
THE GLOBAL HYDROGEN MARKET

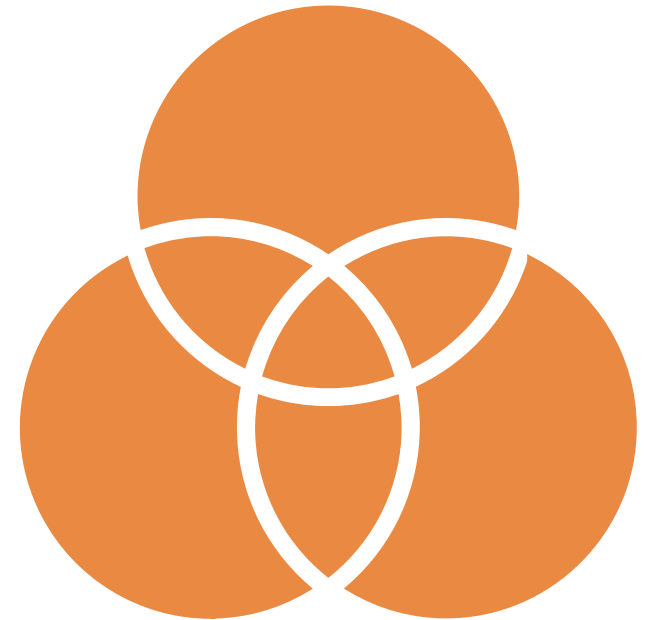
Noé van Hulst

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Opening IPHE SC, Santiago, 10 June 2025

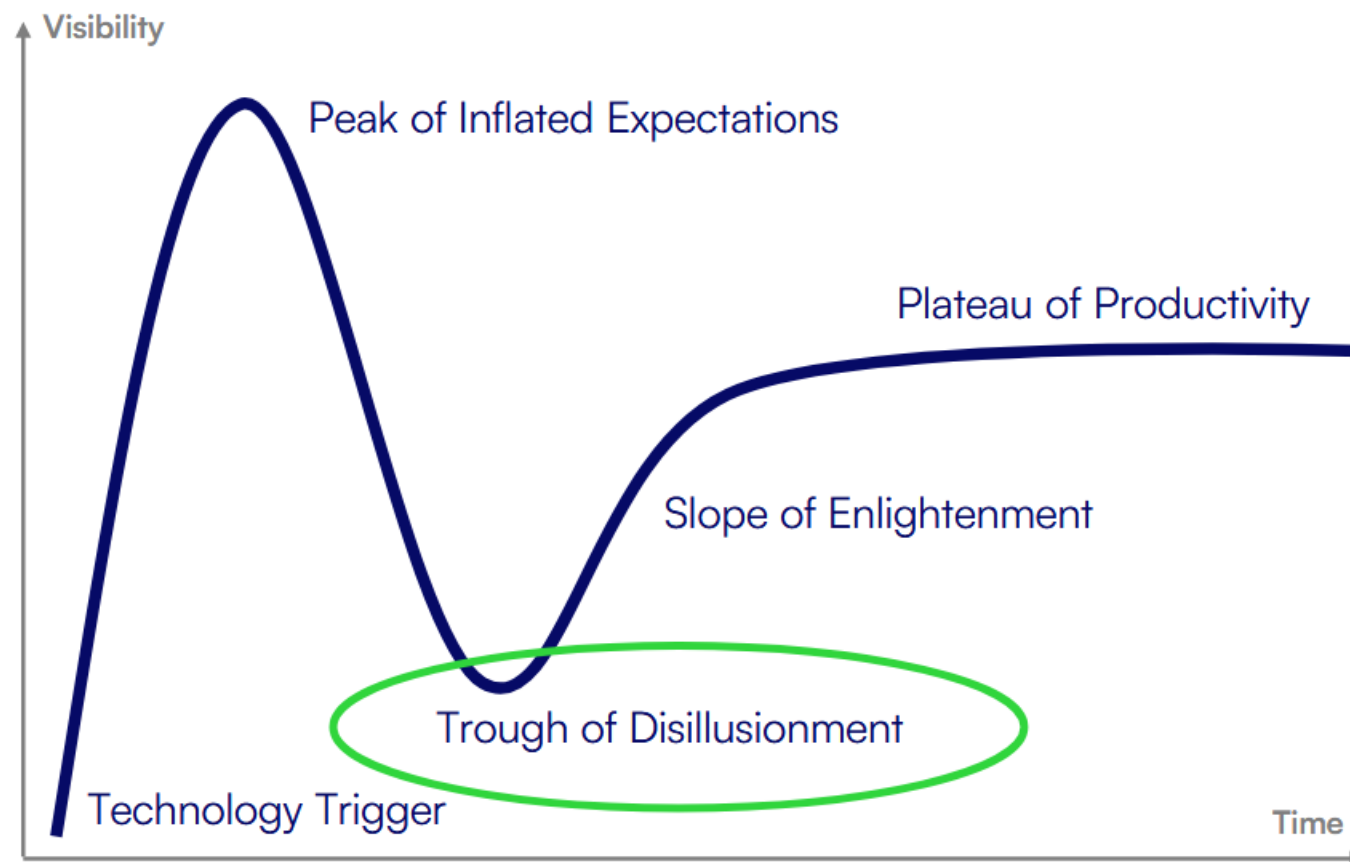
LOW-EMISSION HYDROGEN: HYPE OR HOPE?

