



Our first **HYDROGEN Seminar** on **August 30** at KAUST addressed the role the Middle East can play in a future hydrogen economy. **Dr. Manal Shehabi** highlighted the opportunities and challenges for the region. She estimates there is a potential market for hydrogen in the Gulf of US\$70-200 billion depending on hydrogen's share of the energy market by 2050. While many challenges remain for growing the blue and green hydrogen industry, many of them relate to finance structures and longterm planning, policy, profitability, and a weak regulatory environment.

Dr. Wael Almazeedi highlighted the early steps taken by MENA countries, e.g Saudi Arabia, UAE, Oman, Egypt, and Morocco, in developing the hydrogen industry with many major projects already underway. Dr. Almazeedi noted that 'Hydrogen is not the New Oil or Gas', mostly because it is likely to be low in cross-border trade; produced by conversion, not extraction, and the structure of the hydrogen supply chain is demand-driven rather than industry push. Price and quality signals from consumers will force producers to adapt to market signals. Competitiveness will depend not only on price but also on quality, usage, and supply chain in the new markets. He predicts that MENA will supply 50% of EU and East Asia imports by 2050, accounting for 10% of global energy demand.

Dr. Zeid Alghareeb discussed Saudi Arabia's circular carbon economy initiative and strategy, and how it relates to the announced hydrogen strategy. He highlighted the competitive advantage of the ME region both from the resource perspective and the low cost of capital. Dr. Alghareeb detailed Saudi Arabia's advantages over other countries in the region and the current plans to demonstrate the production of aviation and marine fuels, hydrogen in transport, and as a chemical in industrial processes. In particular, the five priority projects in the implementation stage include mobility pilots, certification, export infrastructure, and policies to enable adaptation.