

DR. ALJOSCHA FREDE

**Europe's leading
Open Innovation
Platform for the
whole hydrogen
value chain**

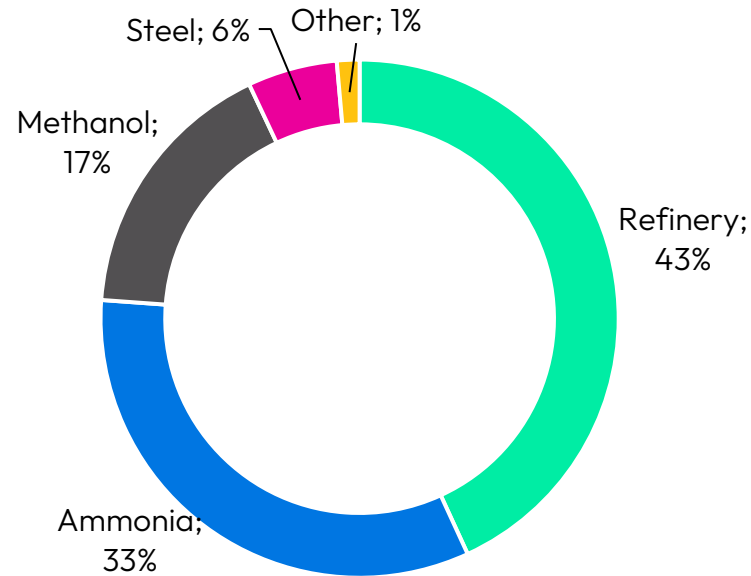
**#HYDRO
GENTEAM
WORK**

JANUARY 25



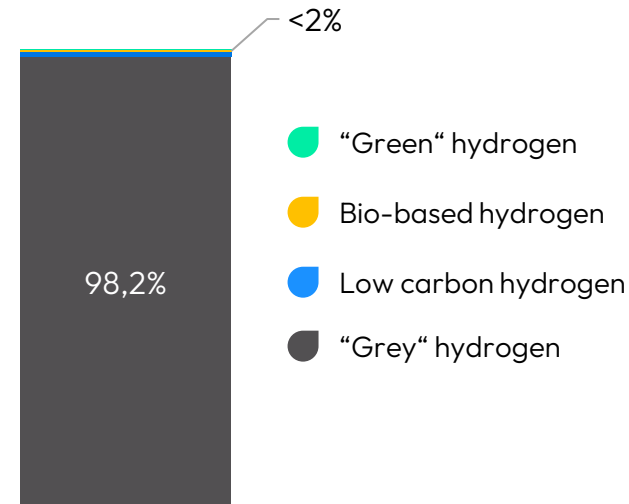
Today's hydrogen market volume is already 94 Mio. t H₂/year