- Not a silver bullet, but missing link in energy transition → clean molecules
- Complementary role to clean electrons (renewables, nuclear)
- Hard-to-electrify sectors: industry (chemicals, steel), transport (ships, planes), energy storage
- Energy security & industrial policy additional drivers
- Jury is out on long-term share H₂ in energy mix: 10-20%



The hydrogen economy is currently passing the 'Trough of Disillusionment' requiring further engagement to develop

The Gartner Hype Cycle

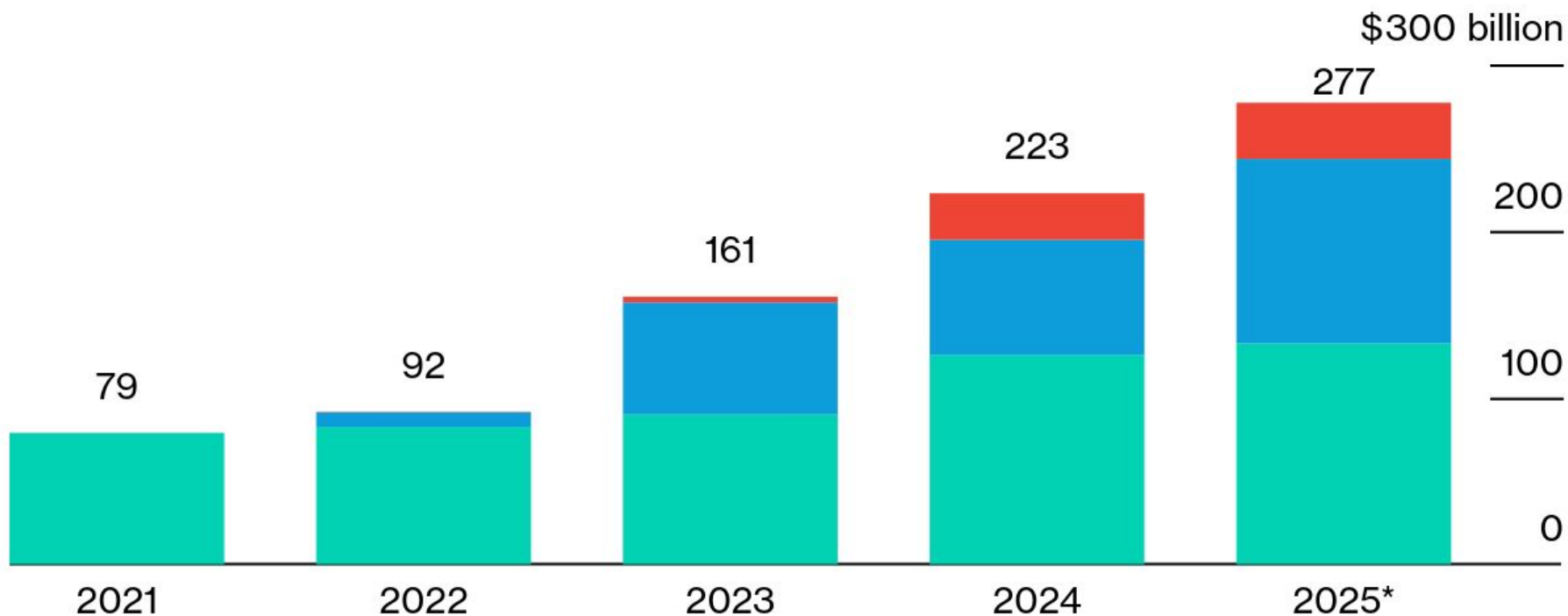


Trough of Disillusionment: Interest wanes as implementations fail to deliver. Producers of the technology shake out or fail.

