

2030 - 300GW



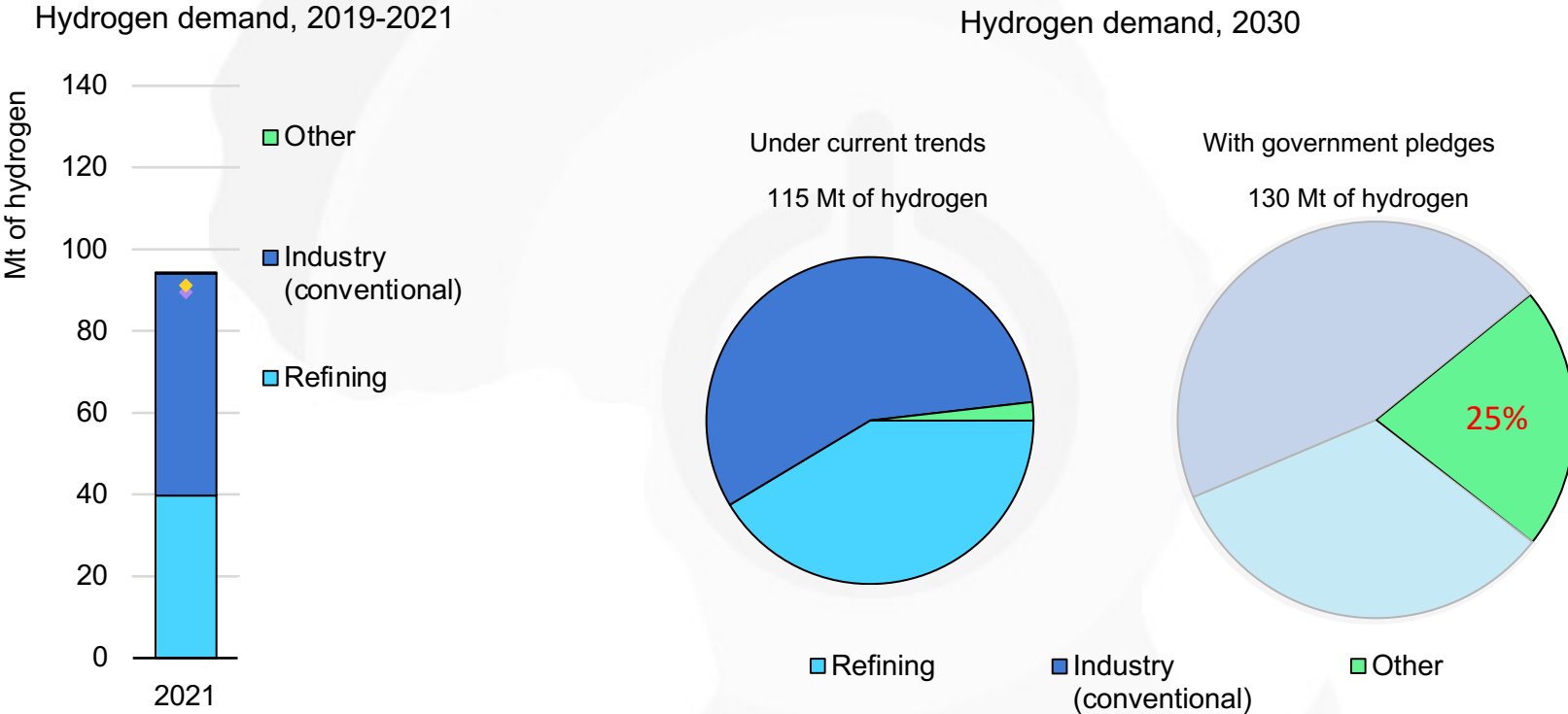
## Recent Trends for Hydrogen and its Role in the Clean Energy Transition

Green Hydrogen Development in Africa: Accelerate  
Energy Transition  
15 November 2022