Hydrogen Market in 2024



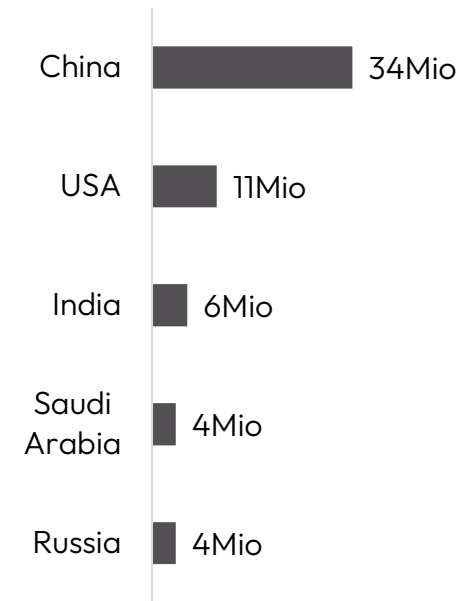
ca. 94 Mio t H₂
> 100 Billion €

Current Hydrogen Production



"Grey" H₂ market generates
940 Mio. t of CO₂ each year

Top 5 Hydrogen Producers



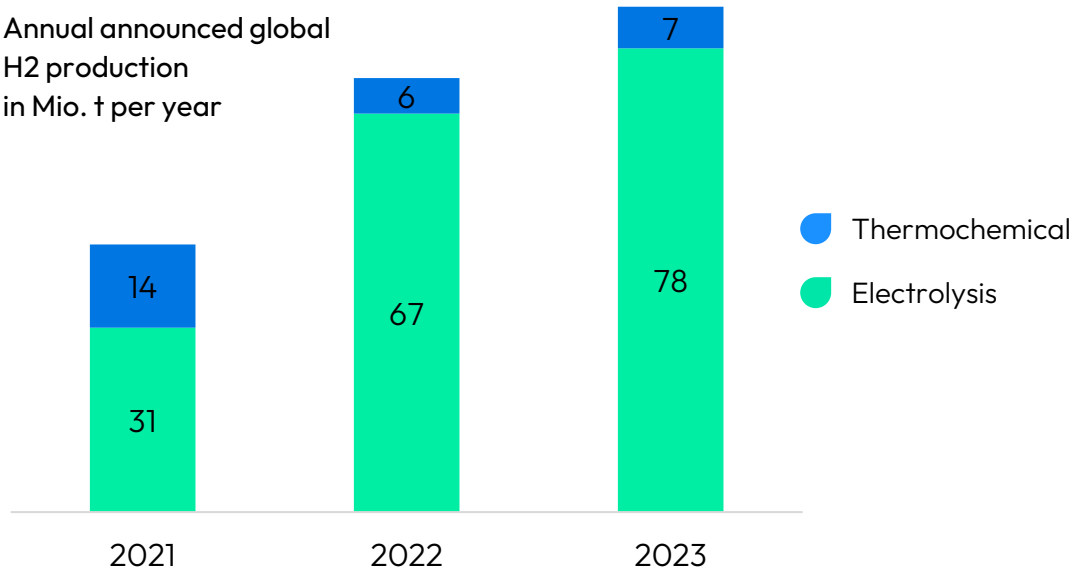
China leads world
H₂ production

Hydrogen Economy – Peak of inflated expectations vs. trough of disillusionment

New production capacity announced last year alone could cover most of today's demand.

Current hydrogen demand = 100 Mio t H₂

Annual announced global H₂ production in Mio. t per year

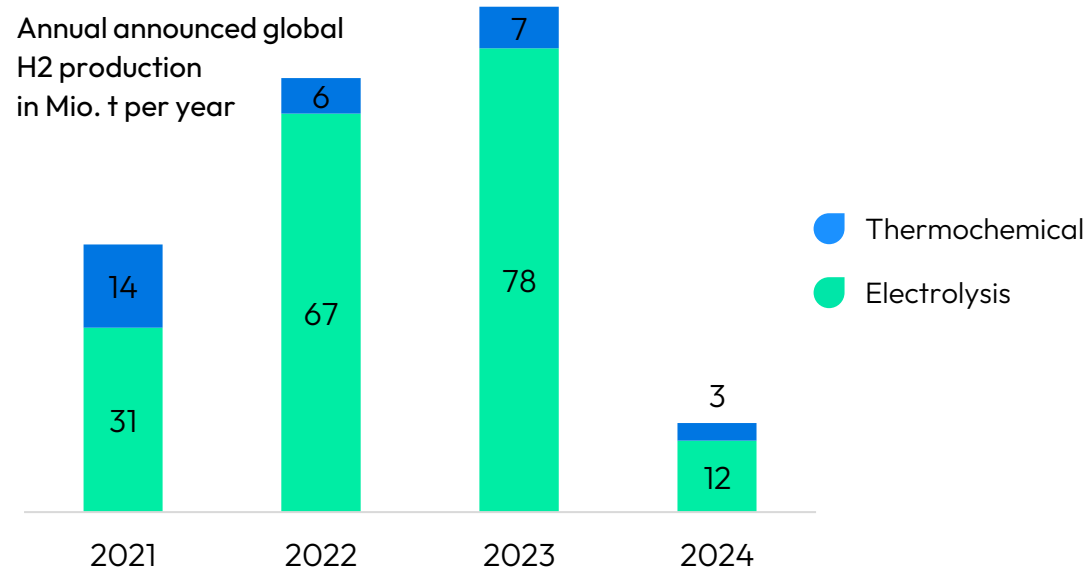


This is not a forecast but a pipeline of proposed projects.

