NET ZERO NORTH WEST

# NORTH WEST CLUSTER PLAN

**January 2023**

UK Research and Innovation

# CREATING THE WORLD'S FIRST NET ZERO REGION BY 2040

"This is a pivotal moment for the North West. For the first time we have a clear and credible roadmap to reaching net zero in the region by 2040. Decarbonising industry will not only be critical to the UK meeting our climate change obligations but will drive economic growth, creating and safeguarding thousands of jobs. We have long had the ambition to be the first region to decarbonise and the Cluster Plan shows how we'll get there.

"The plan demonstrates a £30bn pipeline of live investment opportunities that can deliver in the near term, with the opportunity for over £200bn invested overall. The North West's strength lies in the unrivalled number of projects already happening on the ground across hydrogen, renewables, carbon capture, nuclear and more. We have many regional advantages, from our industrial and entrepreneurial heritage, to our existing skilled workforce and natural geological assets including Irish gas fields and Cheshire salt caverns.

"Collaboration will be critical in meeting the net zero challenge head on. The Cluster Plan brought industry together behind a shared purpose and clear vision, establishing a strong framework for future partnership working in the region. We are in a unique position to become world leaders in clean growth and we have the vision and passion to deliver in the North West."

**Carl Ennis, CEO of Siemens UK and Net Zero North West Chairman**



"It is a pleasure to see the hard work of all those involved in the Net Zero North West Cluster Plan recognised in this report and launch.

The Cluster Plan is one of six Cluster Plan projects funded by UKRI's Industrial Decarbonisation Challenge programme as part of an £8 million portfolio.  Over the last two years, this project has identified a range of interventions within the North West industrial region which will enable the cluster to achieve low carbon status by 2030.  The project has also established a longer-term strategy to achieve Net Zero for the cluster by 2040.

It has been good to see how the project has driven the industrial decarbonisation agenda for the North West, establishing a platform for investment into regions, green jobs creation, skills for Net Zero as well as promoting an inclusive culture for the region's industry.

The Net Zero North West Cluster Plan has produced a number of technical reports including hydrogen demand scenarios, options for renewable power and hydrogen gas transmission.  Moreover, the Cluster Plan has adeptly supported HyNet, the major deployment project in the region, which will create a full chain hydrogen network for the north west as well as a $CO_2$ pipeline connecting the region's major emitters enabling at-scale carbon capture and storage.

This report recognises the scale and ambition of plans in the North West; while challenges remain, the work done so far shows the commitment and energy across cluster partners and what can be achieved in delivering the region's vision for Net Zero and I am delighted to support it."

**Bryony Livesey, UKRI Challenge Director, Industrial Decarbonisation**

# INTRODUCTION

The Net Zero North West Cluster Plan is a deliverable investment, technology and infrastructure blueprint for the North West's net zero transition.

Part funded by UK Research and Innovation (UKRI) through the government's Industrial Decarbonisation Challenge, it offers a roadmap to industrial decarbonisation. It recommends the technologies, infrastructure changes and investment necessary to transition the North West, working with North Wales, to net zero carbon by 2040.

The Cluster Plan is sponsored by Net Zero North West (NZNW), an industry-led cluster acting as a public and private sector investment accelerator for industrial decarbonisation. Alongside public, private and academic institutions, the NZNW consortium includes representation from energy intensive industrial consumers based in the North West that recognise the necessity to decarbonise.

**BLUEPRINT FOR THE NORTH WEST**

**ROADMAP TO INDUSTRIAL DECARBONISATION**

**NET ZERO CARBON BY 2040**



# THE CHALLENGE

The UK government's 'Ten Point Plan for A Green Industrial Revolution (2020)', together with the Industrial Decarbonisation Strategy (2021), 'Net Zero Strategy (2021)' and the British Energy Security Strategy (2022) set out the strategic objectives and priorities, demanded by the Climate Change Act to reach net zero by 2050.

Through a range of initiatives, the UK government is promoting around £100 billion of private sector investment by 2030 into new industries, including offshore wind and supporting around 480,000 clean jobs by the end of the decade. The UK has committed over £12 billion to domestic green investment since March 2020. Through policies and spending brought forward by the Net Zero strategy, the UK government has stated its intention to mobilise over £26 billion of capital investment to support the green industrial revolution.[1]

The Industrial Clusters Mission, supported by UKRI, seeks to deliver Net Zero Industrial Clusters by 2040. The Mission will support the development of strategic assets in a number of Industrial Clusters.

