April 27-28, 2021Virtual Conference

EVENT SUMMARY!

GREEN HYDROGEN 2025 – FUELING EUROPE'S INDUSTRY AND MOBILITY

3,470 Atte

Attendees

43 a

Partners and sponsors

48

Speakers

See you next year! April 4-5, 2022

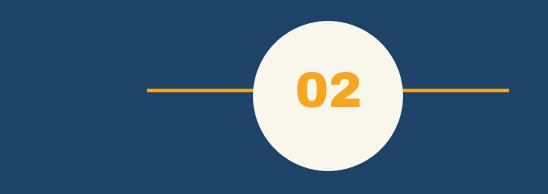


Europe is leading: 126 of 228 global hydrogen projects are planned in Europe

102 NON-EU PROJECTS

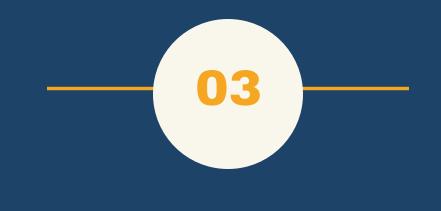
126 EU PROJECTS





In the medium term, green hydrogen will be produced mainly in countries with infinite renewable energies and will be traded globally – similar to oil and gas, today.





For building and industrial heating, blending natural gas with green hydrogen is a quick win to reduce CO2 emissions using existing infrastructures.





39,700 km of hydrogen backbone are potentially emerging in Europe by 2040.





In the next years, green hydrogen demand will be bigger than the available supply. Competition based H2 pricing for limited green hydrogen will be achieved by an auction model.





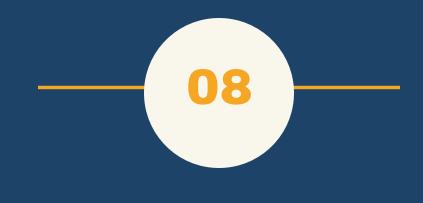
H2 business cases are running already: hydrogen trucks in Switzerland already compete at lower costs than diesel trucks.





In city busses, hydrogen transformation is happening already today. In 2025, only 27% of all EU busses will drive with traditional diesel technologies. H2 will have a share of 7-10 percent.





Rail, plane, automotive, busses, and trucks will most likely use the same hydrogen tank infrastructure, in some years time.





Fuel cells and hydrogen combustion will most likely find their separate market niches.





In the short term, e-fuels are a game changer for existing assets in mobility. Planes, sports cars and trucks will be CO2-neutral soon if fueled with CO2-neutrally produced e-fuels.





550 mio. liters of CO2-neutral e-fuels can be produced in only one plant, in 2026. The challenge is to make the required renewable energy available in the right form at the right location.





CO2 air capture technologies will be used in the hydrogen value chain to transform H2 chemically.





Gas hydrogen seems to be easier to use and superior to liquid hydrogen in many applications.





Offshore wind will be the major source to replace fossil energy and to produce green hydrogen in Europe.





Large scale, modular designed and standardized electrolyzer plants with gigawatt capacity will be available from 2025+.





Traditional grey
hydrogen hubs at
raffineries can easiliy
serve as storage for
large volumes of green
hydrogen and can be
distributed from there.





The combination of three key technologies for one value chain bears enormous potential: a) using green electricity for water electrolysis processes, b) using the resulting ...





... green hydrogen for chemical plants, and c) using green molecules for further processes and as sustainable energy carriers (ammonia, methanol, methane).