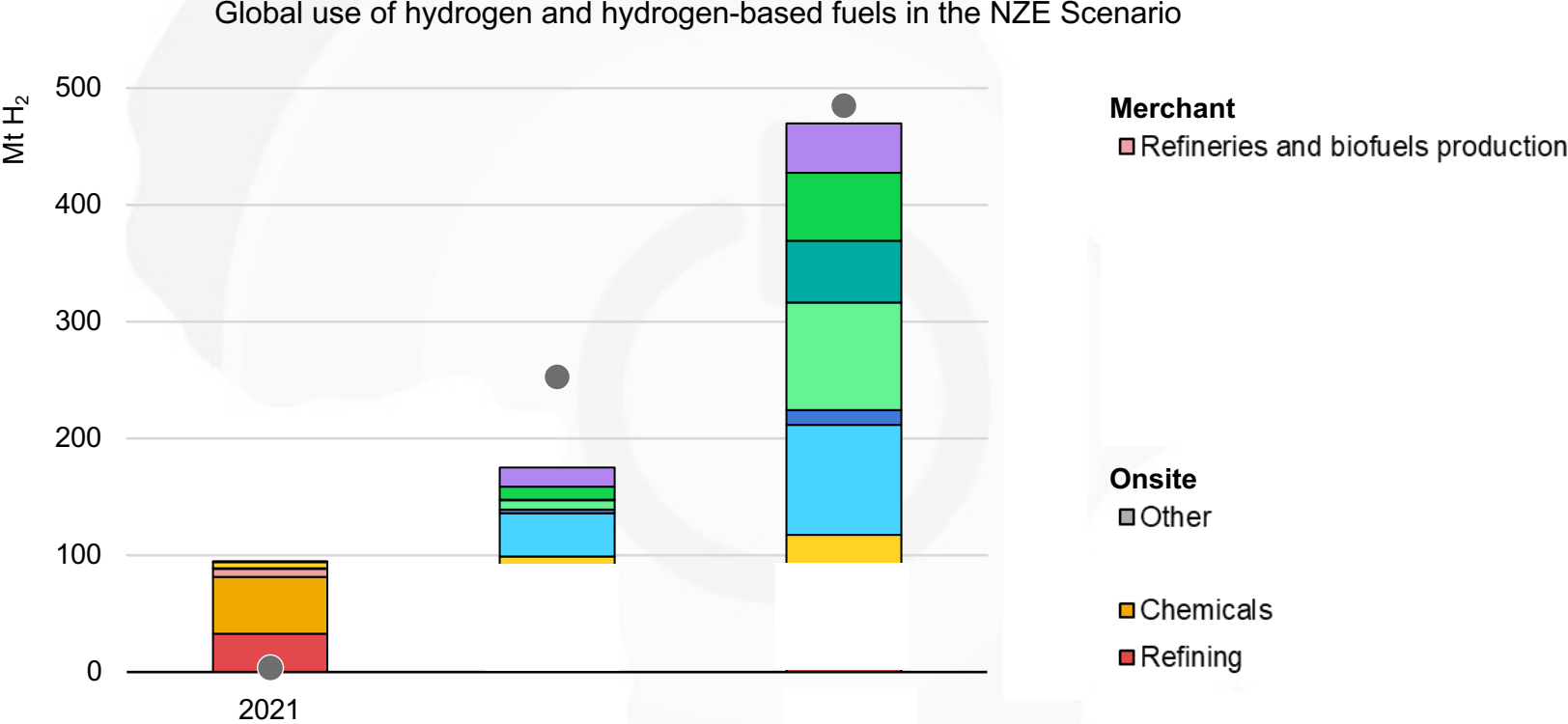
Dr. Uwe Remme  
Head of Hydrogen and Alternative Fuels Unit

# Hydrogen is a key pillar for net zero across the energy system



**There are plans to increase hydrogen use in heavy industry, transport and power generation, but ambitious policies are needed for hydrogen to play its role in meet government climate pledges.**

