

The background image shows a construction site with large, dark-colored pipes stacked in rows. In the background, a blue crane and a tall light pole are visible against a clear blue sky.

# 2026

PROGRESS AND  
IMPACT REPORT

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Northern Endurance Partnership is building the landmark carbon transportation and storage infrastructure that will service the East Coast Cluster. This infrastructure will clearly demonstrate how strategic investments can prompt new industrial capital spending, create jobs and training opportunities, strengthen domestic supply chains, and generate lasting economic value in regions that have powered Britain's economy for generations.

**Richard Mortimer**

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# Foreword

**Northern Endurance Partnership is building the landmark carbon transportation and storage infrastructure that will service the East Coast Cluster across Teesside and the Humber.**



As this report sets out, the infrastructure that the Northern Endurance Partnership (NEP) is delivering now, which utilises safe and proven technology and engineering, is doing more than just transporting carbon dioxide captured from industry and storing it safely beneath the North Sea. By unlocking a new wave of industrial investment, which in turn creates new jobs and industrial capability, it is also acting as a catalyst for reindustrialisation.

Our work on Teesside clearly shows this to be the case. This strategic infrastructure investment has prompted new industrial capital spending, created jobs and training opportunities, strengthened domestic supply chains, and generated lasting economic value in a region that has powered Britain's economy for generations. You can find more detail on the impact that carbon capture and storage (CCS) has had on Teesside on pages 9 to 10. Moreover, the jobs that are being created there will form part of the UK's fast-growing £100bn net zero economy, where roles attract an 11 per cent higher average wage and firms are 48 per cent more productive<sup>1</sup>. These are the jobs of the future, and NEP's infrastructure is central to delivering them in the UK's industrial heartlands of Teesside and the Humber. These jobs will also play a key role in addressing the North's long-standing productivity gap, identified in the UK Government's Northern Strategy<sup>2</sup>.

Key next steps now lie ahead of us. The first of these is Teesside Buildout, which will further multiply the positive impact that CCS has already had in that region. More detail on Teesside Buildout can be found on page 13 and this process is currently being led by DESNZ, with a variety of industries participating in that process. Following that, we are also working to bring the benefits of CCS to the Humber. In line with that ambition, we

have been progressing our Humber Expansion project. If we replicate our successes on Teesside, Expansion could deliver significant economic and decarbonisation benefits. Modelling conducted for this report (see page 22) demonstrates that a Humber CCS pipeline could generate £3 billion or more of GVA across the UK during construction, whilst sustaining 1,800 full-time equivalent jobs opportunities once operational. To maximise these benefits, as is the case on Teesside, a Humber CCS pipeline would depend on selecting local carbon capture projects as users. This report has identified significant demand from six possible carbon capture projects in the Humber region, from a range of industries, and emerging opportunities to move CO<sub>2</sub> by road, rail and ship to our storage network.

Overall, as this first Progress and Impact Report shows, we have made significant strides forwards. NEP's infrastructure across Teesside and the Humber remains on track to enable the permanent storage of around 23mtpa – one of the UK's biggest CCS opportunities. Were this expected total capacity to be fully realised, NEP would play the largest role in the CCS sector in enabling the UK to meet the 6th and 7th Carbon Budgets. Most importantly, in reaching this point, the benefits of CCS that have already been delivered on Teesside would be replicated elsewhere in the UK – creating even more jobs and opportunities for suppliers, whilst helping to protect and upgrade the UK's industrial capabilities.

**Richard Mortimer, Director and Chairman of the Board, Northern Endurance Partnership**

# Industry Insight

**The UK CCUS industry is moving into delivery, driving investment, jobs, reindustrialisation and long-term clean economic growth. It is important now to maintain momentum.**



The UK's carbon capture, utilisation and storage (CCUS) sector has reached a defining moment. What was once an ambition is now becoming reality, with the country's first CCUS clusters – the East Coast Cluster and HyNet – moving from planning into construction and delivery. This progress marks a major step towards reindustrialisation, enabling clean power, and creating new opportunities for investment, jobs and regional economic growth.

The East Coast Cluster is at the forefront of this transformation, demonstrating how industry and government can work together to deliver the infrastructure needed for a competitive, low-carbon economy.