The North West boasts the largest concentration of advanced manufacturing and chemical production in the UK and is home to a concentration of energy intensive users. Industrial consumers in the region emit nearly 17 million tonnes of carbon emissions per year, of which the largest industries in the Cluster account for over 6 million tonnes. This concentration of industry in the North West represents an opportunity to deploy a holistic region-wide approach to industrial decarbonisation at scale.

The Cluster Plan sets out how the North West can help meet the ambition of national policy, with a credible roadmap to reaching net zero emissions by 2040.

[1] Net Zero Strategy: Build Back Greener, HM Government, October 2021

# THE OPPORTUNITY

The North West is the leading region which already has all the elements required to deliver a net zero carbon industrial cluster by 2040 – including renewables, hydrogen, Carbon Capture Utilisation & Storage (CCUS), nuclear and smart grids. With an unrivalled range of projects, the Cluster offers a multi vector energy system that can drive clean growth.

The North West has three crucial regional advantages over most other regions of the UK:

- Expected highly cost-effective production of industrial CCUS enabled hydrogen through HyNet due to the North West's natural geology
- World class nuclear industry in Cumbria, centred around Sellafield, which could be expanded and used to produce cheaper industrial electrolytic hydrogen, Small Modular Reactors (SMRs) could support this
- Offshore wind and tidal could offer an affordable renewable electrolytic hydrogen production

With HyNet in motion and a strong low carbon ecosystem comprising of major universities, business, and government, the North West is poised to lead and become the first Net Zero industrial cluster by 2040.

**DELIVER THE WORLD'S FIRST NET ZERO REGION BY 2040**

**£30BN NEAR TERM INVESTABLE PROJECTS WITH £207 BILLION OVERALL INVESTMENT OPPORTUNITY**

**SAFEGUARDING AND CREATING 34,500 GREEN JOBS IN NEAR TERM WITH 660,000 GREEN JOBS OVERALL**

**£36.5 BILLION NEAR TERM GVA UPLIFT WITH £285 BILLION OVERALL**

**SAVING 46 Mt OF $CO_2$ INCLUDING 17 Mt FROM INDUSTRY**

**ESTABLISHING DOMESTIC SUPPLY CHAINS IN GREEN TECHNOLOGIES**

**DRIVING ENERGY SECURITY**



# THE CLUSTER PLAN ROADMAP

The Net Zero North West Cluster Plan (April 2022) sets out a credible decarbonisation roadmap for industry in the North West. It summarises the findings of various research reports which have informed the development of the Plan.

**The full reports are available at www.netzeronw.co.uk/net-zero-nw-cluster-plan**

Current industrial emissions can be reduced to zero through a series of step changes that will combine to deliver the necessary savings.

A number of scenarios were considered with Figure 1 showing the Higher Hydrogen Scenario (where hydrogen is maximised to supply industry and other sectors) which demonstrates a plausible route to industry meeting net zero by 2040.

