



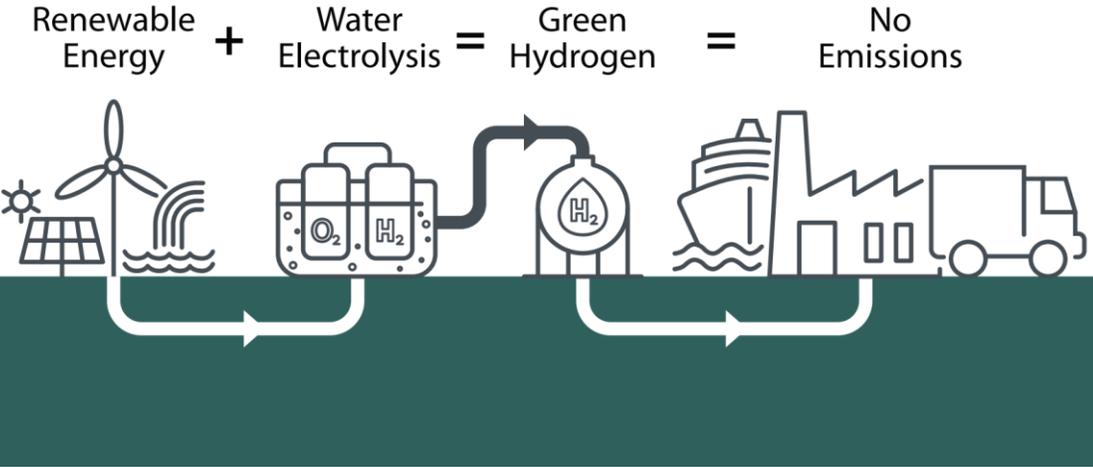
Accelerating the transition to a cleaner future with green hydrogen

Per Christian Eriksen, Head of Hydro Havrand

Pareto Securities Energy Conference, 15 September 2021

Green hydrogen enables transition from fossil fuels

Green hydrogen will play significant role in decarbonizing heavy industry and transport, totaling 1/3 of global emissions

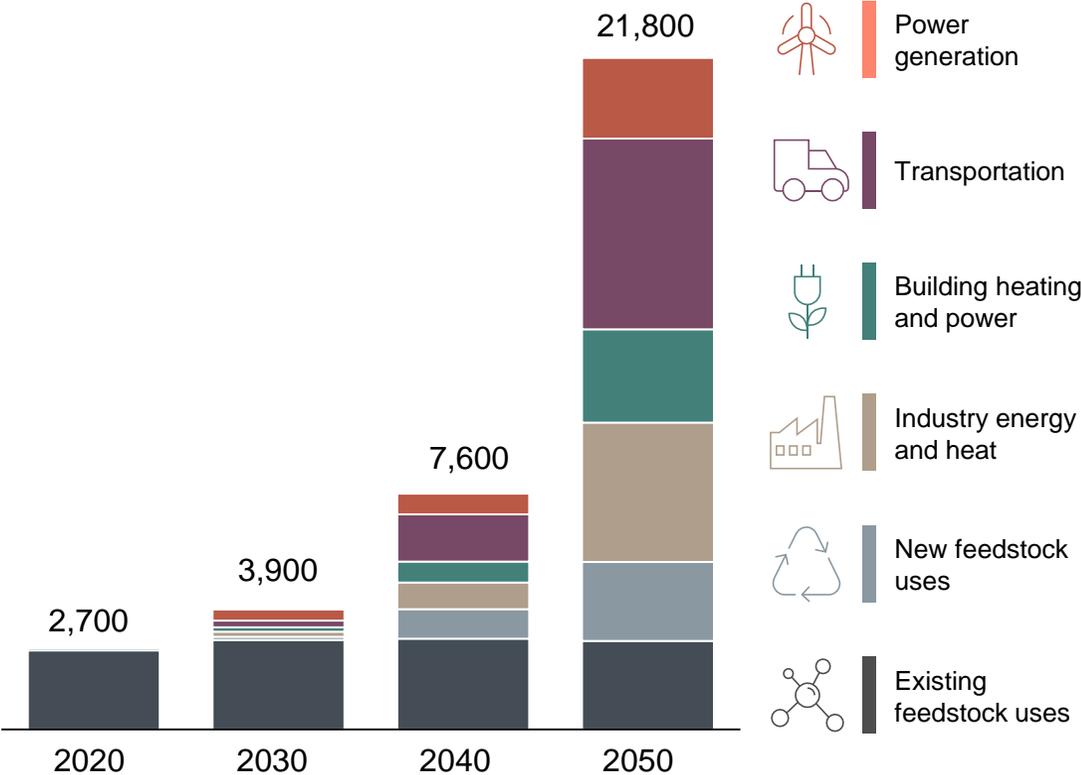


Demand to rise 7-fold by 2050 – green to rise 7000-fold



Globally, more than 1/3 of large-scale announced hydrogen projects tied to industry