Developers have started to dial back their project announcements.

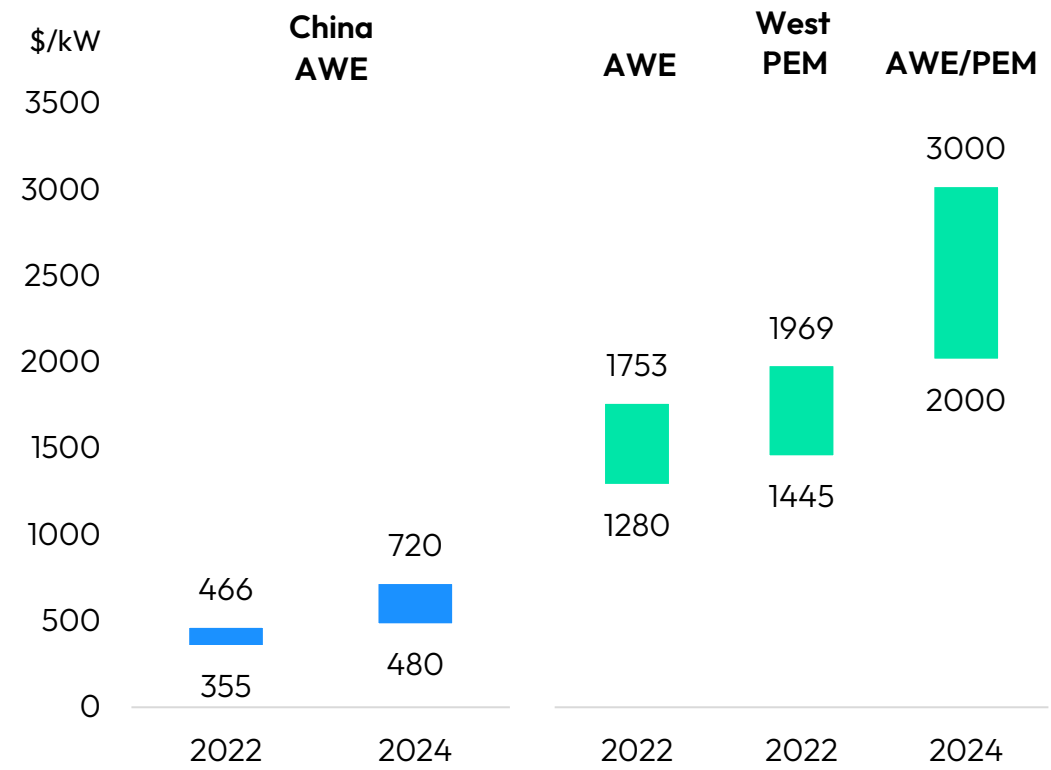
Current hydrogen demand = 100 Mio t H₂

Annual announced global H₂ production in Mio. t per year



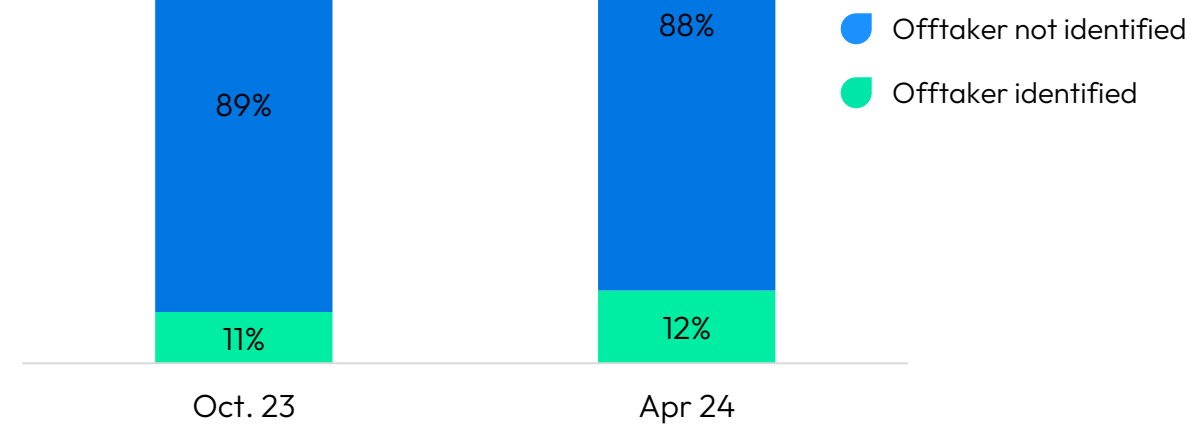
Data as of Sept 4, 2024.

