

EXCLUSIVE SERIES VIEWS YOU CAN USE



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Upscaled hydrogen projects will be needed over the next ten to 20 years for investments to be bankable and for long-term, competitive pricing to be achieved.

Hydrogen production will also need connectivity to off-takers and to the downstream sector. It will be a lot like the renewables business and very much connected to the mechanism that was applied few years ago with LNG infrastructure. By contrast, blue hydrogen as a traded product, will follow from an early phase the same approach of current trading systems.

Capacity metrics: First things first

We need to determine if we will have enough land capacity to produce green hydrogen. According to various predictions, to achieve full net zero by 2050, the world will need approx. 26,000 TWH to produce green hydrogen in addition to the TWH that will be already needed for green electrification. If you translate that in terms of wind, solar and other renewable technologies, it is a very large requirement for new infrastructure and associated land. Still, the Middle East is the best region worldwide to deliver cost reductions down to \$2/kg by latest 2030 and beyond. It has the high renewable resources, the land, and the financing conditions to do so. In tandem, there will be blue hydrogen to support capacity needs and from there, we will need a roadmap for technology evolutions, to support more capacity production in renewables and green hydrogen. So, still a lot of challenges, but rapid and strong progress is being made in this region with real projects. And there's already a market for green hydrogen for certain sectors. We are seeing this with the NEOM green hydrogen project in Saudi Arabia. ■

*Paraphrased comments**

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