



# Yesterday's wind Today's fuel

Company presentation 2023



# Today's presenter

Everfuel 

Yesterday's wind  
Today's fuel

Jacob Krogsgaard  
*Founder and CEO*

2 Everfuel 

# Unlocking hydrogen at scale

## Everfuel at a glance

- Hydrogen is the green heavy-duty fuel – **100% clean and reaching diesel parity**
- Hydrogen is the green gas alternative – **100% clean and reaching natural gas parity**
- A **dedicated fuel and energy company** is needed to commercialize green hydrogen
- Everfuel a **leading European integrated energy company** – providing green hydrogen for Energy, Industry and Mobility
- HQ in Herring, Denmark, listed as **EFUEL** on Euronext Growth Oslo
- Everfuel is a Developer, EPC, Owner and Operator of the complete H2 value chain
- Currently active in **N, S, DK, D, NL, BE**



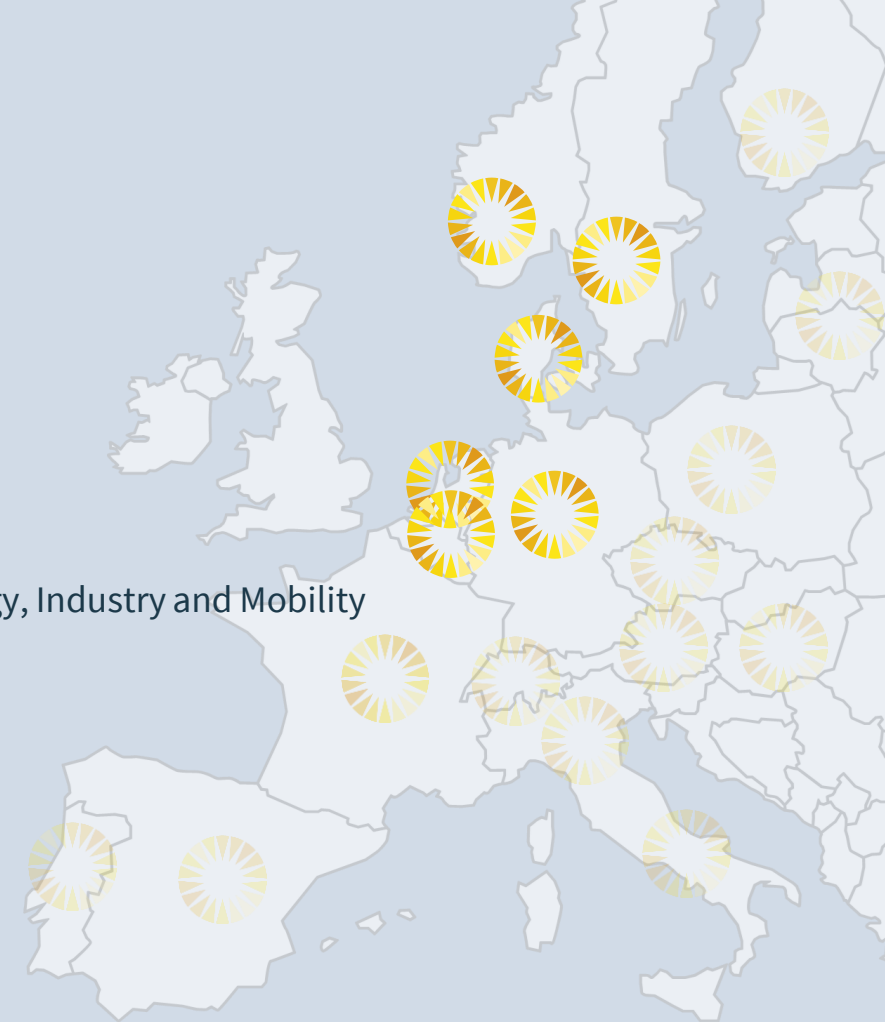
**Power generation**  
RED-II in 2023

**Hydrogen production**  
Expansion via hubs

**Hydrogen distribution**  
12 in operation

**Hydrogen Industrial offtake**  
Strategic opportunities via partnerships

**Hydrogen Stations**  
8 operational, 11 in various stages of development



Initial target markets



Following markets



# EU ready for a step-change in hydrogen industry – rapid market acceleration will follow

- The EU is seeking **energy independence, security and diversification of supply**, reflected in Fitfor55 package, reinforced by REPowerEU. Hydrogen is the **preferred green energy carrier**
- EU ambition is rapid scale up of green hydrogen production across Europe to meet expected **domestic production of 10 million tonnes per year by 2030**
- The **inflation reduction act (IRA)** in US has provided the necessary framework conditions for developers to **bring projects to FID**
- Europe Delegated Act in February 2023 following RFNBO certification and national targets for both industry and mobility
- New EU AFIR regulation sets **mandatory deployment targets for hydrogen refuelling infrastructure** in all urban nodes and **for every 200 km along the TEN-T core network from 2030 onwards**



