged and led the region's debut Green Loan for Masdar, and the region's inaugural corporate Green Sukuk for Majid Al-Futtaim. The Bank led three vaccine Sukuks for IFFIM/World Bank. As a result, in 2019, FAB exceeded its commitment, made in 2016, to allocate US\$10 billion to sustainable development over 10 years.

These initiatives are key to financing the energy revolution that is beginning. After all, even if the energy matrix changes, the Middle East will continue to be at the centre of the world's progress in sustainability.

