

Lhyfe Wallsend

Green Hydrogen for
the North East



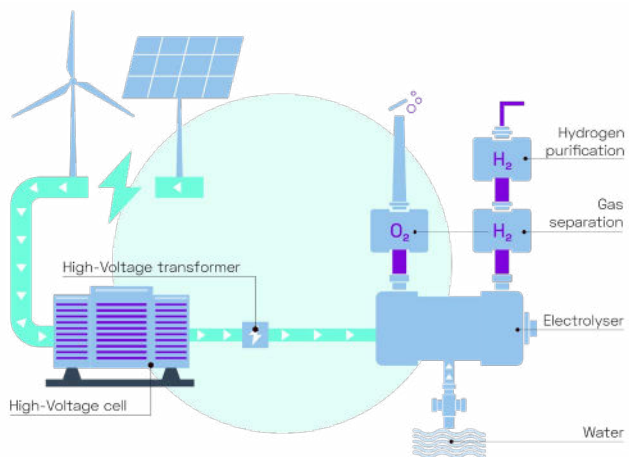
YOUR GREEN FUTURE

Lhyfe is committed to making the North East cleaner and greener on our journey to net zero. We are developing a green hydrogen plant on Neptune Road, Wallsend, and a planning application will shortly be submitted to North Tyneside Council.

WHAT IS GREEN HYDROGEN?

Hydrogen is a gas that, when used, doesn't produce carbon dioxide (CO₂). It's made through a process called electrolysis, where water is split into hydrogen and oxygen, and only oxygen is left as a by-product.

Our environmentally friendly gas is manufactured in units powered by renewable electricity, making it **green**. The hydrogen is then piped or compressed for transport to nearby customers.



It's a clean alternative to fossil fuels in various industries, including glass, chemicals, cement, and steelmaking, as well as in heavy transport like buses, trucks, construction, and logistics vehicles.

IS HYDROGEN SAFE?

Yes. Hydrogen is a well-controlled fuel. It's commonly used in industry and for hydrogen buses. Hydrogen-powered cars rank among the safest cars, emitting zero tailpipe emissions.

Hydrogen has well established regulations in the UK strictly governing its production, transportation, and usage.



WHY DOES THIS MATTER?

Lhyfe Wallsend will have a capacity of 20 megawatts (MW) and generate up to 8 tonnes of green hydrogen every day. The proposed plant will stop thousands of tonnes of CO₂ from going into the air every year, supporting important climate change goals.

Green hydrogen is crucial for the shift to cleaner energy. Our project will support North Tyneside Council's goal to reach net zero by 2030 — 20 years ahead of the UK target, directly addressing the Climate Emergency declared in 2019.

The development will create jobs and economic activity locally during construction and operation. Additionally, it will help established local businesses reduce their carbon footprint, ensuring a sustainable future.

OUR PLAN

Lhyfe Wallsend will cover around 4 acres within the Neptune Energy Park — an area ideally placed to offer green hydrogen to local businesses and organisations.

Baseline information has been collected for the site to guide the development design. Technical studies, including assessments of transport, ecology, geotechnics, and site drainage, have been conducted.

Care will be taken to minimise the impact on nearby homes, businesses, and the listed Neptune House (Thermal Syndicate Building).

Site will include:

- Main building for plant equipment
- Control room
- Driver facilities
- Cooling systems
- Hydrogen storage with compressors
- New substation
- Tube trailer parking
- Parking for staff and visitors

The site is designed to have a positive impact on the environment with features like sustainable drainage, carefully chosen materials that blend with the surroundings, and landscaping for both appearance and to support local wildlife habitat.

WHO ARE WE?

Lhyfe is a European group dedicated to the energy transition, producing and supplying green and renewable hydrogen. Operating in 12 countries, our sites contribute to a cleaner and more sustainable future.



Bouin (France)

In service since 2021. Two additional sites in Occitanie and Brittany inaugurated in 2023.

Sealhyfe(France)

Offshore Production. Launch of the world's first offshore green hydrogen pilot platform in 2022.



Schwäbisch Gmünd (Germany)

Site installation scheduled for the end of 2024.


NEXT STEPS: YOUR OPINION MATTERS!


We want to know what you think about our green hydrogen plant plans.

Right now, we are getting everything ready for the planning application to North Tyneside Council.

Once we have gathered your thoughts and ideas we will analyse this information to establish which issues are most important to the local community. The project team will then use this information to develop a preferred scheme.

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