
HyNet
CAPTURE YOUR POTENTIAL
Pathways to high-energy careers in hydrogen and carbon capture

World leading climate action. Right here.

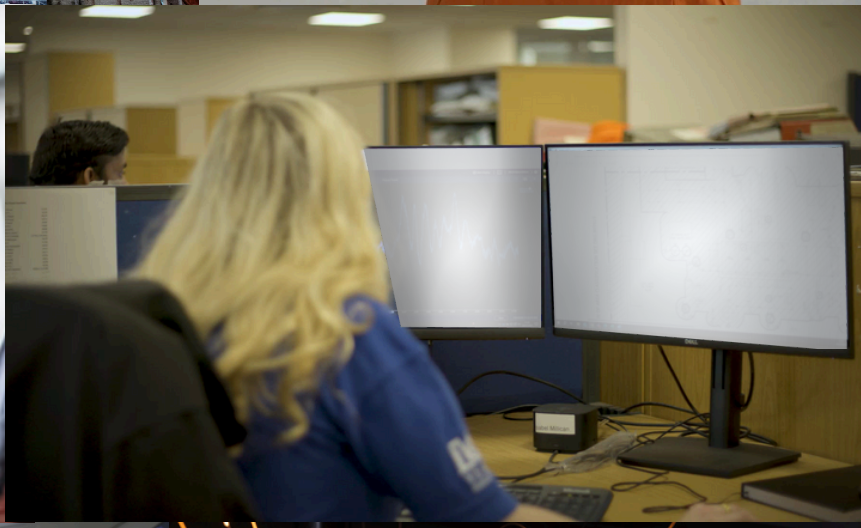
We are in the midst of a climate emergency and we each have to play our part to save the planet.

The North West and North Wales is home to some of the UK's biggest sources of carbon dioxide, which contribute to global warming.

We must help our industry produce the things we rely on every day — from the food we eat, to the toiletries we buy — whilst reducing the greenhouse gases they emit.

HyNet is building the infrastructure which will capture and lock away carbon dioxide, leaving a greener legacy for everyone.

Dozens of companies in the region are working together to realise these ambitions, and we need your help.

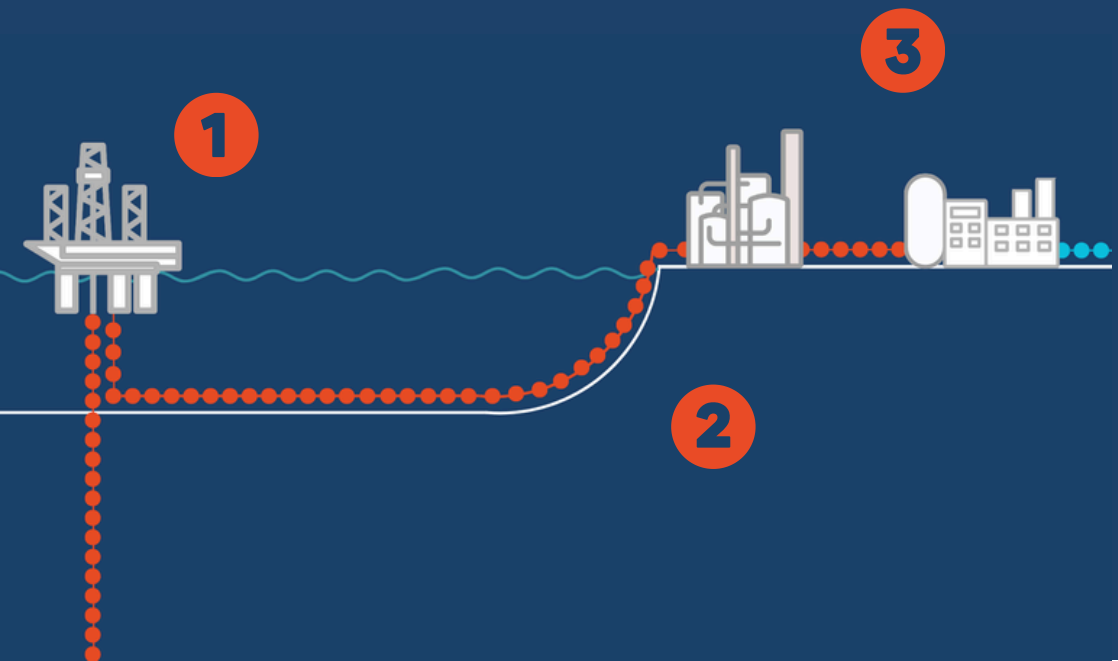


CARBON CAPTURE

1. Carbon dioxide storage
Former gas fields in Liverpool Bay will be used to permanently store carbon dioxide in rock deep beneath the seabed.
Company: Eni