Global hydrogen demand, TWh



Source: Hydrogen Council; BNEF Hydrogen Economy Outlook 2020; von der Leyen speech to the Hydrogen Council, 2021

Green hydrogen enables leaps towards greener metals



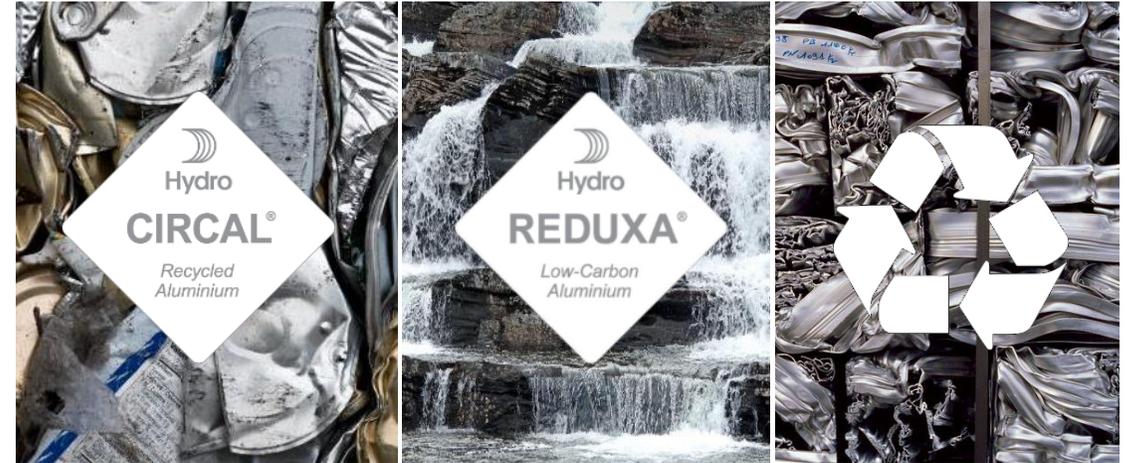
High-heat processes can be fully decarbonized with green hydrogen

Fossil-free steel: SSAB and Volvo Group



- Ambition to deliver world's first vehicles of fossil-free steel
- Replace coal with hydrogen to make fossil-free steel in 2026
- Will cut Sweden's CO2 emissions with 10%

Low-carbon aluminium: Hydro



- Ambition to reduce CO2 emissions by 30% by 2030
- Potential across the aluminium value chain
- Decarbonizing casting process and anode production