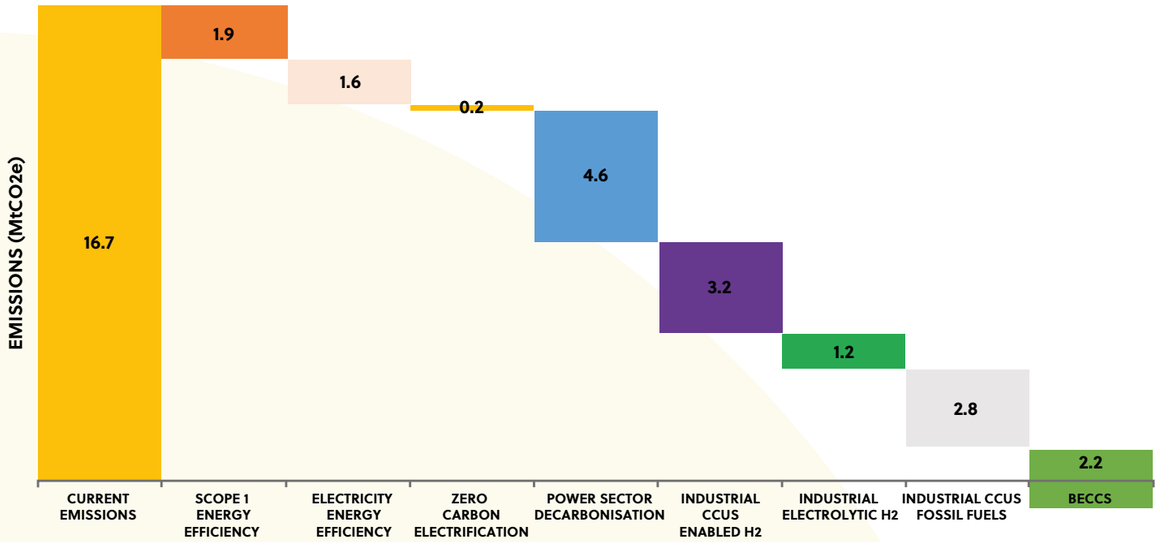



*FIGURE 1: Higher Hydrogen Scenario*

# THE CLUSTER PLAN ROADMAP

## GRID SCALE LOW CARBON DISPATCHABLE POWER, UNIPER

To reach Net Zero in the UK by 2050, significant changes must be implemented in the electricity sector on a national level. Much of this required decarbonisation is expected to be achieved through increased renewables. However, in order to maintain security of supply, low carbon dispatchable power is shown to be required throughout the forecast period to 2050. Current forecasts suggest Hydrogen Turbines and Natural Gas Turbines with carbon capture to be the most likely technologies to provide much of the required low carbon dispatchable power. Other developing technologies, such as the Allam cycle or large scale fuel cells, have also been shown to have future potential as their technology readiness improves. Based on the proposals, made as part of HyNet and other projects, for considerable hydrogen production, infrastructure and storage and carbon dioxide infrastructure and storage, there is significant opportunity for deployment of dispatchable low carbon power generation in the North West region.

There remain, however, some considerable challenges to overcome:

- Greater certainty around future energy outlooks to further inform the possible role of dispatchable power
- Proof of technological capability at scale is required for both Hydrogen Gas Turbines and Natural Gas Turbines with carbon capture
- Suitable business models and regulatory frameworks are required to ensure investor confidence
- Suitable and sufficient infrastructure developments, providing capacity and flexibility, will be required on hydrogen, carbon dioxide and power networks

## POWER SUPPLY CONSIDERATIONS, SPEN

Decarbonisation of industry in the North West will have significant implications for the power grid both at the transmission level and distribution network level. There is anticipated to be a need for significant new generation, to reinforce the network substantially to enable new developments to come forward and for industry to electrify some processes. There is a requirement for a collaborative planning approach across the whole system and cross vector.

For example, SPEN are developing an open data platform solution which is expected to be available for customers to use on their website by March 2023. Their future delivery strategy is that the solution will allow major connections customers to view and corroborate all their data requirement needs in a one stop shop, thereby providing improved pre-application information provision and better customer service for all connections customers.

## INDUSTRIAL CONSUMERS & ELECTROLYTIC HYDROGEN RECOMMENDATIONS, EQUANS

Alongside the decarbonisation of the power sector, on-site interventions will be required to decarbonise industrial consumers in the North West. This will be achieved through a combination of energy efficiency, on-site renewable generation, carbon capture and the use of low carbon fuels such as hydrogen.

For each of the industrial sectors in the North West, a roadmap was produced to show how each of these initiatives could contribute to the decarbonisation of industry. The combination of these interventions for all industrial consumers in the North West is shown in Figure 2.