Challenge 1: Costs are higher than expected



Electrolysis system cost are higher than they were two years earlier

Challenge 2: Demand is missing



Only 12% of announced 2030 clean H2 production volume has identified an offtaker

The EU is the only market with a nearly complete legislative framework for renewable hydrogen

Definitions	Production	Infrastructure	Demand
Renewable hydrogen	IPCEI & state aid	Hydrogen and Gas Package	REDIII industry quota – 42 % of H2 consumption by 2030
	European Hydrogen Bank	Connecting Europe Facility	REDIII transport quota – 1-5.5% of transport fuels by 2030
	EU Innovation Fund	National funding for pipelines and storage	ReFuelEU Aviation – 1.2% e-SAF quota by 2031
	Other national funding		FuelEU Maritime – 1% RNBO target by 2031
Renewable hydrogen production rules defined	1.8 Mio. t / 11.8 GW funded	>3,900 km of pipelines funded	2.1 – 4.2 Mio. t of demand

"35% of the emissions reductions in the NZE scenario in 2050 come from technologies at the demonstration or prototype stage, i.e. not yet available on the market."

"Carbon capture, utilisation and storage (CCUS), hydrogen and hydrogen-based fuels, and sustainable bioenergy are critical to achieve net zero emissions; rapid progress is needed by 2030."

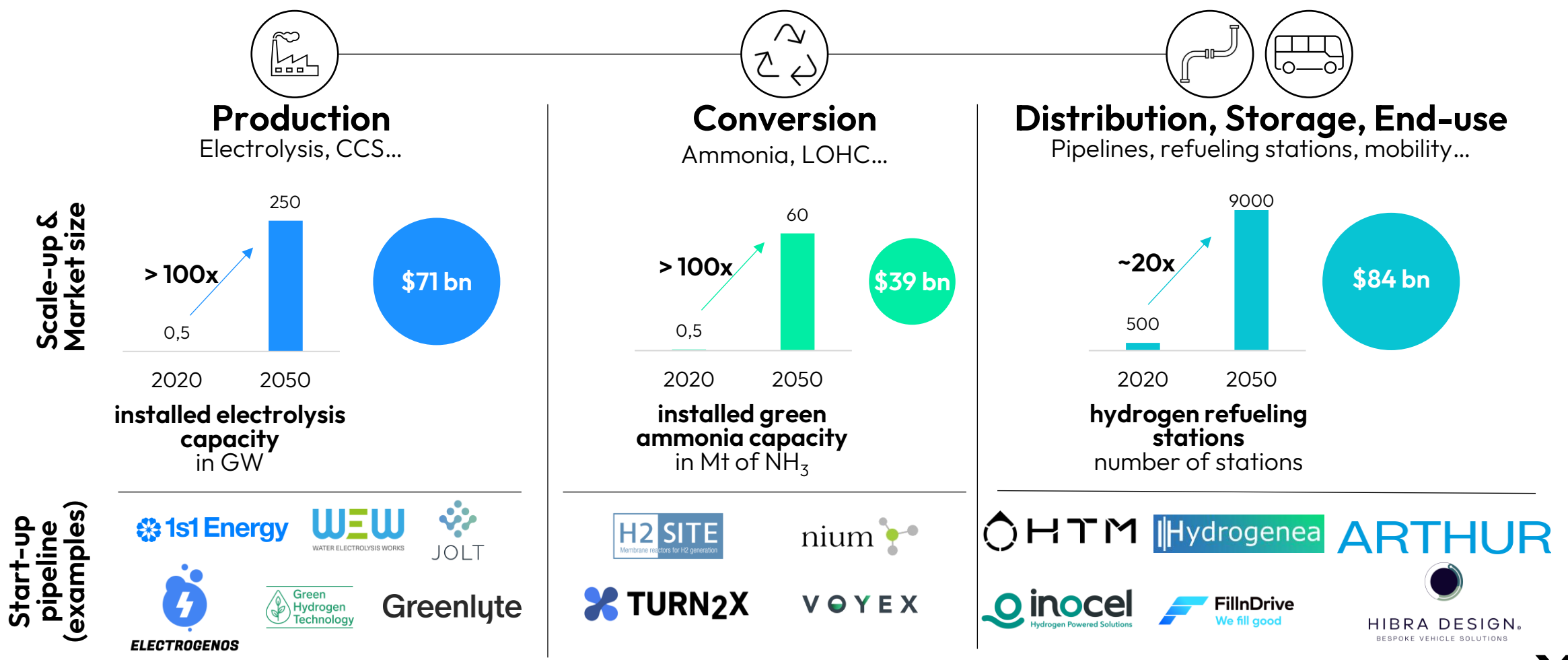
Source:

