

EU support for the green hydrogen region of Europe: Northern Netherlands

The Fuel Cells and Hydrogen Joint Undertaking (FCH JU) of the European Commission has selected the Northern Netherlands to start the grant preparation for an EU support of 20 million euros and public and private cofunding of 70 million euros. The total project volume is approximately 90 million euros. The grant is meant to develop a fully-fledged green hydrogen value chain in the Northern Netherlands. The 'HEAVENN-project (**H2 Energy Applications (in) Valley Environments (for) Northern Netherlands**) consortium', led by Energy Valley (part of the New Energy Coalition), participated in the call for applications in April, which included 31 public and private projects from six European countries. The consortium's call application was supported by over 65 national and international parties from all over the world, including California, Japan and New Zealand. The HEAVENN-project is unique because it comprises an entire hydrogen value chain within one geographical region. The consortium aims to sign the grant agreement before the beginning of next year which will allow the region to start the six-year project and become one of Europe's leading regions in hydrogen.

Sectoral integration of green hydrogen: from production to filling stations

Projects that will be supported by the grant involve the large-scale production of green hydrogen as a feedstock for industry, storage, transportation and distribution of hydrogen and hydrogen applications in industry, the built environment and the mobility sector. Existing natural gas pipelines will be retrofitted to enable the transportation of hydrogen and new pipelines will be built at Chemical Park Delfzijl and between GZI-Next and the Emmtec Industry Business Park in Emmen. An underground hydrogen storage facility is foreseen at HyStock in Veendam. Hydrogen as a feedstock for heating in the built environment in Hogeveen and Groningen and for industry in Delfzijl and Emmen will be developed. In the mobility sector, hydrogen will be used for buses, light and heavy-duty vehicles and cars. Hydrogen filling stations will be built in Groningen and Emmen in addition to the previously planned stations in Pesse and Groningen and the already operational station in Delfzijl. Furthermore, hydrogen will be used for an inland waterway vessel and for the production of e-kerosine for aviation. Heavy-duty vehicles are also particularly suitable for hydrogen application and decarbonising this sector will greatly contribute to CO₂-reduction and climate-neutrality.

Hydrogen HEAVENN

The Hydrogen Valley grant is one of the largest grants that the public-private partnership FCH JU, part of the HORIZON 2020 Framework Programme, has ever made available for one project. This grant and the regional co-financing that accompanies it enables the winning region to go beyond individual hydrogen projects and develop sectoral integration for green hydrogen. This allows the region to take leadership in the field of hydrogen and be a source of inspiration for the development of other hydrogen regions in Europe and beyond. The application process for the HEAVENN-project was led by The New Energy Coalition and the Northern Netherlands Alliance.