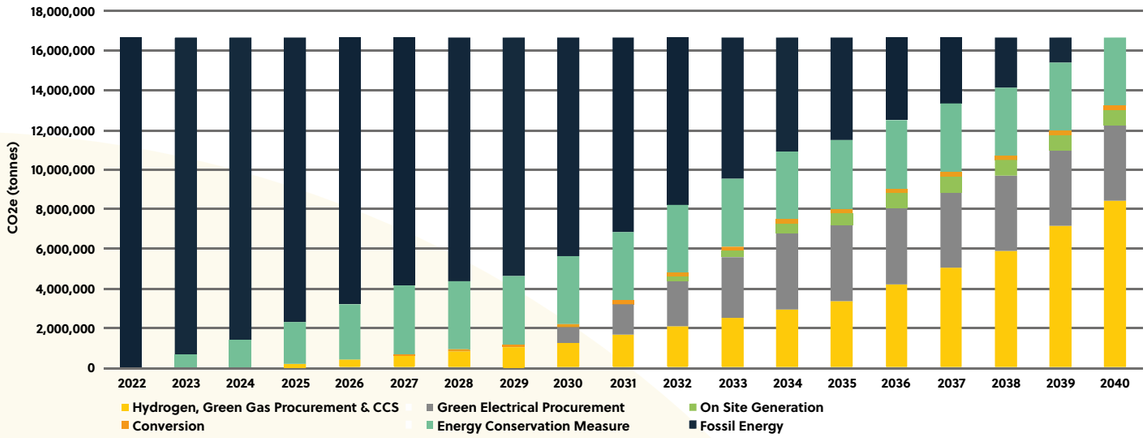



*FIGURE 2: North West Industrial Consumers Action Plan Priorities.*

As seen in Figure 2, after energy efficiency and electrification projects have been deployed there will be 8.4 $MtCO_2$per year of industrial emissions remaining. For the North West Industrial Cluster to reach net zero, these emissions must be abated and low carbon hydrogen is recognised to be a credible and scalable solution. Electrolytic hydrogen production, alongside CCUS enabled hydrogen, will be required for the North West Industrial Cluster to reach net zero by 2040.

Different electrolytic hydrogen project archetypes will emerge, with some connected to the HyNet network and some co-located with hydrogen demand. Each of these archetypes has inherent differences in its operating principles, which will be further impacted by local factors. In order to optimise the cost of hydrogen production, developers should focus on maximising the capacity of behind-the-meter renewables and increasing the flexibility of hydrogen offtake.

## HYNET – THE ROAD TO NET ZERO, PROGRESSIVE ENERGY & CADENT

HyNet will be deployed over several phases and expanded to decarbonise both industry and all wider sectors of the North West economy.

- **CCUS infrastructure:** $CO_2$ transport and storage infrastructure underpins both the direct capture of $CO_2$ from industry and the production of low carbon hydrogen by HyNet. Initially focused on storage in the Liverpool Bay oil and gas fields, as the requirement increases further in the 2030s, further storage capacity in gas fields in Morecambe Bay is likely to be required.
- **A hydrogen network:** A hydrogen network will be developed which will initially connect major gas users across the region with the potential to supply hydrogen into the home in the future.
- **Hydrogen production:** Hydrogen will initially be produced at Stanlow in Cheshire with future phases potentially at Morecambe and with increasing amounts of electrolytic hydrogen into the HyNet network.
- **Hydrogen storage:** Hydrogen can be stored in salt caverns in Cheshire which are already used to store natural gas.

# INVESTMENT CASE

## The North West's strength lies in the unrivalled number of projects already happening on the ground. Collectively they offer long term, sustainable investment opportunities in net zero.

A £30bn pipeline of investable projects in the North West has been identified which will deliver net zero in the region. These projects are live investment opportunities that can deliver in the near term with the potential of adding and safeguarding over 30,000 green jobs and supporting the vibrant North West economy.

The Net Zero North West Investment Case (Mace, 2022) initially identified over 150 projects which were filtered into a short-list of around 60 projects. There are new projects coming forward all the time, so even if some of these shortlisted projects do not come to fruition, others will take their place.

The Mace report reviews six different pathways to decarbonisation in the region. The preferred pathway is a 'Mixed Net Zero pathway' which utilises a strategic mix of intervention types to maximise diversification. This includes power sector decarbonisation (£16.3Bn), industrial CCUS-enabled hydrogen (£5Bn), industrial CCUS(0.62Bn), industrial electrolytic hydrogen (£3.9Bn) , Bioenergy with carbon capture and storage (BECCS) (£.97Bn) and energy efficiency measures (£2.8Bn).

In line with HMT Green Book guidance, the 'Mixed Net Zero Pathway' meets all three critical success factors of strategic fit, value for money, and supplier capacity & capability. The diversity of energy vectors is affordable and 'hedges bets' across different future technologies to reduce risk. It will also utilise and grow domestic supply chains, whilst drawing on regional strengths.

There will be a requirement for both public and private sector funding. Government support will be required to drive the uptake of hydrogen and other net zero technologies as the market will not drive this organically.

| WATERFALL SEGMENT | $CO_2$ REDUCTIONS P.A. INDUSTRIAL, $tCO_2$* | CAPEX |
|---|---|---|
| Power Sector Decarbonisation | 4.6m | £16,285m |
| Industrial CCUS Enabled Hydrogen | 3.2m | £5,000m |
| Industrial CCUS At Industrial Plants | 1.8m | £620m |
| Industrial Electrolytic Hydrogen | 1.2m | £3,970m |
| BECCS | 2.8m | £970m |
| Energy Efficiencies | 3.5m | £2,800m |
| Total | 17.1m | £29,645m |



# SKILLS AND SUPPLY CHAIN

## The North West is already delivering on some of the UK's high-profile net zero projects. However, with challenges including Brexit and an ageing domestic workforce it is becoming harder for industry to access the required specialist and skilled workforce.