Global Public Funding for Clean Hydrogen Tops \$275 Billion

Hydrogen funding by region and effective start year

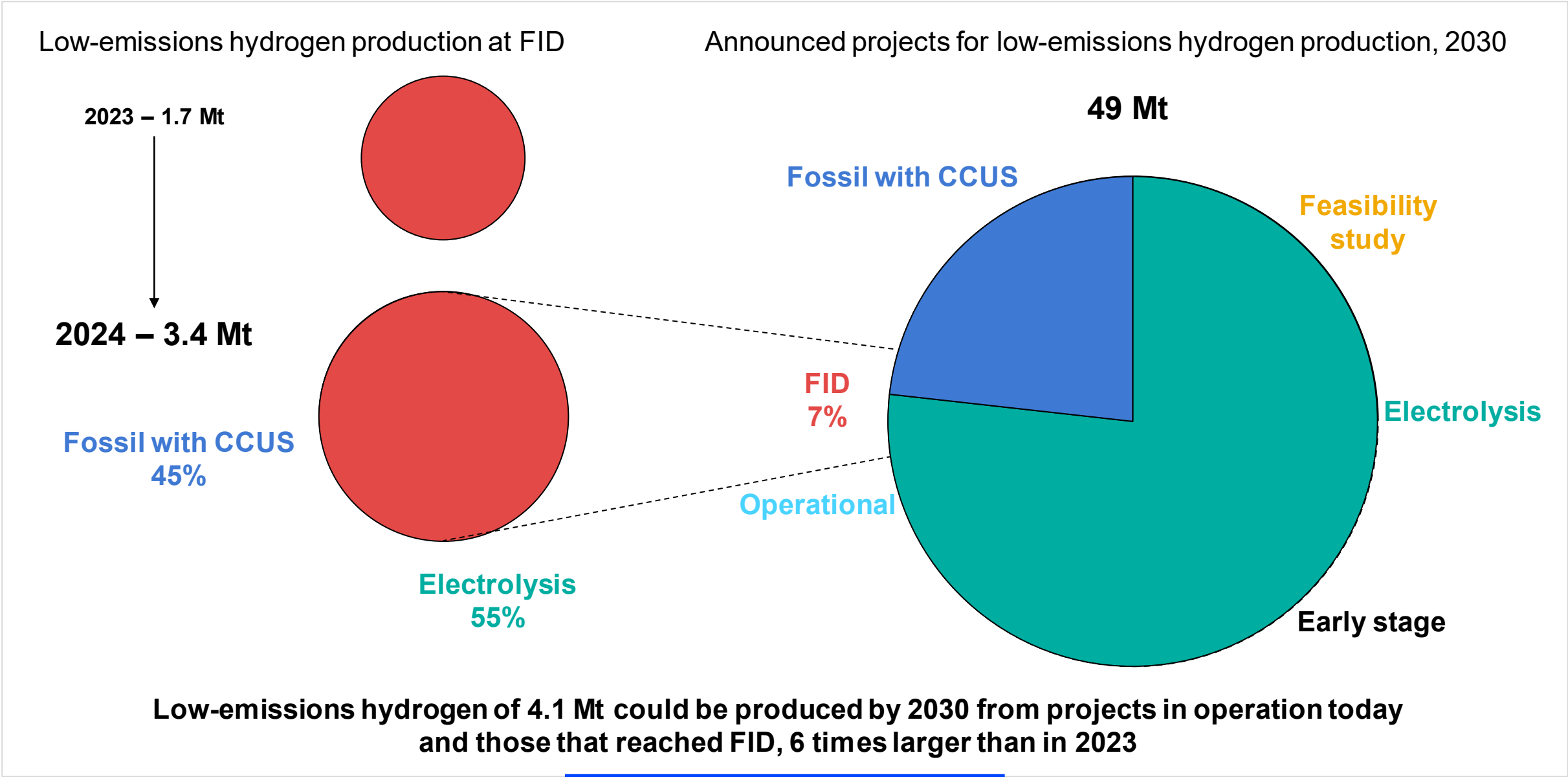
■ Europe, Middle East and Africa ■ Americas ■ Asia Pacific