The momentum behind the sector is already delivering tangible benefits. More than £4 billion in supply chain contracts have been awarded across the UK's first two clusters, supporting 5,500 skilled construction jobs while strengthening domestic manufacturing, engineering and specialist services. These investments are laying the foundations for a new industrial sector that will underpin clean growth for decades to come.

The opportunity extends far beyond these first pioneering projects. CCSA analysis shows that the first four CCUS clusters could contribute around £8 billion annually to the UK economy by 2030. Across the wider sector, CCUS could unlock £26 billion of private investment this decade, contribute £94 billion in Gross Value Added by 2050 and support around 50,000 jobs across the UK.

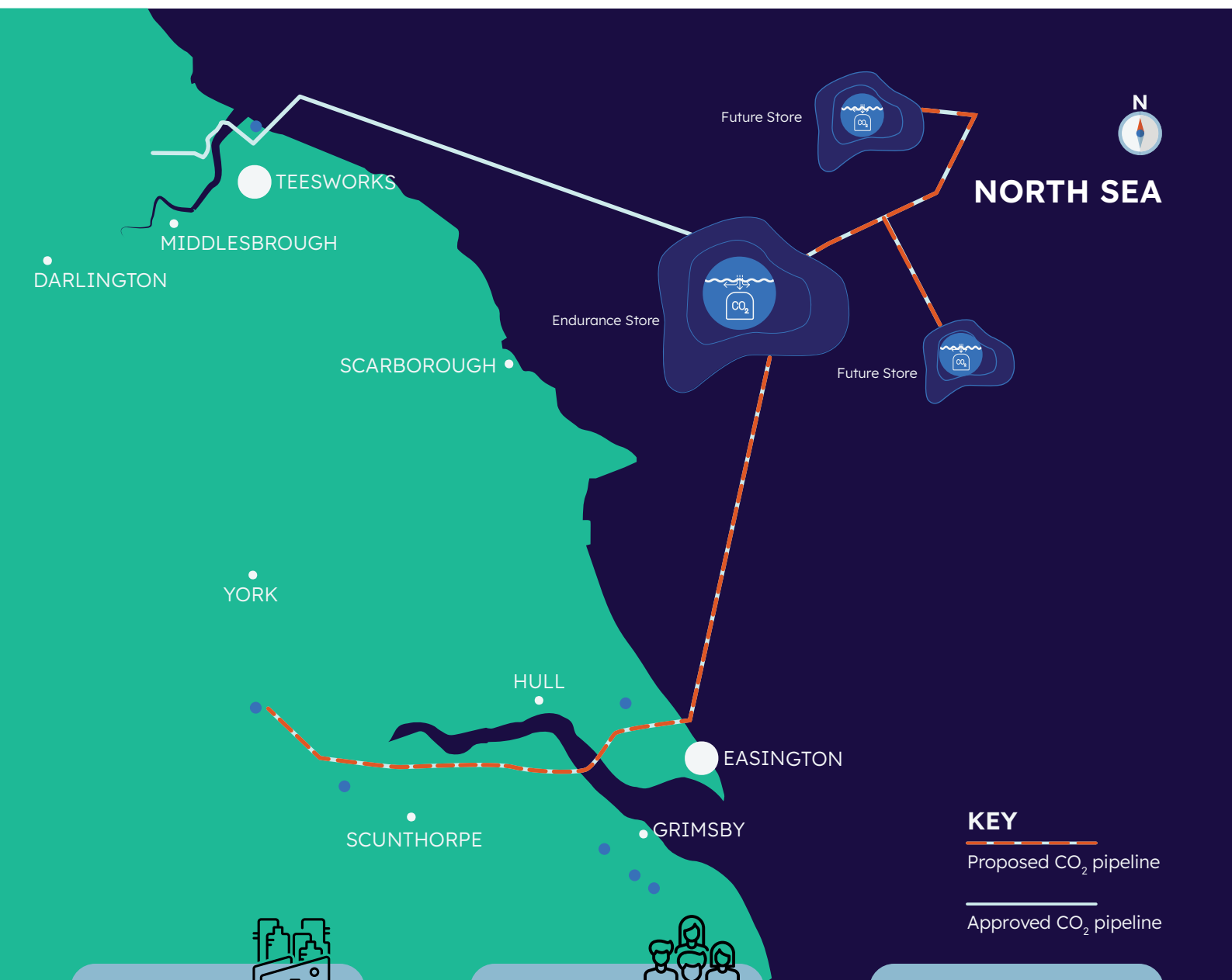
Realising this potential will require continued momentum. Progressing the build-out of the East Coast Cluster and HyNet, alongside the development of Viking CCS and the Acorn Project, will be essential to establishing a

self-sustaining CCUS market. Continued investment in the next wave of projects, supported by policies that enable new CO<sub>2</sub> transport solutions, cross-border CO<sub>2</sub> storage, low-carbon products and carbon removals, will help expand access to storage, reduce costs through deployment and provide the long-term certainty needed to unlock private investment.