The skills and employment piece is not linear and does not sit alone: up and re-skilling, existing and new workforces all require tailored approaches; 'skills' itself needs unpacking to consider accredited and non-accredited training, competencies, transferable skills and more; this work is also linked to and must keep pace with technology and innovation developments.

The NZNW Innovation, Jobs & Skills report by the University of Chester brings together the work of various partners in the North West which focus on the skills agenda. It sets out a series of recommendations to ensure skills solutions are developed for existing and future workforces that meet both short and long term demand. These include:

- A coordinated strategic plan and structure for net zero in the North West
- A communication plan for net zero in the North West
- Pilot innovative mechanisms for skills sharing

The NZNW Cluster Plan has successfully brought together a wide variety of organisations behind a shared purpose. Cross-industry collaboration will be necessary to deliver net zero and the Cluster Plan has established a strong framework for future collaboration in the North West.

There is a tremendous opportunity for the North West to lead the successful transition to Net Zero. To succeed, business and skills and training providers need to work together to support current and future workers to gain the skills and knowledge they will need. The North West has developed a Net Zero Skills Charter – developed by the North West Business Leadership Team in collaboration with NZNW, Manchester Metropolitan University and the University of Chester – to help businesses step up to ensure opportunities in net zero can be harnessed for the benefit of communities and people across the region.

The North West has a long and rich history as the home of industry in the UK and has the most manufacturing jobs of any UK region. Leading the way in hydrogen innovation is the next chapter in its story. The diversity and scale of HyNet North West will enhance the region's supply chain with opportunities for new and existing businesses, and expand the reach of local subcontractors across North West England and Wales. Developing a regional hydrogen economy would establish the region as a global exporter of new technologies, skills and services.

# PROJECTS

## HYNET

**Overview:** HyNet represents an anchor project for decarbonising industry in the North West. HyNet is an integrated hydrogen and CCUS infrastructure project, which will deploy a hydrogen pipeline network and provide a catalyst for other sources of hydrogen generation. The project has been selected by BEIS as a priority 'Track 1' project in its 'Cluster Sequencing' process. HyNet is expected to be operational by 2025.

**Investment Opportunity:** £1bn+

**Timescales:** Operations to start in 2025 subject to consenting and Government Business Models for Low Carbon Hydrogen and CCUS


## PROTOS

**Overview:** Protos is a strategic cluster of energy generation and energy intensive industry in Cheshire. With over 54 hectares consented and a wider masterplan extending to 280 hectares. Existing infrastructure includes a 50 MW wind farm and 26MW biomass facility. Protos has the opportunity for carbon capture and storage and will provide multi energy vector local networks to support energy intensive industry.

**Investment Opportunity:** £1.5bn+

**Timescales:** Immediate project specific opportunities around plastic recycling and recovery, BioSNG, hydrogen production and carbon capture and utilisation. Extending to 15 year business plan across later phases.

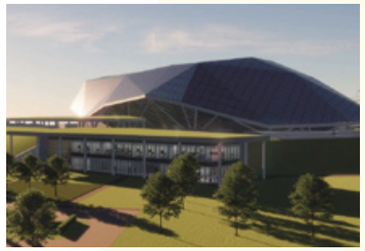
## MERSEY TIDAL POWER PROJECT

**Overview:** The high tidal range in Liverpool Bay and the Mersey estuary provides a unique opportunity to reliably generate abundant and predictable long-term renewable energy. Progression of the new scheme over the next decade will 'lock-in' long term, low carbon generation for the urban and industrial area for a century. The scheme is an important jigsaw piece in the whole energy system integration of electricity, storage and hydrogen and will provide resilience in the wider region network, whilst also providing a boost in employment and skills for the city region.