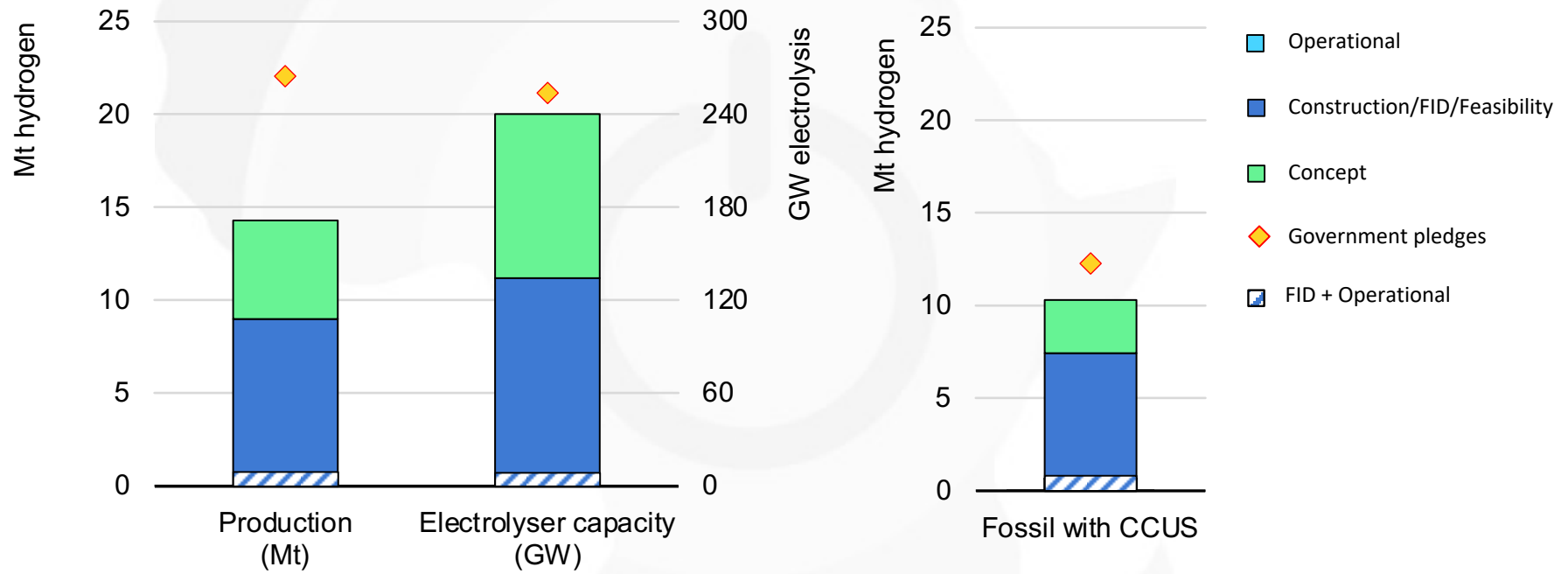
# Hydrogen is a key pillar for net zero across the energy system



Hydrogen demand jumps fivefold by 2050, expanding beyond refineries and the chemical industry to new uses in long-distance transport, electricity generation and steel making.

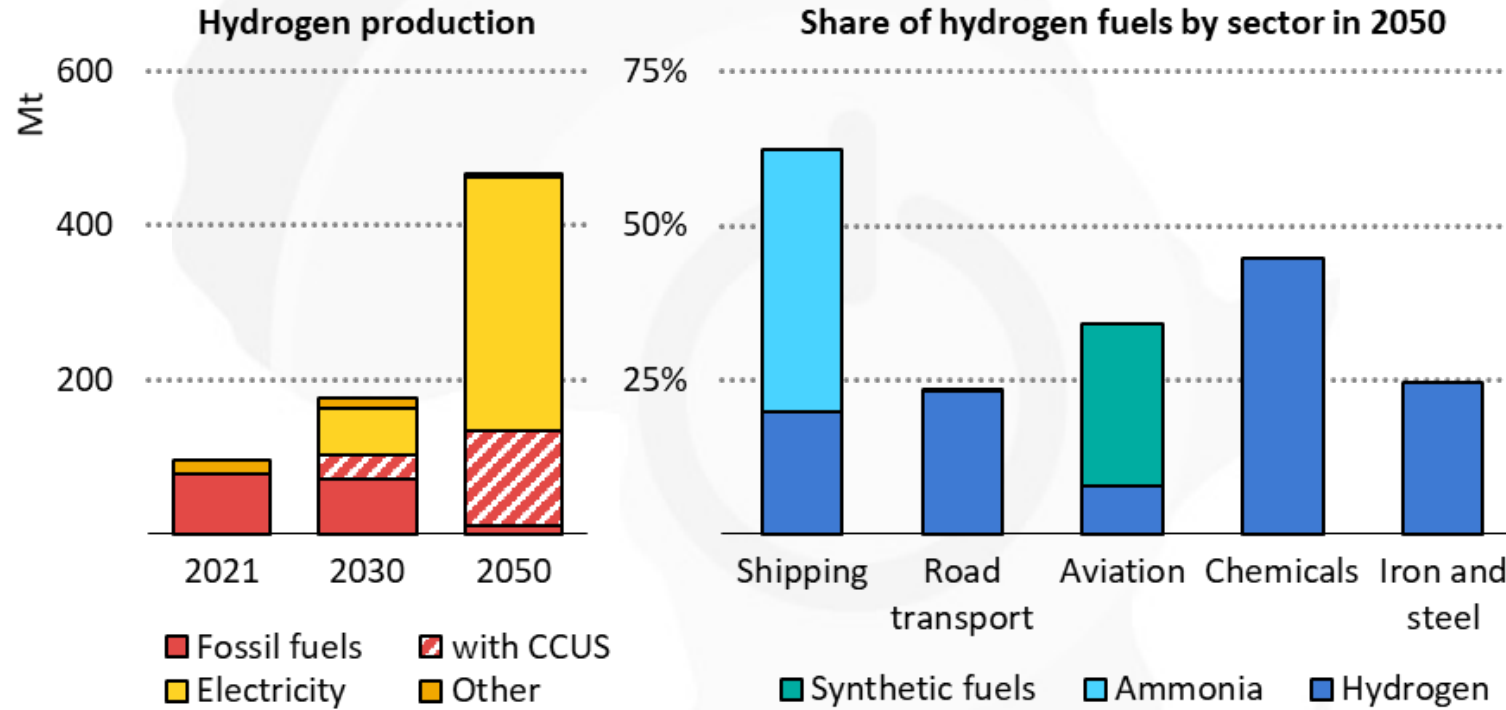
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Low-emission hydrogen production from announced projects, 2030