Net Zero Roadmap - A Global Pathway to Keep the 1.5 °C Goal in Reach (2023 Update)

https://iea.blob.core.windows.net/assets/9a698da4-4002-4e53-8ef3-631d8971bf84/NetZeroRoadmap_AGlobalPathwaytoKeepthe1.5CGoalinReach-2023Update.pdf



H2 Supply Chain needs to grow by 100x – Unlocking a \$190B Market Opportunity with Start-ups



Source: Hydrogen Insights from the Hydrogen Council and McKinsey & Company

The H2-ecosystem is different from the 'classic' start-up game



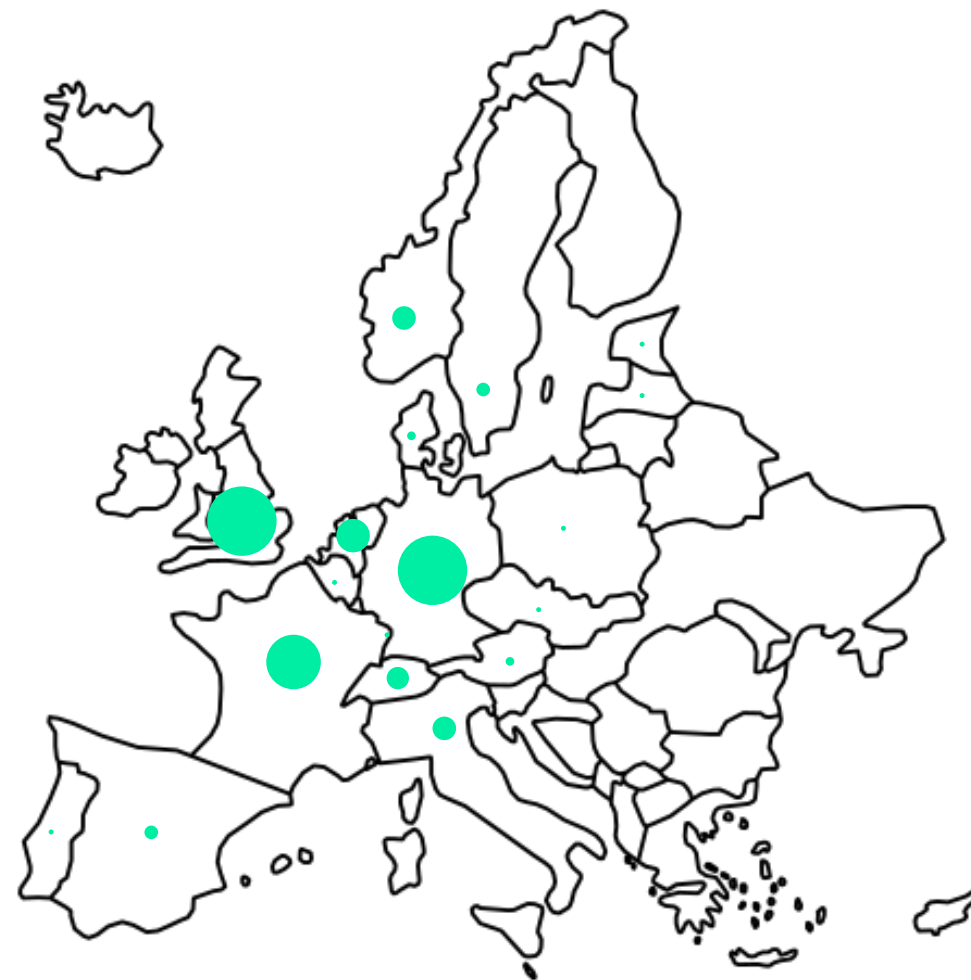
**their number is limited
(about 650¹ in Europe)**