**Investment Opportunity:** £ Multi-Billion Capital

**Timescales:** Early stage Development

## 5X ROLLS ROYCE SMR



**Overview:** Rolls-Royce announced in early 2021 it will soon complete the feasibility stage in the development of its UK SMR system and in May will focus on securing investment for the first SMRs to be deployed by 2030. The NWNA is a nuclear sector cluster incorporating all the facilities and capabilities across the whole nuclear lifecycle from fuels to energy production, management of waste and decommissioning. NWNA is unique in the UK and widely recognised as a world class, self-contained, end-to-end nuclear system all within a very compact geography. Building of 2 large 3.35 GW nuclear stations, 5 SMRs at 450 MW each and significant extension of reprocessing activities in the region.

**Investment Opportunity:** £ Multi-Billion Capital

**Timescales:** Early stage Development

## ENERGY FROM WASTE TO SUSTAINABLE REFUELLING HUB

**Overview:** The development of the UK's first sustainable multi-fuelling hub (combining retail premises with EV charging, bio-CNG/LNG, hydrogen and potentially e-fuels refuelling infrastructure), located adjacent to the M53 motorway and intending to benefit from private wire electricity from nearby Hooton energy from-waste plant and connection to the gas grid.

**Investment Opportunity:** £ Multi-Billion Capital

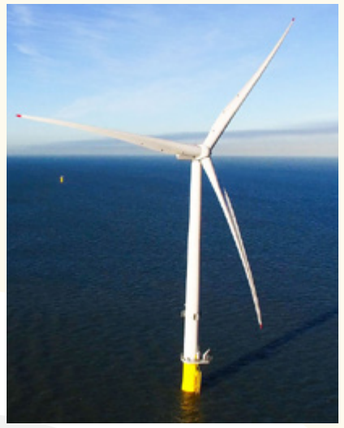
**Timescales:** Early feasibility / conceptual stage

**2022:** Development and installation of EV charge-points, hydrogen (350 & 700 bar) and bio-CNG/LNG refuelling infrastructure, connection via private wire to the Hooton EFW plant and hub retail proposition.

**2023:** Development and installation of a small-scale electrolysis facility at either the Hooton EFW plant or onsite at the sustainable refuelling hub.

**2024:** Feasibility analysis for the production of e-fuels onsite (combining hydrogen and Co2) at a larger scale to match expected demand growth.

## THE CROWN ESTATE ROUND 4 BUILD OUT IN THE NORTH WEST OF 3.5 GW OFFSHORE.



**Overview:** Offshore Wind Leasing Round 4 creates the opportunity for at least 7 GW of new offshore wind projects in the waters around England and Wales by the end of the decade. That's enough to power more than six million homes and deliver a step-change in the UK's journey to net zero by 2050. Round 4 has the potential to further strengthen the UK's world leading offshore wind sector, create jobs and investment, and deliver green, reliable, affordable energy to millions more homes. It's part of our commitment to supporting the UK's low carbon future while ensuring we maintain our healthy, biodiverse seas. The projects identified through this process will join a strong pipeline of UK offshore windfarms already in operation, construction and planning, and will help put the UK on track to meet the government target for 40GW of offshore wind capacity by 2030.

**Investment Opportunity:** £ Multi-Billion Capital

**Timescales:** The process is currently at Stage 1. Development and Consenting: estimated five years. Procurement and Contracts for Difference (CFDs): estimated two years. Construction: estimated three years

## PEEL PLASTICS-TO HYDROGEN

**Overview:** c.11,667 tonnes p.a. of mixed residual plastic waste from municipal solid waste and commercial and industrial sources converted into hydrogen.

**Investment Opportunity:** £ Multi-Billion Capital

**Timescales:** Late stage development (full planning permission obtained, close to 'shovel ready').

# RISING TO THE CHALLENGE

**The Net Zero North West Cluster Plan is a deliverable investment, technology and infrastructure blueprint for the North West's net zero transition. With a 'higher hydrogen' scenario, industrial emissions in the region can be reduced to zero by 2040.**

The North West is the leading region which already has all the elements required to deliver a net zero carbon industrial cluster by 2040 – including renewables, hydrogen, Carbon Capture Utilisation & Storage (CCUS), nuclear and smart grids. With an unrivalled range of projects, the Cluster offers a multi vector energy system that can drive clean growth. This diversity is one of the North West's major strengths.

A £30bn pipeline of projects in the North West has been identified. Collectively they offer long term, sustainable investment opportunities in net zero which can deliver in the near term.

The North West Cluster is already bringing the public and private sector together to drive the Cluster Plan strategy forward. Net Zero North West and the North West Business Leadership Team are engaging with major institutional investors to exemplify the exciting opportunities for investing in industrial decarbonisation in the region.