## Stick and carrot incentives



CO<sub>2</sub> tax and penalties

RFNBO targets industry and transport

ESG requirements – funds and industry



RED II<sup>1</sup> & DA<sup>2</sup> for RFNBO i.e., certificates

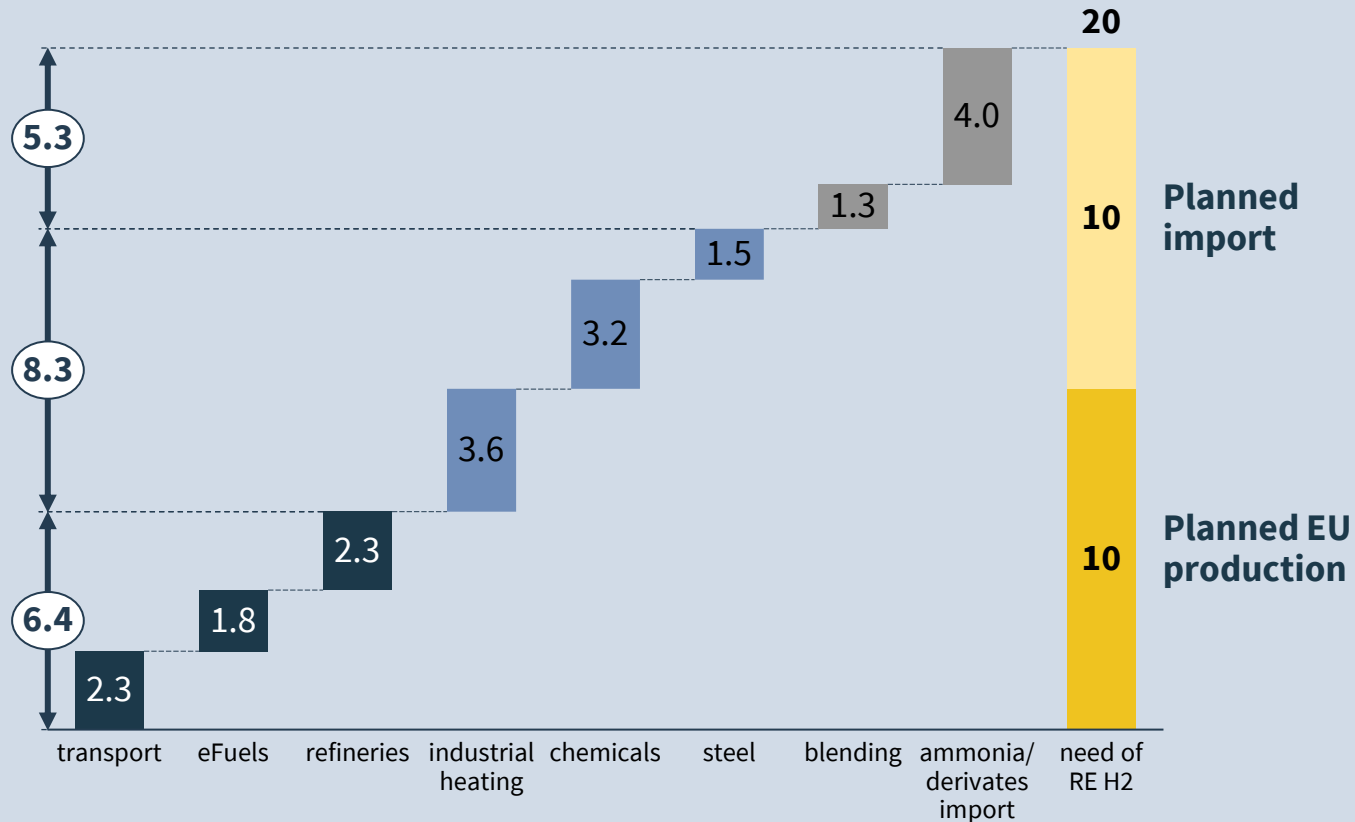
Funding programs like IPCEI

Contracts for Difference (CfD)

