



The HyTrEc project aims to improve access to and advance the adoption of hydrogen as an alternative energy vector across the North Sea Region.

Six European countries are involved in the project:

- Aberdeen City Council, Gateshead College, UK
- European Institute for Innovation, Germany
- Green Network, Denmark
- Hydrogen Sweden, SP Technical Research Institute of Sweden
- WaterstofNet, Belgium
- Narvik University College, Norway.

The objective is to promote:

- regional accessibility strategies;
- environmentally responsible energy production practices;
- the development of multi-modal and transnational transport corridors;
- the development of efficient and effective logistics solutions;
- sustainable growth solutions for expanding areas.

Aberdeen Goteborg Boras DENMARK Vejls Gopenhygen Handwitt Shaffield Hanwich KINGDOM Harwich Intern. Port NETHERLANDS Osterholz Scharmbeck Rotterdam Ansterdam London HyTEC/HyFIVE Station Doyer Venio Turnhout Dunkertive Hallo Brussels BRUSSELS BRUSSELGUM ROUTE 2 (ALTERNATIVE ROUTE)

Figure 1: The journey throughout the NSR (Source: European Institute for Innovation)

A hydrogen journey throughout the North Sea Region (NSR)

One of the major outputs of the HyTrEc project was the hypothetical journey through the NSR. The idea was to figure out if it would be possible to travel from Gothenburg in Sweden to Aberdeen in the UK with a hydrogen car. The elaboration of the tour brought out two major findings.

- 1.It is possible to travel through the NSR, but the trip has to be planned very carefully due to the different regulations and permission in the different countries as well as the partially insufficient infrastructure of refuelling stations.
- 2. More efforts on a political and economic level have to be made to broaden the refuelling infrastructure and to harmonize the regulations regarding the use of hydrogen vehicles.

The European Institute for Innovation (ElfI) is responsible for the work package "Evaluation and Building in Sustainability" which means fostering collaboration between all related stakeholders and knowledge exchange to accelerate hydrogen's market readiness.

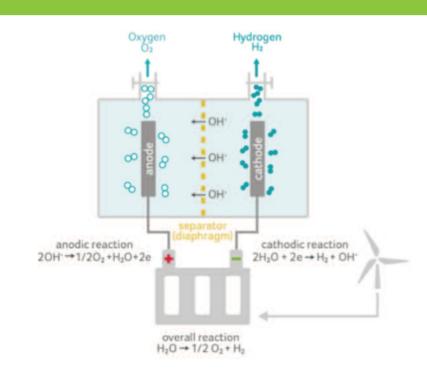


Figure 2: Application of an alkaline electrolysis (Source: Author's illustration based on (DLR, 2012))

Development of a model to increase the sustainable and economical use of green hydrogen production and distribution

This model is a compendium that lists necessary steps and actions which should be taken when developing and implementing a hydrogen infrastructure. Furthermore the model focuses on the use of sustainably generated hydrogen in the transport sector.

European Institute for Innovation

Stefan Molkentin Jacob-Frerichs-Straße 2-8 27711 Osterholz-Scharmbeck Email: s.molkentin@eifi.eu