The Northern Endurance Partnership exemplifies what can be achieved through collaboration, long-term investment and shared ambition to transform the economy and industries in the North East. By enabling the East Coast Cluster, it is helping establish the UK as a global leader in CO<sub>2</sub> transport and storage while creating the foundation for cleaner power, competitive British industry and long-term economic growth.

**Olivia Powis, Chief Executive Officer, Carbon Capture and Storage Association**

# The East Coast Cluster



## Driving reindustrialisation

NEP's Teesside infrastructure is demonstrating how strategic investments can create jobs, strengthen domestic supply chains, and generate lasting economic value.

## Training the next generation

Clear skills pipeline established on Teesside, launching careers in the clean energy sector. Opportunities to establish a similar skills pipeline when delivering a Humber CCS project.

## Potential for 23mtpa

Permanent and secure carbon dioxide storage enabled through full deployment of NEP's infrastructure across the East Coast Cluster.

### Backing British suppliers



Significant contracts awarded to Teesside-based companies. More than half of the content utilised comes from the UK. A Humber CCS project offers the same opportunities.

### The economic impact of CCS in the Humber



Modelling shows that a CCS project could deliver clear, significant economic benefits in the Humber. Including £1.2bn to UK suppliers from the pipeline alone.

### A united vision for the Humber



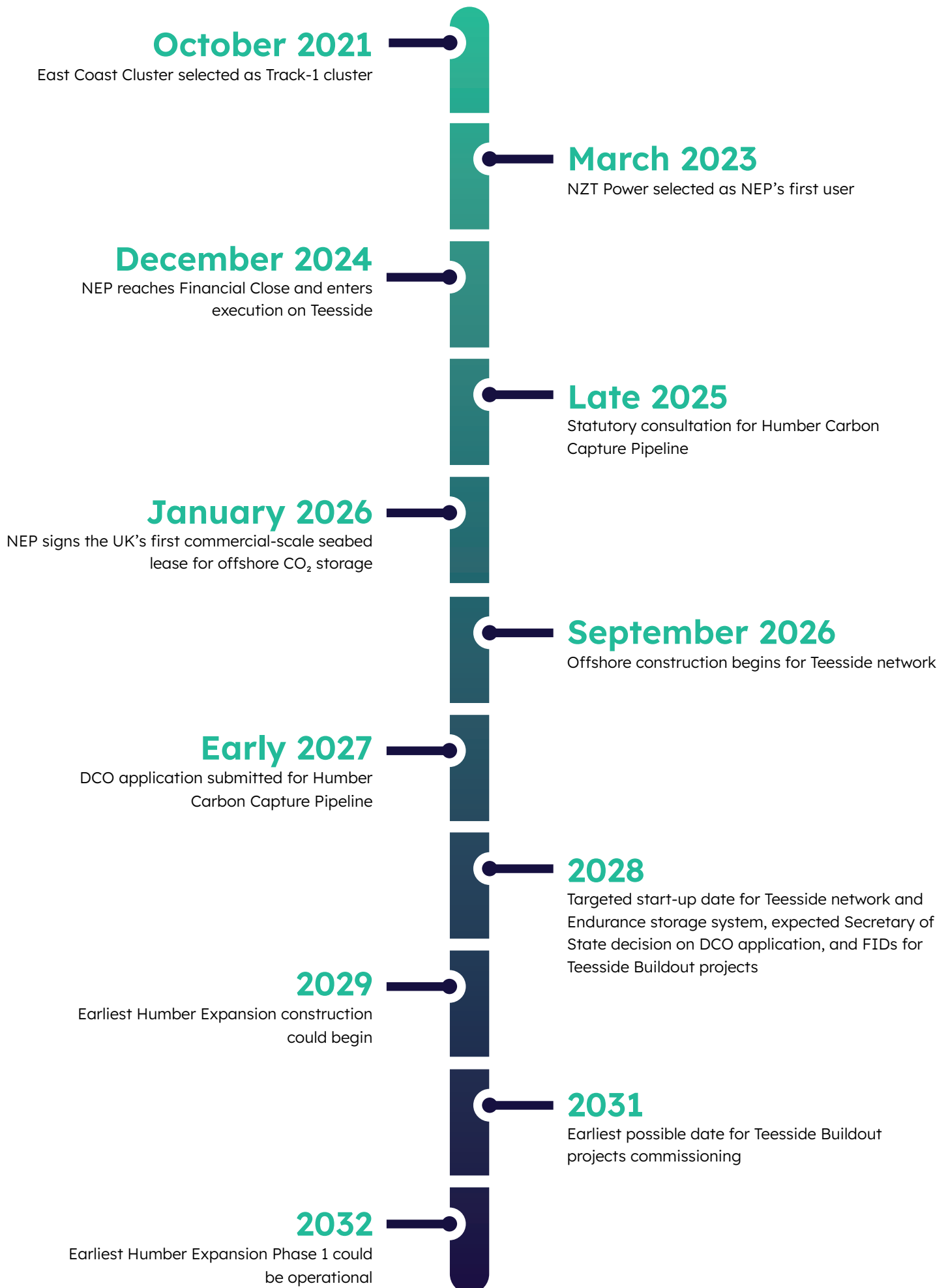
There is clear industrial demand for CCS infrastructure in the Humber, with upwards of 10mtpa identified by this report.