Hydro Havrand: Creating a global renewable hydrogen leader

Powering greener industries

Owned by Hydro, a global aluminium and energy company



Hydrogen's future is fossil-free: we do **green-only**



Hydro potential offtake gives platform for growth

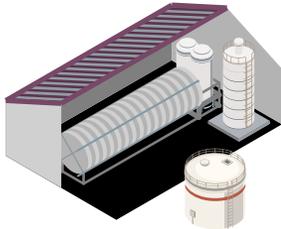
4 GW
potential offtake*

80+
potential locations



Global reach

Fully integrated – owner, developer and operator



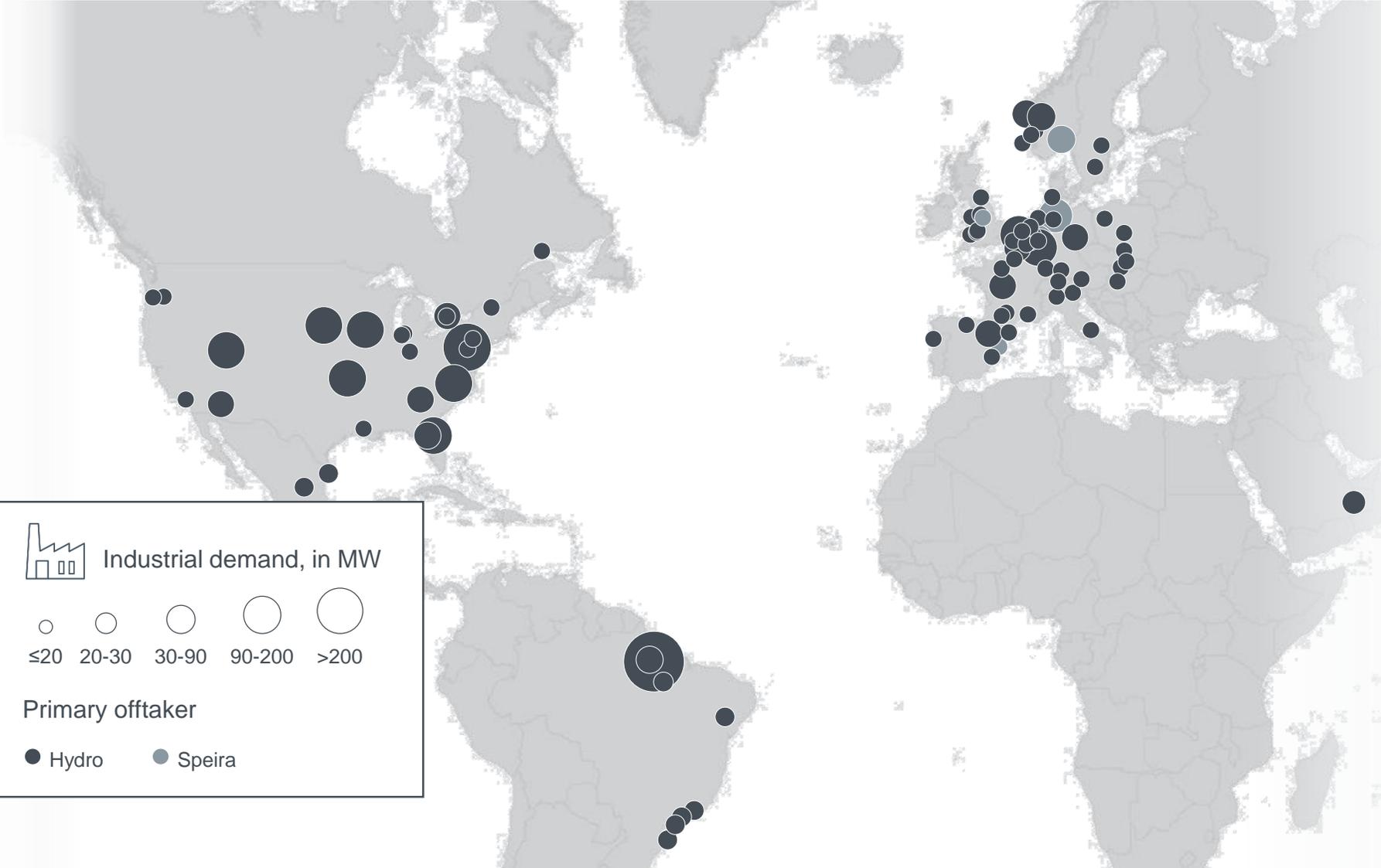
- Maturing projects in Norway and Europe
- 2025: First mover portfolio realised
- 2030: Global footprint

International developer, for industry and transport



* Potential long-term offtake includes Speira, previously Hydro Rolling

4 GW potential long-term demand from partner industrial sites in strategic locations



Industrial partners' gas use replaced with on-site green hydrogen production **1**

Hydrogen clusters serve industrial players, long-distance transport and shipping **2**

Interconnectivity between the sites **3**

Hydro Havrand ready to move early and capture market positions



Companies originated from Hydro (not exhaustive)

2021
Hydro establishes green hydrogen company



Lyse Kraft DA



- 1 **First mover position with offtake at scale** and 4 GW demand potential from Hydro and Speira
- 2 **Building portfolio of profitable at-scale green** hydrogen plants to capture nascent, but fast-growing attractive third-party market
- 3 **Uniquely positioned** with existing capabilities, access to competitive renewable power from Hydro – a global leader in industrial power sourcing
- 4 **Strong execution model** combining Hydro’s capabilities, strong management team, and partner ecosystem to serve Hydro and third-party demand

Strong position to kick-start the green hydrogen economy

Our bold and simple plan: to enable industry and transport to make the shift from fossil fuels to renewable energy through green hydrogen

- Green hydrogen will play significant role in decarbonizing heavy industry and transport, totaling 1/3 of global emissions
- Attractive hydrogen projects on Hydro sites our springboard to global opportunities
- Fully integrated player, offering green hydrogen and unique industry and energy expertise on how to make the fuel switch



Hydro