Low-emission hydrogen could reach 16-24 Mt per year by 2030. However, just a few projects are under construction or have reached FID due to uncertainties about demand, regulation and infrastructure

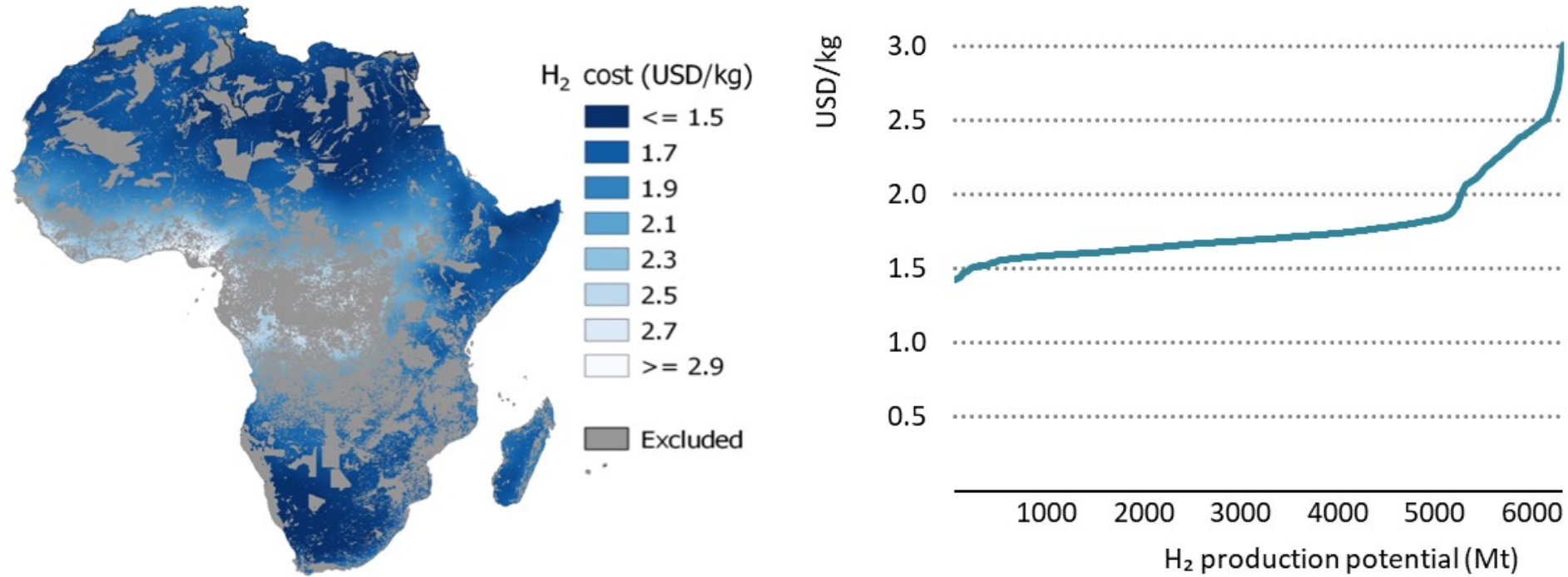
# Low-carbon hydrogen critical for hard-to-abate sectors



By 2050, hydrogen production in the NZE is almost entirely based on low-emission technologies, with electrolyzers accounting for around 70% of global production, and natural gas in combination with CCUS for almost 30%.