The transport and storage infrastructure that NEP is building will service a diverse range of projects across the East Coast Cluster, one of the UK Government's first carbon capture, usage and storage clusters. Across Teesside and the Humber, these projects will span industrial carbon capture, low-carbon hydrogen production, low carbon power and the potential for atmospheric carbon dioxide removals. The Humber and Teesside together account for around 44 per cent<sup>4</sup> of the CO<sub>2</sub> emissions from the UK's major industrial clusters, making the East Coast Cluster the country's single largest industrial decarbonisation opportunity<sup>5</sup>.

As the Climate Change Committee has made clear, there is no route to net zero that does not include CCS. NEP's work to enable the East Coast Cluster is key to delivering that outcome.

In doing so, our infrastructure, and the capture projects that connect to it, will create new jobs, strengthen supply chains and generate lasting economic value.

This is what modern reindustrialisation looks like.



# Our Story So Far

**After reaching financial close in December 2024, NEP's Teesside infrastructure moved into the execution phase. This is reindustrialisation in action and is delivering clear benefits for UK suppliers, and the local community.**



NEP is currently delivering a landmark piece of transportation and storage infrastructure on Teesside, encompassing an onshore (12km pipe network) and offshore transportation system (149km pipeline). This will connect to NEP's Endurance Offshore Storage System. It is this network, some of the first CCS Transport and Storage (T&S) infrastructure to be built in the UK, that will service carbon capture projects within the East Coast Cluster.

Construction is progressing as expected, with a planned start-up date in late 2028. At this point, NEP's Teesside network will be able to store up to 4mtpa of CO<sub>2</sub> per year, with the capability to store up to 10mtpa in the future. NEP has appointed px Group as its Operator Partner ahead of start-up.

NEP's progress on Teesside is closely linked to the delivery of Net Zero Teesside Power (NZN Power), the first carbon capture project expected to connect to our T&S network. A joint venture between bp and Equinor, NZN Power could generate up to 742 megawatts of flexible, dispatchable low carbon power – equivalent to the average annual electricity needs of more than 1 million UK homes. Currently under construction on Teesside, NZN Power aims to be the world's first gas-fired power station fitted with carbon capture and storage.

When NEP and NZN Power become operational, a major UK industrial policy ambition will become reality. This will constitute the UK's first full-chain CCS network. CO<sub>2</sub> will be captured by NZN Power, handled at the NEP compression station and transported offshore for safe and secure storage. Reaching this crucial milestone will continue to support the transition to a self-sustaining

domestic CCS market, which will be able to support domestic projects and export domestic CCS technology and expertise to the world.

## The impact of CCS on Teesside

As we have delivered our first piece of infrastructure, we have, alongside NZN Power, worked consciously to leave a positive and lasting legacy on Teesside. As part of this, we have aimed to ensure that the benefits of CCS are felt by local workers and businesses.