**hardware takes time,
deep pockets &
risk-takers**



**strong industry partners
are needed to scale**



¹ <https://netzeroinsights.com/resources/market-insights/navigating-the-hydrogen-startup-ecosystem/>

WHAT
ISN'T
DED?



Vision

**We are Europe's leading
Open Innovation
Platform for the whole
Hydrogen Value Chain.**

Mission

**We collaborate with the
brightest entrepreneurs,
corporates and investors to
contribute to the common
goal: Net Zero!**

Our (Open-) Innovation Platform

CORPORATE INNOVATION

We collaborate with the smartest corporate innovation teams by leveraging Venture Clienting and Corporate Venture Building activities:

- From **Proof of Concept** to **Delivery**
- **Venture Building** services

START-UPS

We boost the brightest entrepreneurs building hydrogen start-ups by:

- Providing market-leading **tailor-made** start-up **programs**
- **Matching** them with next **customer** and/or **investor**

(CORPORATE) VENTURE CAPITAL

We scout, source, select and support start-ups to deliver innovative solutions to:

- **Decarbonize** your business operations & maximize **efficiency**
- **Invest** in future hydrogen **champions**

A man in a dark hoodie stands at the front of a room, addressing a group of people seated in rows of chairs. The room has large windows with sheer curtains and a presentation screen on the left. The text 'WHAT ARE WE DOING?' is overlaid on the image. The word 'WHAT' is in white, 'ARE WE' is in white outline, and 'DOING?' is in pink outline.

WHAT
ARE WE
DOING?

Partnership- and project-based Collaboration – H2UB Market Intelligence Reports & Tech Assessments



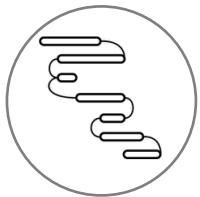
Deep Insights into Funding Trends

Analysis of hot topics, quarterly funding rounds and deal activity



Scouting vs. Comprehensive Tech Assessment

comprehensive tech assessment provides deeper insights and minimizes risks when selecting H2 startups



Accelerate Innovation with Data-Driven Decisions

Tech Assessment represents a “Due Diligence Light” enabling faster decision making



Start-up Programs



3 days program for start-ups and corporate innovators



Venture-building essentials and senior expert assessment on Product, Market & Funding