2. Carbon dioxide pipeline
An 80km steel pipeline will carry captured carbon dioxide from multiple industrial sites to the storage in Liverpool Bay.
Eni

1. Carbon dioxide capture
Capture plants will extract carbon dioxide from the chimneys of existing industrial sites, preventing it contributing to global warming.
Encyclis, Heidelberg Materials, Viridor and more



HYDROGEN

3. Hydrogen production
Hydrogen will be produced at Stanlow Manufacturing Complex. Natural gas is converted into hydrogen for supply to customers, whilst carbon dioxide (a by-product) is sent to storage.
Essar Energy Transition

4. Hydrogen for industry
Industries such glass making, which currently burn natural gas to generate heat, will switch to hydrogen which generates no emissions.
Encirc, Tata Chemicals, Pilkington Glass, Novelis and more

5. Hydrogen pipeline
A pipeline stretching from Stanlow into Manchester and Liverpool will link production with customers and storage.
Cadent Gas

6. Hydrogen for power
When renewable sources like wind and solar are not generating, we need something to fill the gap. Power stations can switch to hydrogen fuel to produce low-carbon electricity.
ESB, EET Hydrogen

7. Hydrogen storage
Hydrogen will be stored in underground salt caverns in Cheshire, ready and waiting for times of high demand.
Storengy, INEOS Inovyn, Uniper

HyNet North West

infrastructure

CO_2 storage

LIVERPOO

FLINT

North Wales

Thanks to its beautiful mountains and coastlines, North Wales serves as playground for every outdoor adventure. Heidelberg Materials, Uniper and Enfinium are based here.

Industrial CO_2 capture

WREXHAM

Industrial H_2 user

Flexible H_2 power generation

H_2 blending for homes & business

Liverpool

Liverpool is a lively city of music, sport, and culture, with a stunning waterfront, historic charm, and friendly locals. The Wirral sits just across the Mersey.

Manchester

The UK's second and fastest-growing city has plenty to offer with two big universities, and two big football clubs. Lots of graduate opportunities can be found in the city centre.

MANCHESTER

H_2

Low carbon H_2 production

Industrial CO_2 capture

NORTHWICH

Underground H_2 storage

CHESTER

Chester

Historic Chester is close to Ellesmere Port and the centre of HyNet. Local colleges are close-by with the River Dee and New Market area in the city centre perfect for relaxing.

From here to there

Apprenticeship

Apprenticeships are important for budding engineers because they provide real-world, hands-on experience that textbooks alone cannot offer. Working alongside professionals helps students apply their technical knowledge while learning practical skills, teamwork, and industry standards.

GCSEs

GCSEs are the foundation to any career. Sciences, design and technology, geography demonstrate an interest in the world around you. Most apprenticeship schemes require at least C in Maths and English.

A-Levels

A-Levels are crucial as they build the academic foundation needed for higher studies in science and mathematics. They develop problem-solving, analytical thinking, and discipline, which are essential qualities for engineering.
Strong A-Level results also open the pathway to university programs and future career opportunities in the field.

University

University plays a key role in shaping the careers through the development of technical knowledge and practical skills, increased focuses on problem-solving abilities and research. University degrees can be BEng and MEng, with foundation years, degree apprenticeships and year in industry options available.

Ops Apprentice

Jake is responsible for safely operating and maintaining an onshore underground gas storage plant. His apprenticeship began with 10 months of engineering training at TTE before moving on site, where he has since completed a BTEC, NVQ, and NEBOSH qualification, and is now working toward an HNC in general engineering.

Jake
Process Operations Apprentice
STORENGY

Engineer

Dylan is working in the Tankage Transformation team. He's gaining hands-on experience through site training, plant design work, and the graduate scheme, which supports him in working toward chartership. With access to a wide range of equipment and teams, Dylan is focused on developing his engineering skills.

Dylan
Mechanical Engineer
EET

CCS Project Manager

Megan started her career hands-on at project sites, learning how operations worked. Now, as a full-time project development professional, her role is desk-based and focused on long-term planning. Her day typically involves meetings with project team members, evaluating decisions, and considering their broader project impacts.

Megan
Deputy General Project Manager
UNIPER

APPRENTICESHIPS & VOCATIONAL COURSES

The quickest way to start on a HyNet project is via an apprenticeship in engineering or related subjects.

With an apprenticeship you are paid whilst you learn and a shortage of skilled construction workers means you will soon secure a high wage.

