

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.

North East England has proven itself to be a real demonstrator location for all aspects of electric vehicles and is now turning its attention to hydrogen. Producer of 50% of all UK hydrogen and home to a large automotive sector, the region has expertise in H₂ supply technology, development, testing and manufacture as well as vehicle development services linking to a component supply chain. Hydrogen research organisations are present in our strong regional University base and the development of training for the sector is underway at Gateshead College.

Hydrogen Production

BOC's trailer hydrogen facility serves the area with hydrogen. BOC is also a member of the UK H₂Mobility Group. Location: Teesport, TS6 7RT

Parker Hannifin are producers of hydrogen with an interest in the how it can be used in power generation. Location: Team Valley, NE11 0PZ

SABIC: Production of Ethylene. Location: Redcar, TS10 4YR

Manufacturing

Haskel (Milton Roy) are leaders in the manufacture of hydrogen handling equipment with years of experience in hydrogen engineering. Location: Sunderland, SR5 3JD

AVID Technologies have an active interest in the manufacture of hydrogen equipment. Location: Cramlington, NE23 1WG

Research and Development

Three fuel cell research groups:

- Sir Joseph Swan Centre - Newcastle University, NE1 7RU
- The Institute for Automotive & Manufacturing Advanced Practices (AMAP) - The University of Sunderland, SR5 3XB
- The School of Chemical Engineering & Advanced Materials - Newcastle University, NE1 7RU

Facilities

North East Process Industry Cluster (NEPIC) - the industry cluster. Location: Teesside, TS10 4RF
Centre for Process Innovation is a UK-based technology innovation centre. Location: Teesside, TS10 4RF

The Performance Track is a unique facility which is located in an ideal position for testing and trialling in a demonstration environment. The location has electrolyzers on site. Location: Sunderland, SR5 3HE

The New and Renewable Energy Centre, Blyth provides access to the offshore wind industry for the development of 'green' hydrogen. Location: Northumberland, NE24 1LZ

Training

Gateshead College: developing the first vocational hydrogen safety training programme. Location: NE8 3BE

Gateshead College's role in the project involves the production of a new education forum and the development of a draft curriculum and sample module training course on hydrogen safety. Creation of two demonstrator vehicles - one mixed fuel (hydrogen and petrol) and the other a range extended electric vehicle.



For more Information:

Kevin White
Gateshead College,
Skills Academy for Sustainable
Manufacturing
Washington Road
Sunderland
SR5 3HE

E-mail: kevin.white@gateshead.ac.uk