10 WEEKS
H2UB SPRINT

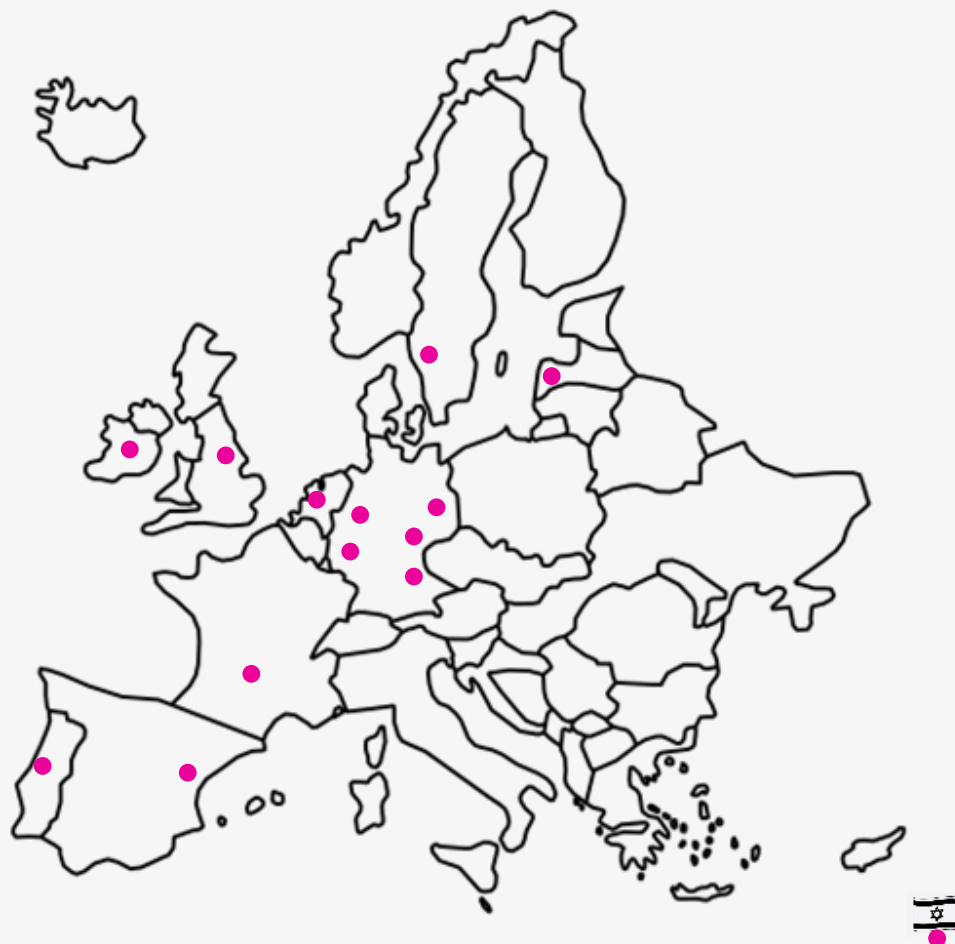


Individual & challenge driven 10-week program for Seed/Series A start-ups; 2 batches/year



Access to business mentors + high-level industry experts; focus on PMF, go-to-market strategy, sales & funding; access to R&D if needed

