



HyNet North West is an exciting new hydrogen and carbon capture project in North West England and North Wales. It is paving the way for a more sustainable future that will contribute significantly to regional and national 'net zero' targets, while creating and protecting local jobs. Hydrogen production, which is at the heart of HyNet, will be key to delivering clean energy for UK industry.

HyNet North West Unlocking a low carbon economy

What are the UK's Carbon Net Zero 2050 aspirations?

The UK Government has created a legally binding net zero CO₂ emissions target in response to the global climate emergency. This means that by 2050, any CO₂ emissions to the atmosphere must be offset by equivalent emissions removal.

Nearly 70% of the UK's local authorities have set even stronger targets, including the Greater Manchester Combined Authority, Liverpool City Region, Cheshire West and Chester Council and Flintshire County Council, who are aiming for net zero carbon emissions by 2040 or earlier.

How will we achieve this?

Achieving these targets will involve a complete transformation of the way people live, shop, travel, work and do business over the next 20 years. HyNet has a critical contribution to make in achieving that goal.

The project aligns with the ambitions of the UK Committee on Climate Change, who have repeatedly said that low cost carbon capture and storage (CCS) will play a big part in the UK meeting its net zero goal. Hydrogen will transform our energy system – being able to replace petrol and diesel in transport, replace natural gas in homes and to power our industry.



HyNet could reduce carbon emissions by 10 million tonnes a year by 2030 – the equivalent of taking four million cars off the road.

How does HyNet North West help?

HyNet could reduce the region's carbon emissions by a quarter over five years. The project provides a viable solution to the local and national climate emergency. The CO₂ pipeline upon which we are currently consulting will transport CO₂ emissions from industries in the HyNet area to permanent and safe underground storage.

HyNet North West

Why do we need HyNet North West?

Many industrial emissions come from fuel combustion, and currently the fuel used is generally natural gas. Work such as HyNet North West's Industrial Fuel Switching programme is demonstrating that natural gas can be easily replaced with low-carbon hydrogen which emits no CO₂ when combusted. A smaller proportion of industrial emissions come from the raw materials themselves, and for these industries CCS will be required.

Without the deployment of hydrogen and CCS at scale, not only will the UK struggle to meet net zero in 2050, but the operating costs of industry in the region could increase, which would threaten thousands of jobs.

HyNet North West's aspirations

HyNet intends to produce clean low carbon hydrogen to replace natural gas. We have an aspiration to provide low carbon hydrogen energy for industry and power generation, as well as energy for homes and transport to decarbonise the whole economy in North West England and North Wales.

To ensure we can provide hydrogen in homes, we are also partners in the HyDeploy Project, which is testing and demonstrating the blending of hydrogen with natural gas, so that it can be used as a safe alternative without needing to change heating or cooking appliances.



Essar Stanlow Refinery