After GCSEs but before an apprenticeship, one or two year vocational courses can make you stand out in front of employers.

COLEG CAMBRIA

Coleg Cambria | Deeside & Wrexham

Coleg Cambria offers apprenticeships and vocational courses in Deeside and at Bersham Road in Wrexham. Check out their Engineering, Fabrication & Welding, and Process Manufacturing course options.

ENGINEERING COLLEGE

The Engineering College | Birkenhead

The North West's specialist engineering training centre with a strong focus on Welding and Rigging for engineering construction. The College offers an ECITB Scholarship where you can get paid whilst you learn.

TTE | Ellesmere Port
Many of the companies developing HyNet projects partner with TTE for their apprenticeship programmes. Apprentices from TTE will help run and maintain carbon capture and hydrogen plants once running.

Warrington & Vale Royal College | Warrington
There are hundreds of businesses serving the energy sector based in Warrington. Their Engineering Design, Operative and Maintenance Operations Engineering apprenticeships will set you up for a career in HyNet.

Cogent Skills | Remote & In-Person
Cogent Skills trains people for roles in chemicals production such as hydrogen or sustainable aviation fuel. They offer apprenticeships with a remote option so you can work at a company near you.

Cheshire College South and West | Ellesmere Port
Cheshire College is the county's largest and offers vocational courses, apprenticeships, T-Level and A-Levels. Explore their Electrical, Pipefitting, Fabrication & Welding options to unlock a career in HyNet.

Riverside College | Widnes
Through its Welding and Pipefitting courses, Riverside College has strong links with United Living and Cadent Gas who are building HyNet's pipelines. You will be future-proof with their hydrogen training rig.

UNIVERSITIES & UNDERGRADUATE STUDY

HyNet needs hundreds of people to design and manage projects so they are constructed on time and under budget.

For these roles, typically more office-based, employers require a degree to evidence your ability and commitment.

Our region has a range of fantastic universities, with the courses below setting you up for a range of careers to help push HyNet's ground-breaking projects forward.

Many universities offer foundation years, industry placements, and increasingly, degree apprenticeships.

Chemical Engineering
Carbon capture and hydrogen rely on chemical reactions to keep working just right. You will be crucial to keep them going.

Environmental Science
All projects touch the environment and trained specialists will be needed to assess and minimise their impact.

Electrical Engineering
Monitoring HyNet's operation and making sure it has the power it needs is the responsibility of electrical engineering designers.

Quantity Surveying
Someone needs to work out how much HyNet will cost to build, and make sure it's under budget. As a QS, that's your job.

UNIVERSITY OF LIVERPOOL

PRIFYSGOL glyndŵr Wrecsam | Wrexham glyndŵr UNIVERSITY

MANCHESTER 1824
The University of Manchester

Manchester Metropolitan University

uclan
University of Central Lancashire

LIVERPOOL JOHN MOORES UNIVERSITY

University of Chester

PRIFYSGOL BANGOR UNIVERSITY

Mechanical Engineering
Mechanical Engineers design the vital pumping systems and power stations that keep gas and electricity flowing in the network.

Geography & Planning
We need to secure permission to build HyNet from local and national bodies, with expert planners needed on both sides.

Economics & Business
To secure funding for a project, a business case must be made. Head this direction if you enjoy analysis and understanding risk.

Construction Project Management
Once designed and funded, project managers lead the delivery phase, working with teams on the ground.

ROLES READY FOR YOU

HyNet is creating a breadth of roles through the design, construction, and operation of the new infrastructure.

The job titles below are just some of those jobs which will be needed for HyNet to be a success.

DESIGN & DEVELOPMENT

Project Managers

Mechanical Engineers

Electrical Engineers

Business Analysts

Project Engineers

Environmental & Permitting Specialists

Planning Consultants

Geologists

Process Engineers

CONSTRUCTION

Electricians

Procurement Managers

Welders

Project Controllers

Pipefitters

Construction Laborers

Community Engagement Leads

Automation Engineers

Quantity Surveyors

Riggers

OPERATION

Commissioning Engineers

Quality Assurance Inspector

Operators

Environmental Officers

Account Managers

Mechanical Engineers

Process Technologists

Instrument & Control Technicians

These companies are leading HyNet

Over 20 different companies are connecting to HyNet's infrastructure. Each ground-breaking project is being lead by the organisations below, who will require staff to operate them long into the future.

These companies will build HyNet

Over ten thousand jobs will be created through the construction of HyNet projects, many of these in the construction, environmental and manufacturing supply chain, at the companies including these.

Capture your potential with a career in HyNet

hynet.co.uk/careers

@HyNetNW