

35th IPHE Steering Committee Meeting 22 - 23 June 2021 Virtual Meeting



Announcements / New Initiatives *The Netherlands*



Investments/Funding/Policies/Initiatives

- <u>Letter to the Dutch Parliament over the progress of the implementation of the Dutch Hydrogen strategy released in March 2020</u>. (December 2020)
- The Cross Sectoral Hydrogen Working Group (<u>CSWW</u>), established in January 2021, will deliver in July 2021 a draft of the working plan of the National Hydrogen Programme (NWP) to be implemented from 2022-2025. The working plan will include activities and policies covering the whole hydrogen chain in industry, transport and built environment.
- <u>Green Deal "H2 in built environment"</u> between the national government, regional governments and market parties to work together on the technical, legal and social aspects of hydrogen use in residential heating (March 2021).
- <u>International Hydrogen Platform</u>. Platform organized by the Dutch government and the NL Technology & Industry Association to bring together companies and knowledge institutes that want to interact with international partners.
- <u>IPCEI</u> match making procedure (June 2021), 25 projects preselected.
- National Growth Funds: "Greening the Dutch economy" project awarded (€73 million + €265) for H2 innovation and R&D.
- Subsidy for Hydrogen Technologies, TKI (€3 million)
- Subsidy TSE Industry for industry and fuels for aviation and maritime applications (€6,36 million)
- €4 million subsidy for first inland shipping vessel on hydrogen, more to follow (March 2021)









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- New Research & Development, Demonstration and/or Deployment **Activities**
 - Overview with over 130 projects can be found here.
 - First hydrogen tractor in Stadsboerderij Almere, NL (H2Trac Arnhem)
 - Hydrogen Demo house opened "Hydrogen Experience Center from grid operator Alliander as training location
 - TU Delft Solar Team developed the first flying hydrogen boat in the world. The "Hydro Motion" will race in July during the Energy Boat Challenge in Monaco.
 - Two garbage trucks powered by hydrogen in Helmond, NL operational since May 2021
- New task on hydrogen underground storage within the IEA Hydrogen TCP coordinated by The Netherlands



















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Key Collaborations

- Penta-lateral Forum, Hydrogen Working Group: Joint Position paper on regulatory framework
- IPCEI
- Several studies with Germany: HY3, German/Dutch joint innovation approach to green hydrogen and chemistry
- IEA, IEA-TCP, CEM-H2, MI, IPHE
- International Hydrogen Platform
- Port of Rotterdam concluded agreements with a number of countries









The Netherlands - Profile June 2021



Status of Deployments

- Deployment in transport: passenger cars, buses and trucks and first experiences with other applications
- Start upscaling phase of green hydrogen production (realizing 1-20 MW electrolysis)
- Kick starting clean hydrogen market

Leading Government Initiatives

- Hydrogen National Programme
- HyWay27 (study on repurposing gasgrid)
- IPCEI (25 projects preselected)
- Combined tenders h2 & offshore wind (study)

Goals or Focus Areas

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

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

Funding

€70million subsidy per year (DEI+ & new upscaling instrument) + SDE++ for green and blue hydrogen production



















Thank you



International Partnership for Hydrogen and Fuel Cells in the Economy