# Hydrogen market will reach a demand of 20Mt/y<sup>1</sup> in 2030 – likely shortage on green hydrogen initially

Expected RFNBO consumption in 2030 in million tons (Mt) in EU

■ transport & mobility ■ industry ■ others



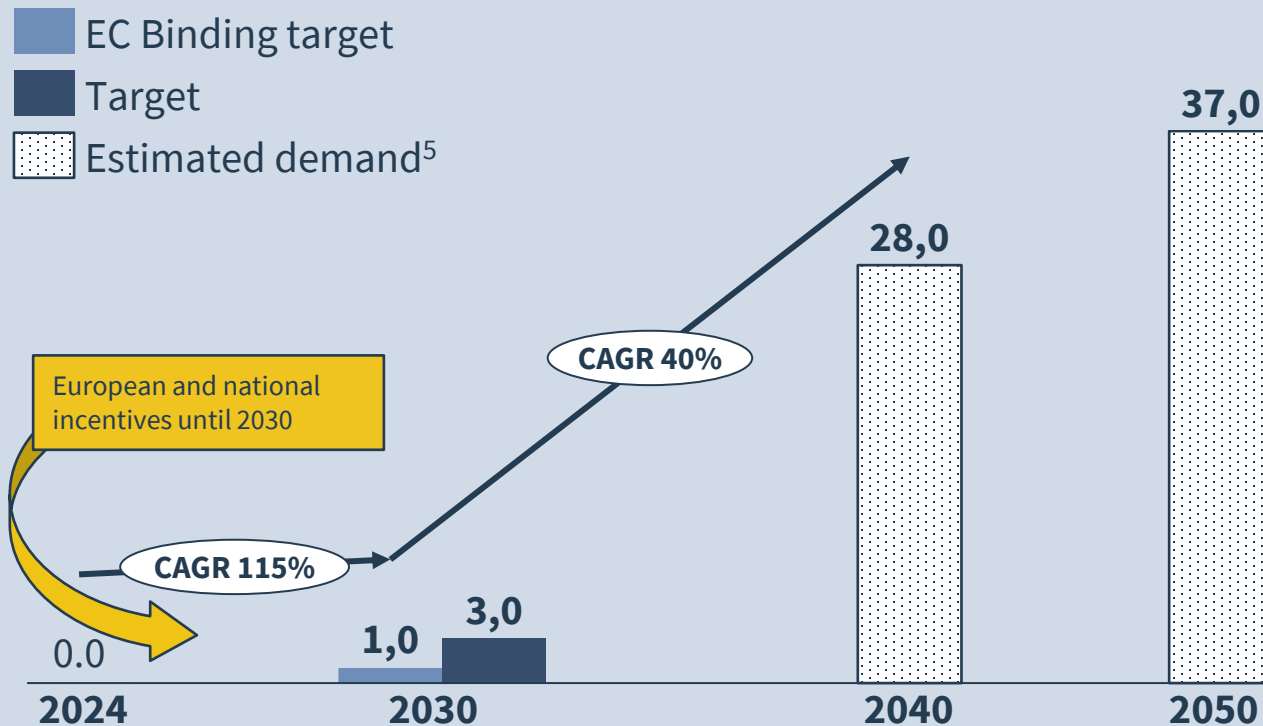
## Takeaways

- The European Commission's plan, REPowerEU estimates **10 Mt can be produced in EU, and 10 Mt needs to be imported**
- Hydrogen Europe's **estimation of RFNBO market potential in 2030 is considered a pessimistic estimation** compared to other studies
- **~100GW electrolyser** to be installed in Europe to meet demand.

1) Million tons per year  
Source: Hydrogen Europe; Deloitte Hydrogen4EU 2021

# RFNBO (hydrogen) mobility market in Europe

## Million tons of RFNBO



## Takeaways

- RFNBO<sup>1</sup> definition of green hydrogen agreed by EU commission in Feb 2023
- The EC propose a **2.6% target for RFNBOs** in the transport sector in Europe by **2030 of which 1% is binding<sup>2</sup>**
- Energy consumption in 2020 was ~340 Mtoe<sup>3</sup> and is assumed to be similar in 2030<sup>4</sup> equal to ~3900TWh
- A binding RFNBO target of 1% alone would open a mobility market for **1.2 Mt H<sub>2</sub> in 2030** resulting in a **fuel value of EUR ~6-7 billion and additional RFNBO certificates value**