There are some challenges ahead. A joined up approach across the North West and North Wales will be critical to co-ordinate activity around the skills pipeline and planning and delivery of major projects. Decarbonisation of industry in the North West will also have significant implications for the power grid both at the transmission level and distribution network level, which will require collaborative planning across the whole system.

Market forces alone will not be able to achieve the UK government's ambition to reaching net zero by 2050. Time is mission critical.  The size and scale of the challenge combined with the need to work at pace requires a new delivery model to create the enabling environment for investments, whilst harnessing new partnerships between the public and private sector.

The Investment Case explores various options in setting up a robust delivery model to oversee the strategic vision and programmes, whilst incorporating lessons learnt from international industrial clusters who are on the same journey towards net zero.

However, the North West is united in rising to the challenge and delivering the bold vision to be the world's first net zero industrial cluster by 2040.



# REFLECTIONS FROM OUR PARTNERS

**Jean-Philippe Loiseau, CEO Equans UK & Ireland:**

"Equans is proud to be a partner on the Net Zero North West Cluster Plan project. During this project we have conducted valuable research into industrial decarbonisation pathways and electrolytic hydrogen production which is a strategic topic for the Equans group. Our customers are now benefiting from this R&D, as we are harnessing this intelligence to deliver innovative decarbonisation solutions and support our customers in achieving their zero carbon ambitions."

**Philip Cox, Chief Executive of Cheshire and Warrington LEP:**

"We look forward to working with cluster plan partners to help drive the £30bn investment into the region by coordinating and convening activity and addressing barriers. We will ensure that delivering the industrial decarbonisation plan is a core part of what we do as a LEP, working with Government and businesses to facilitate its delivery."

**Professor Eunice Simmons, Vice Chancellor, University of Chester:**

"A diverse, inclusive and skilled workforce is critical to unlocking the potential of the transition to a net zero economy. The University of Chester will continue to work closely with industry and professional bodies to develop skills solutions for the existing and future workforce."

**Dave Parkin, Director, Progressive Energy:**

"As an originating partner in the HyNet project and a partner in Vertex Hydrogen, Progressive Energy is at the heart of decarbonising industry in the North West. We are continuing to work with the other HyNet partners and with Government, along with a range of local stakeholders, to deliver material carbon reduction for major manufacturing and power generation sites."

**Mike Lockett, Uniper UK Country Chairman and Chief Commercial Officer Power:**

"Uniper, working together with our partners, is committed to using its knowledge and expertise to provide innovative decarbonisation solutions across the UK and we're pleased to have contributed to the cluster plan for the North West and North Wales region."

**Emma Degg, Chief Executive, North West Business Leadership Team:**

"The Cluster Plan provides a fantastic platform for action across the region to accelerate the journey to net zero. North West Business Leadership Team will continue to work with NZNW and other strategic partners to highlight the opportunities presented by the project pipeline and raise awareness amongst potential investors".

**Rachel Shorney, SP Energy Networks**

"Engaging with customers and stakeholders is at the forefront of everything we do as a business, and the needs of our key stakeholders and connections customers are embedded into every decision we make at SP Energy Networks as we make the transition to net zero. We are already seeing an increase in large scale industrial connections onto our network as the region moves to net zero, and we are dedicated to supporting our customers and key stakeholders to help facilitate delivery of these large scale connections that will directly impact the development of the Net Zero North West Cluster Plan."

**Steven Underwood, Chief Executive Officer, Peel L&P**

"The Cluster Plan shows the significant progress the region has already made towards net zero. It brings together the huge range of projects we have - from harnessing tidal power in the Mersey, to strategic energy hubs like Protos in Cheshire to hydrogen and carbon capture – which can all work together to reduce industrial carbon emissions to zero. This pipeline of projects will drive investment into the region and ensure the North West is at the forefront of the green industrial revolution."

UK Research and Innovation

Cadent
Your Gas Network

EQUANS
EMPOWERING TRANSITIONS

Peel NRE
PART OF PEEL L&P

uniper

PROGRESSIVE ENERGY

Cheshire and Warrington Local Enterprise Partnership

SP ENERGY NETWORKS

Liverpool City Region Local Enterprise Partnership

University of Chester
Thornton Science Park

North West Business Leadership Team

# NET ZERO NORTH WEST

For further information visit: **www.netzeronw.co.uk**

Or email us at: **info@netzeronw.co.uk**