



International Partnership
for Hydrogen and Fuel Cells
in the Economy

The Netherlands Update

37th IPHE Steering Committee Meeting

26 – 27 April 2022

Virtual Meeting

Announcements / New Initiatives *The Netherlands*

Investments/Funding/Policies/Initiatives

- Dec 2021: a €35 billion Climate Fund, including €15 bln for sustainable gasses, such as hydrogen.
- January 2022: Start of the National Hydrogen Programme
- January 2022: Subsidy for 13 projects under the hydrogen technologies scheme of TKI Nieuw Gas (€3 million in total)
- April 2022: €500 million from the National Growth Fund awarded to the 2nd stage of the project Groenvermogen (GreenCapacity) , focused on the realisation of 4 green hydrogen production projects of at least 100 MW in The Netherlands

Announcements / New Initiatives *The Netherlands*

New Research & Development, Demonstration and/or Deployment Activities

- Nov 2021: First Dutch home heated by hydrogen connected to a local, underground hydrogen network
- December 2021: Flex H2 - demonstration of offshore wind to green hydrogen production (€4 mln subsidy)
- December 2021: Symbatt – project that will implement and test the battolyser concept which integrates generation and interim storage and conversion to hydrogen in one chain (€3,2 mln subsidy)
- March 2022: The construction of the first hydrogen powered inland ship in The Netherlands has begun on 30th March.
- March 2022: First PV-powered hydrogen production site commissioned in Oosterwolde by network company Alliander and GroenLeven.
- April 2022: Development of import terminal for hydrogen carrier in port of Rotterdam: Gasunie, HES International and Vopak have announced a collaboration to construct an ammonia import terminal in 2026.

Announcements / New Initiatives *The Netherlands*

Key Collaborations

- Joint statements on import-export supply chains with Portugal (2020) Chile, Uruguay, Namibia, Canada (2021) and UAE (2022)
- Multilateral collaborations:
 - Hy3 – study on h2 from offshore wind, h2 demand from industry, and h2 infrastructure, together with Germany (federal and North Rhine Westphalia)
 - Monitoring North-West European hydrogen market (CEM H2I-IEA)
 - IEA TCP task over underground hydrogen storage launched under NL initiative

The Netherlands – Profile April 2022

Status of Deployments

- Start upscaling phase of green hydrogen production (realizing 1-20 MW electrolysis)
- Deployment in transport: passenger cars, buses and trucks and first experiences with other applications (trains, ships, etc)
- Kick starting clean hydrogen market – regulating and role out of transport infrastructure (H2 backbone)

Leading Government Initiatives

- Hydrogen National Programme
- IPCEI
- National Growth Fund and Climate Fund

Goals or Focus Areas

- Upscaling green hydrogen production & reducing costs
- Infrastructure development (Hydrogen backbone)

Funding

- € 1 billion Research and Development (Groenvermogen I & II)
- +€ 1 billion infra & electrolysis (Rijksbegroting, SDE++)
- € 100 mln subsidy per year for innovative projects (DEI+, Tki Nieuw Gas)

Deployment Goals

- 3-4GW electrolysis in 2030, 500 Mw in 2025
- In 2025: 50 tank stations, 15.000 FCEVs en 3.000 heavy duty vehicles
- Pilot projects to enable use of hydrogen for urban heating by 2030

Thank you



International Partnership
for Hydrogen and Fuel Cells
in the Economy