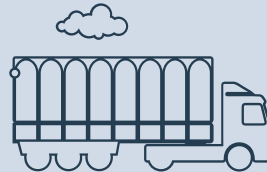
1. Source; Hydrogen Europe & EC, subject to approval by European Parliament | RFNBO renewable fuels of non-biological origin  
2. Expected to be fixed by the European commission by end of March 2023 as a response to inflation reduction act (IRS) in US  
3. Million tonnes of oil equivalent  
4. European Commission Energy statistics - an overview - Statistics Explained (europa.eu) and Agora Energiewende European Energy Transition 2030: The Big Picture  
5. Hydrogen4EU 2022 Edition

# National incentive schemes to enable swift implementation | German example

## THG Quoten in Germany<sup>2</sup>

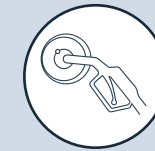


H<sub>2</sub> production



Transport

1t H<sub>2</sub> over a distance of ~400 km<sup>1</sup>



At dispenser

H<sub>2</sub> value

Certificates

7-11€/kg

H<sub>2</sub> fuel

6-10€/kg

Taxonomy targets

CO<sub>2</sub> emissions of H<sub>2</sub>: **<25 g CO<sub>2</sub>/ MJ**  
Certificate value of H<sub>2</sub>: **7.35 to 11€/ kg H<sub>2</sub>**

CO<sub>2</sub> emissions of H<sub>2</sub>: **28.2 g CO<sub>2</sub>/ MJ<sup>2</sup>**  
Certificate value of H<sub>2</sub>: **7.20 to 10.80 €/ kg H<sub>2</sub>**