Source: BloombergNEF. Corrects color for Americas to blue and corrects 2025 value for Americas to \$110.7 billion. Corrects color for Europe, Middle East and Africa to teal and corrects 2025 value to \$132.5 billion. Preceding year values also corrected.

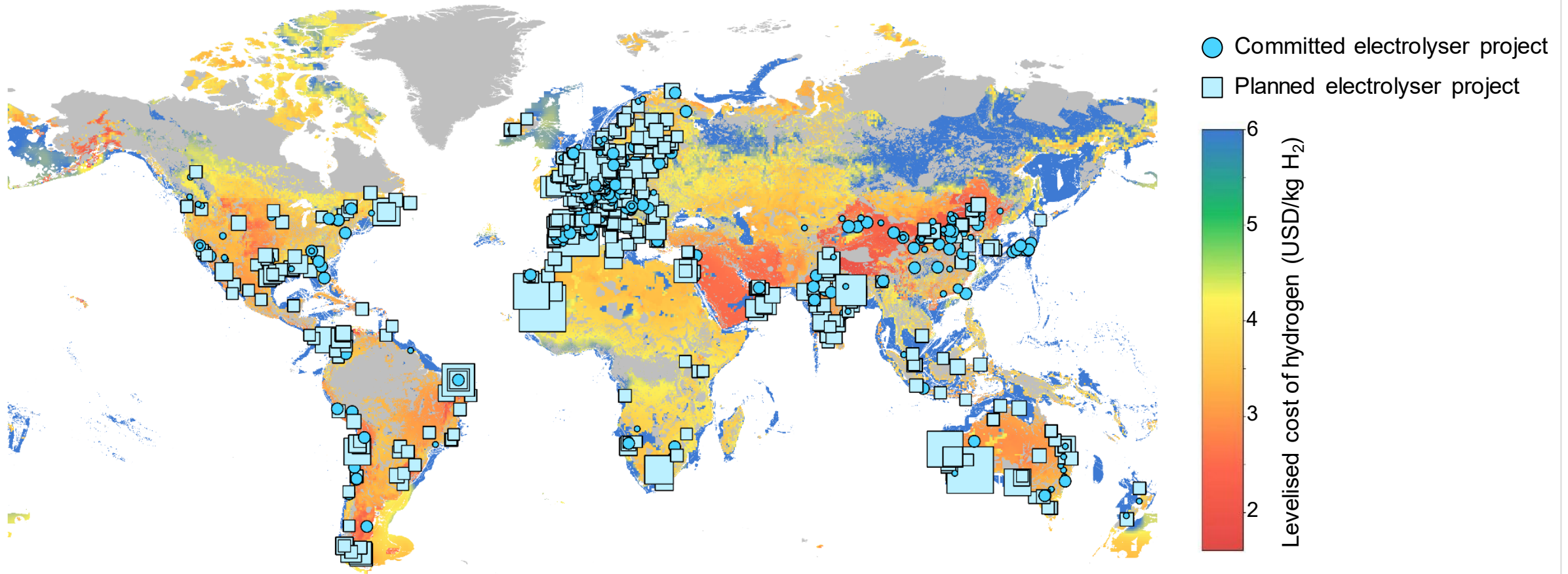
Note: The year 2025 includes funding that may start distribution in 2026, 2027, and 2028. Includes funding mechanisms that are announced, available, and/or allocated. Includes tax credits, grants, contracts for difference and fixed-premium subsidy mechanisms. Excludes loans and loan guarantees.

Investment decisions doubled in the last year



Scaling up deployment will bring down costs for renewable hydrogen

Hydrogen production cost from hybrid solar PV and onshore wind, and from offshore wind
in the Net Zero Emissions by 2050 Scenario, 2030



**Various regions around the world have excellent renewable resources for low-cost hydrogen production.
Production costs could fall below USD 2/kg H₂ by 2030 in certain locations.**