# Africa can be a leading player in hydrogen made from renewables

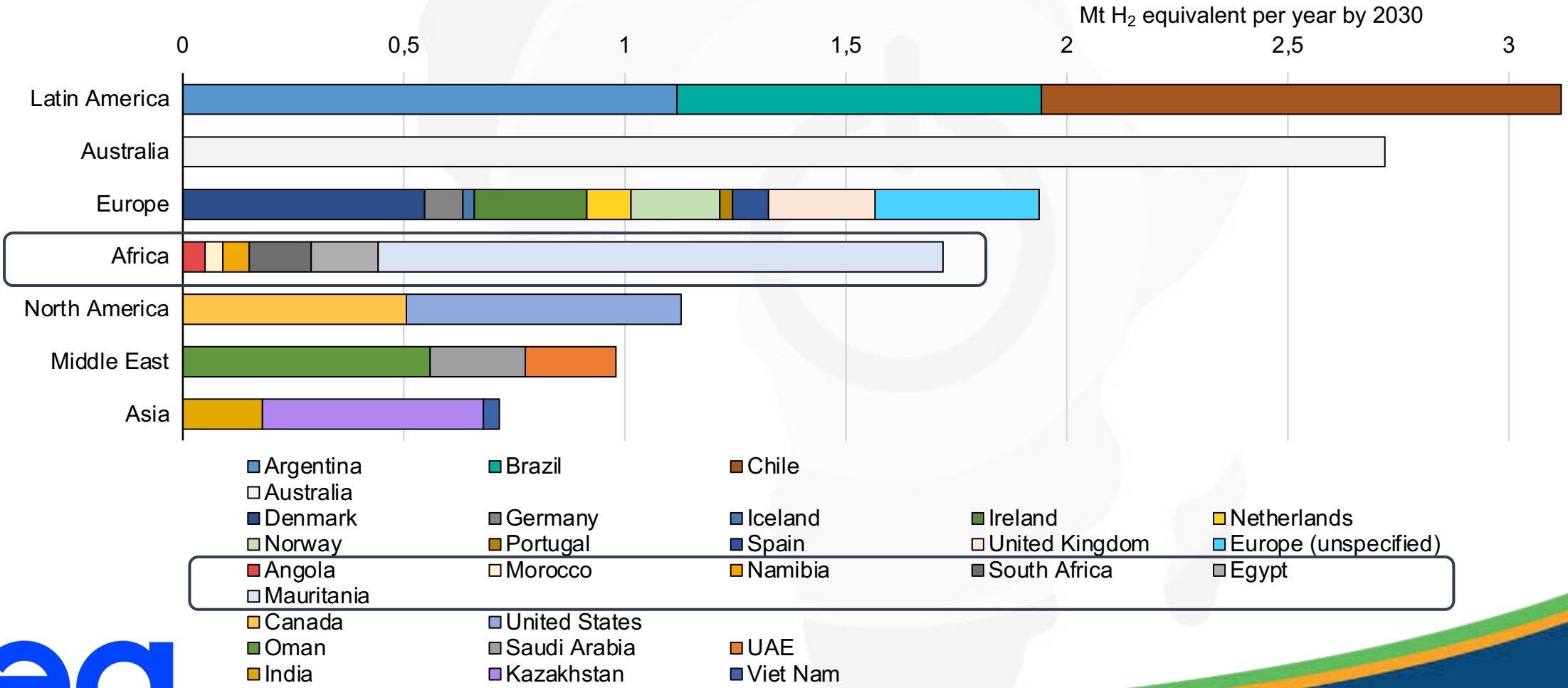
Clean hydrogen cost potential, 2030



Several renewables based hydrogen projects are already underway. Africa has the potential to produce 5 000 megatonnes of hydrogen at less than USD 2 per kilogramme—equivalent to global primary energy demand today.

# Low-emission hydrogen exports reach 12 million tonnes by 2030 based on projects under development

Planned hydrogen exports by region/country, 2030





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