RFNBO targets

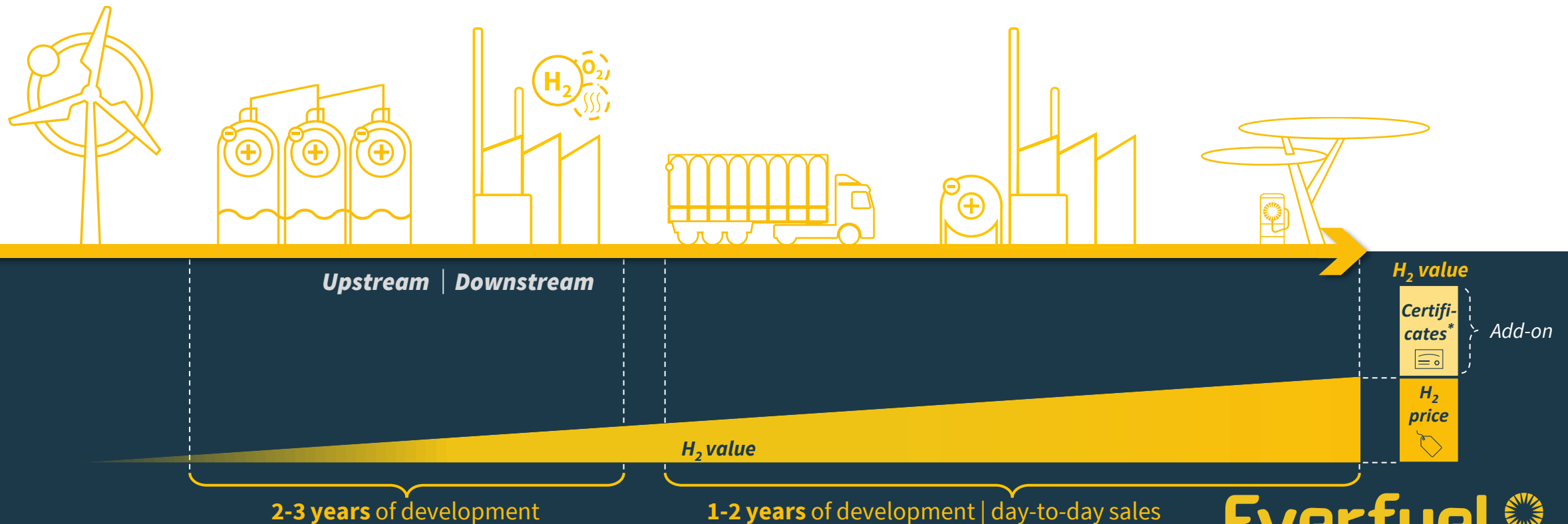
CO<sub>2</sub> emissions of H<sub>2</sub>: **<28.2 g CO<sub>2</sub>/ MJ**  
Certificate value of H<sub>2</sub>: **7.20 to 10.80 €/ kg H<sub>2</sub>**

CO<sub>2</sub> emissions of H<sub>2</sub>: **31.4 g CO<sub>2</sub>/ MJ**  
Certificate value of H<sub>2</sub>: **7.10 to 10.60 €/ kg H<sub>2</sub>**

1. Diesel truck with a consumption of 35l/ 100km and an emission factor 2,68 kg CO<sub>2</sub>/l  
2. Certificate value based on an assumed maximum penalty range of 400 €/ t CO<sub>2</sub> to 600 €/t CO<sub>2</sub>

# Full value chain integration to reduce risk and maximise value creation

- **Multiple revenue** streams create robustness and bankability in the business cases
- **Key Everfuel** tech elements in the value chain enable efficiency and cost reductions
- Integrated value chain ensures Everfuel's **unique position to secure 'add-on' hydrogen certificate value**





# Flagship project: HySynergy

## Phase 1 “First hydrogen” produced December 2022

- **20 MW green hydrogen** production facility next Crossbridge Energy refinery
- Surplus heat used for district heating to **~1,300 households**
- H2 delivery by pipeline and Distribution Center

## Phase 2 development according to plan

- **EUR 33.1 million** in IPCEI funding
- **Commercial agreement** with Crossbridge Energy refinery
- Conditional **O2 offtake** agreement with industrial neighbour
- **300 MW** electrolyser, 3x 100 MW
- Targeting FID in late 2023 subject to regulatory approvals with **commissioning in 2025**