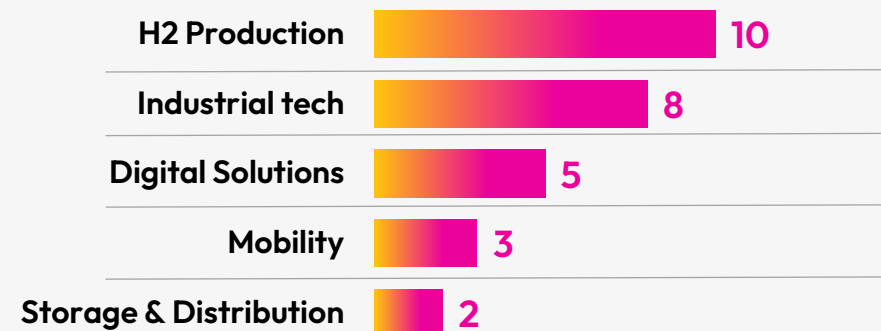
H2UB Start-up programs KPIs



28 TEAMS

IN H2UB SPRINT

H2UB SPRINT VALUE CHAIN

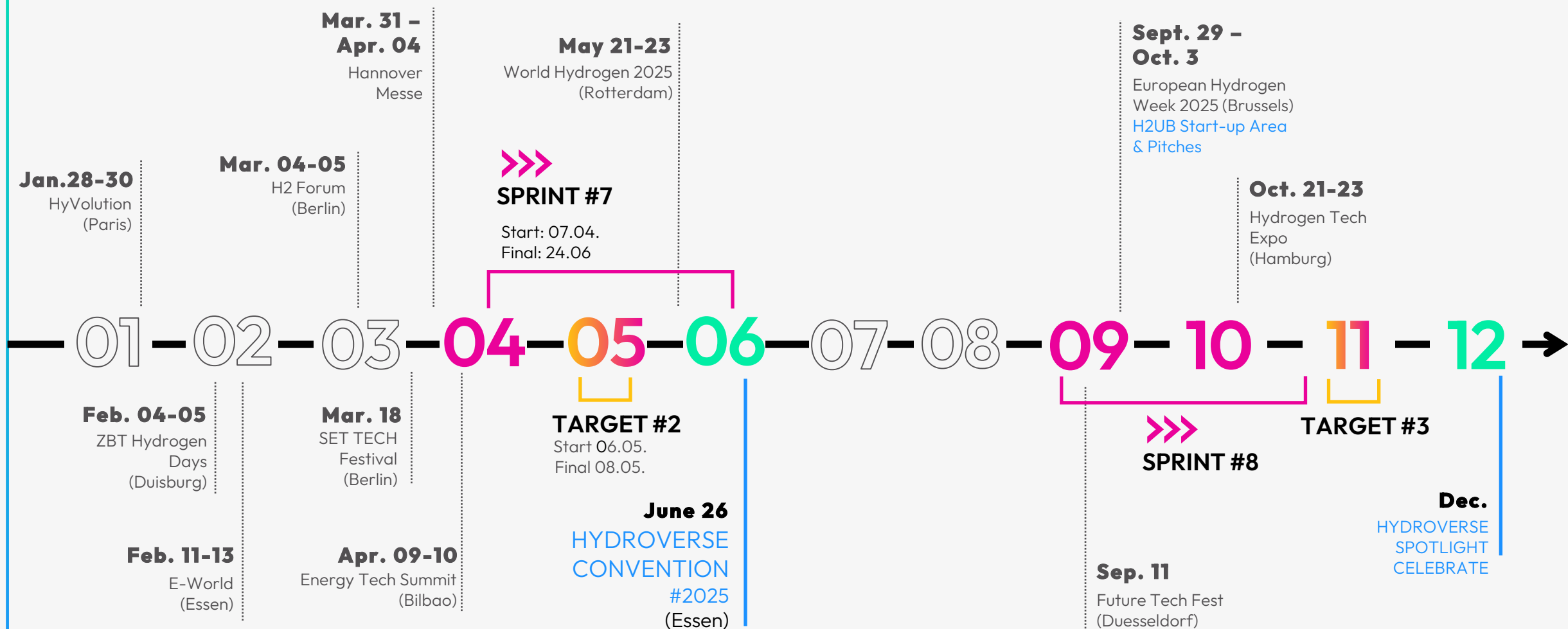


€ 149 M // €320 M

EXTERNAL FUNDS RAISED //PM VALUATION

NPS Score 9.4

Events & Programs 2025





**HYDROVERSE
CONVENTION**
2025

SAVE THE DATE
June 26, 2025

**THE EUROPEAN
HYDROGEN
START-UP EVENT
OF THE YEAR**



www.hydroverse-convention.com

European Hydrogen Week 2025 in Brussels

Sept. 29th – Oct. 3rd, 2025

Official Start-up Partner of Hydrogen Europe





Represented with own H2UB Start-up Area

Joined by 20+ European Start-ups & Corporate Partners





Shareholder


Funded project


Funded by:


Ministry of Economic Affairs,
Industry, Climate Action and Energy
of the State of North Rhine-Westphalia



Contact

 h2ub.com

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Corporate Partner
















... and more to join us soon.



HYDROGEN IS TEAMWORK. BECOME PART OF THE #HYDROVERSE!



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H2UB Ecosystem Startup Pitches



Product: Hydrogen transport & storage
Founded: 2015
Stage: Series A
Location: France

Supported/funded by



Pitch by:

Belén Moreno
Account Executive



Product: Stack & Components for PEM
Founded: 2019
Stage: Seed/Series A
Location: Portugal & USA

IPCEI funding of €45Mio approved by



Pitch by:

Thiago Figueiredo
Chief Business Officer



Product: MEAs for FCEV
Founded: 2022
Stage: Series A
Location: Germany

Funded by



Pitch by:

Dr. Matthias Breitwieser
Co-Founder & CTO