## Phase 3 preparations ongoing

- **700 MW Electrolyser** latest in 2030 totalling 1 GW in HySynergy
- Land reserved for full implementation

Phase 1: **20 MW in 2022** | Phase 2: **~300 MW in 2025** | Phase 3: **1 GW before 2030**





# Developing hydrogen hubs across Scandinavia

- **Scaling green hydrogen via local value chains for production, distribution and consumption backed by long-term customer agreements**
- **HySynergy to become the initial hydrogen hub and major PtX facility with completion of the first 100 MW in Phase II. The project received EUR 33 million in IPCEI funding in December 2022**
  - Followed by planned hubs in Kristiansand, Holstebro and Karlstad
  - To be developed in phases in collaboration with partners within industry and mobility
- **Hub-concept enables large-scale hydrogen production and distribution to meet rapidly rising industry and mobility demand**
- **Everfuel and Hy24 Joint venture established to address the call to action for green hydrogen production in Europe**
  - **Combines experience and financial strength** of two leaders within green hydrogen
  - Partners committed up to **EUR 200 million equity investment** in the JV
  - Everfuel 51% ownership | Everfuel will be developer, EPC and operator for JV



# Hydrogen fuelling network

- Engaging in **close dialogue with end-users and OEMs** to develop the optimal roll-out of dedicated hydrogen stations synchronized with vehicles
- Everfuel **operates 8 hydrogen stations** and has an **additional 11 locations in different stages of development**. Focus moving to heavy-duty mobility
  - Active portfolio management focused on 2<sup>nd</sup> generation stations
  - 12 purpose-built hydrogen distribution trailers in operation
- Strategic core network** across active markets with scalable sites ready for market uptake focused on the TEN-T corridors, meeting EU “Fit for 55” strategy
- Distribution by Everhaulers** and prepared for later pipeline connection when possible
- Network roll-out** will be **supplemented by** Everfuel’s mobile fuelling unit **‘The Everfiller’**

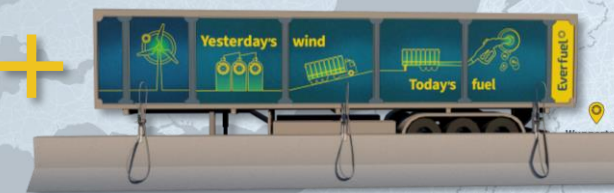
Hydrogen station



Everhauler



Everfiller™ THE NETHERLANDS

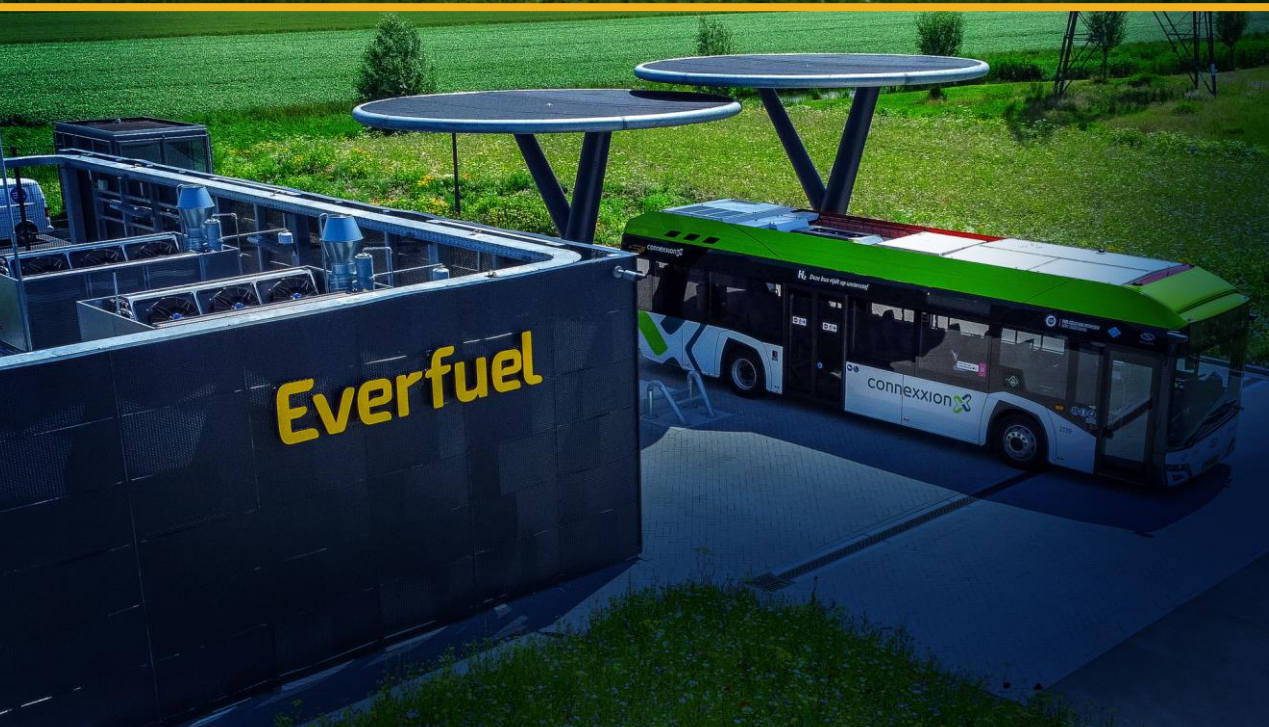


GERMANY

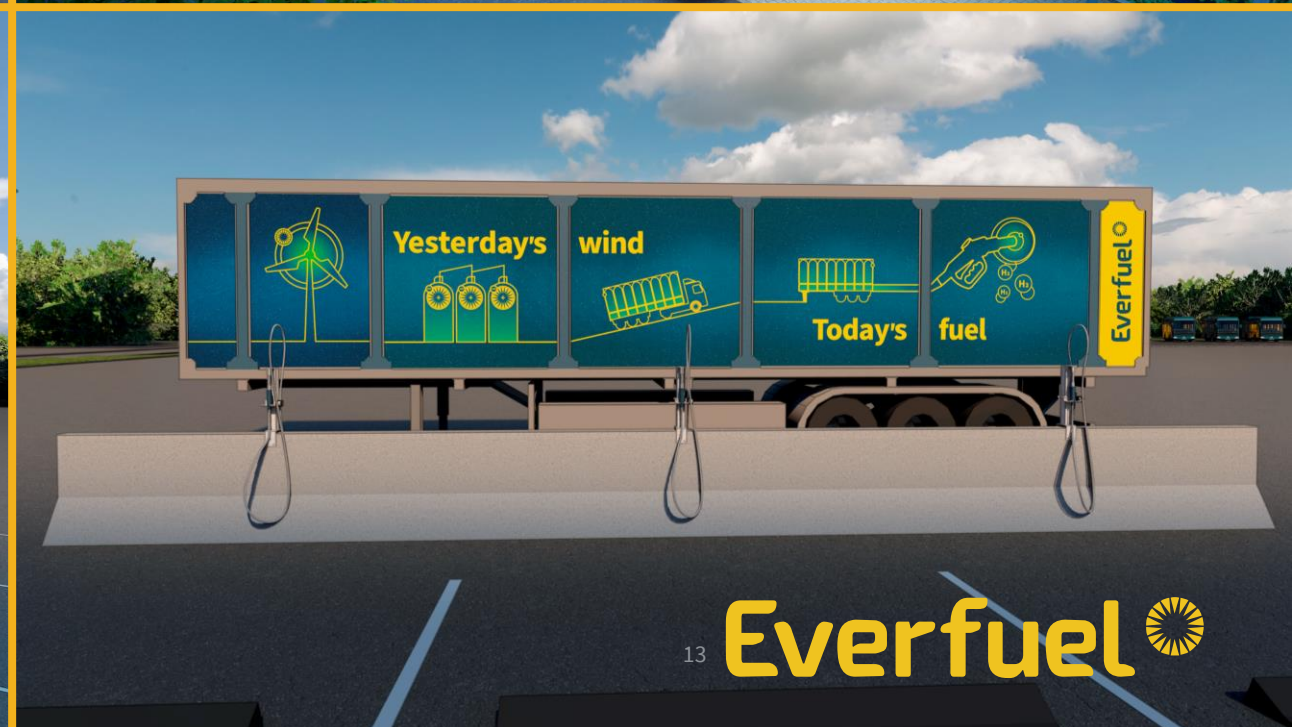
Everfuel 





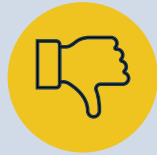
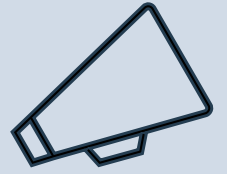








# Key messages for H<sub>2</sub> competitiveness in SWE



Political hesitation creates an unfair **first-mover disadvantage** by inducing additional risk



**Hydrogen infrastructure is the key to expand renewables**



EU's framework conditions for Green H<sub>2</sub> are **clear. Act on them** (RED III & DA<sup>2</sup>). **IRA is the benchmark!**



Don't spend years deciding when to build the SWE **H<sub>2</sub> backbone**. Delays uptake of significant H<sub>2</sub> demand



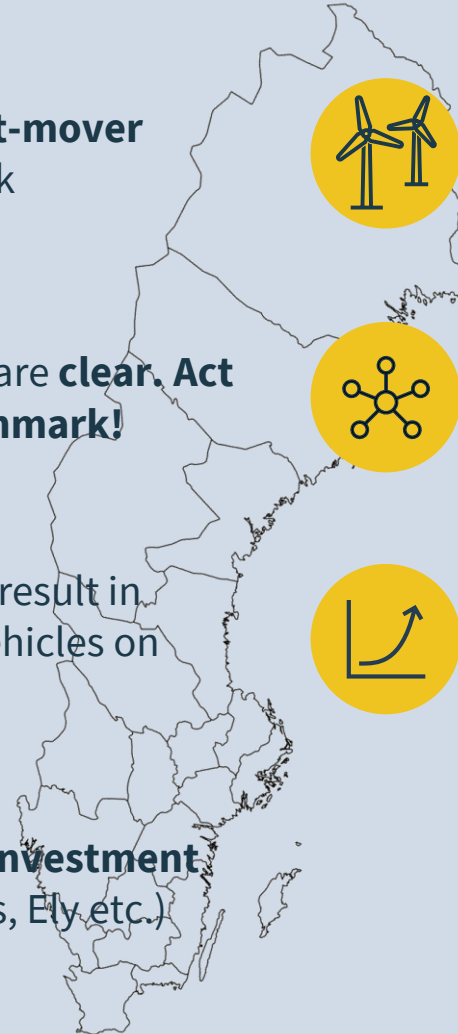
**No RFNBO targets or certificates in SE** result in export to other markets. Fewer Z.E. H<sub>2</sub> vehicles on roads. SE need to set targets



Public **funding across the value chain is essential** to accelerate the hydrogen market



Lack of clarity on frame condition **push investment decisions from OEMs** (vehicle producers, Ely etc.)



<sup>1</sup> Rev. RED II: revision of the Renewable Energy Directive II

<sup>2</sup> DA: Delegated Act on additionality, appendix to the rev. RED II



# Summary and Q&A

1

**Everfuel is a leading European green hydrogen energy company**

2

**Positioned to capitalise on EUR multi-billion hydrogen market now opening up in Europe**

3

**Firm growth plan backed by proven execution capability to unlock hydrogen at scale**

4

**Unique business model to secure rapid growth, recurring revenues and solid profitability**