CCS on Teesside has the potential to support thousands of jobs during the construction and operations phases. As we have done already, NEP and NZN Power, where practical, will prioritise recruiting from the Teesside region including Redcar & Cleveland, Stockton, Middlesbrough, Darlington, and Hartlepool. The jobs we create will contribute to the £100bn net zero economy, where, according to the CBI, workers secure a higher average wage (11 per cent+ versus average) and help their firms to be 48 per cent more productive versus the UK average<sup>6</sup>.

Delivering NEP and NZN Power's infrastructure also presents an opportunity to close the skills gap in Teesside's fast-growing low-carbon industries, through targeted training and sustained outreach. Following a £1m+ investment from the two projects, and delivered in partnership with local educational institutions, the Tees Valley Combined Authority, and construction partners, 175 young people across Teesside are currently undertaking training designed to launch their careers in the clean energy sector.

These are the jobs of the future, and our infrastructure will deliver them in the UK's industrial heartlands. Reflections from those participating in these training courses can be found on pages 14 to 15.

Finally, there are clear benefits for NEP and NZT Power's suppliers, more than 50 per cent of which are UK based. Upwards of 300 subcontracts have now been awarded to UK companies, with a total value above £2.1bn. Many of these suppliers are operating on Teesside and, by supporting these projects, new industrial capacity and capability has been established. As an example, more than 60 per cent of the linepipe joints were manufactured at the Hartlepool LSAW pipe mill in Hartlepool, now owned and operated by Corinth Pipeworks. This work

helped secure 150 skilled jobs, with an additional 30 jobs created, including 4 apprentices. The mill has engaged with regional supply chain companies, supporting UK content, and is now working to support domestic and international carbon capture, hydrogen infrastructure, LNG and oil and gas projects. You can find more information about LSAW Hartlepool and the other suppliers supporting the delivery of CCS on Teesside, on pages 16 to 17.

Undoubtedly, the construction of NEP and NZT Power's Teesside infrastructure continues to have a positive impact and is bringing benefits to the region, with new employment, training and supplier opportunities.

## NEP and NZT Power's impact



# £2.1bn+

More than £2.1bn awarded to UK suppliers, including significant contracts to Teesside-based companies



# 3,000+ jobs

More than 3,000 jobs during the construction period, with hundreds of permanent roles created and supported. Where practical, we aim to prioritise recruiting from the Teesside region.



# More than 50 per cent

More than 50 per cent UK supply chain content utilised, with more than 300 subcontracts awarded to UK companies



# 175 young people

Funding for 175 young people across Teesside to undertake training designed to launch their careers in the clean energy sector



# £2.5m

£2.5m worth of social investment to create long-term benefits for local community groups

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NEP is helping to unlock investment, support skilled jobs and reinforce Teesside's position at the forefront of industries of the future.

**Ben Houchen, Tees Valley Mayor**



Image credit: official portrait of Lord Houchen of High Leven © House of Lords / photography by Roger Harris, used under CC BY 3.0 (creativecommons.org).



# Our Construction Partners

## Saipem

Saipem's scope of work encompasses the offshore pipeline and associated landfalls. Additional specialist services contracts have been awarded to Engineering Services and Supplies Ltd, Ordtek Ltd, Weston Compliance Services Ltd, and Stockton Drilling Ltd. Around 90 per cent of Stockton's contract will be delivered using local resources, supporting 35 jobs.

## TechnipFMC

TechnipFMC is delivering the first electrified subsea system for CO<sub>2</sub> transport and storage. Work is taking place across several UK locations, including Aberdeen, Newcastle, Evanton and Dunfermline.

## Costain

Costain, the UK infrastructure business, is delivering the engineering, procurement and construction of NEP's onshore carbon dioxide gathering system on Teesside. To date, its work has seen 250 people from Costain actively support the project, with approximately 100 working on site and an additional 150 engineers and designers based in their Manchester office. Costain has engaged 46 suppliers to date, all of which are UK based, supporting an additional 200 jobs in the supply chain.

## Alcatel

Alcatel Submarine Networks (ASN) and NEP are collaborating on the project's power and communications cables. The business, which directly employs more than 500 people in the UK, has awarded sub-contracts to UK offshore specialists including Cathie Associates (Newcastle), EGS (Teesside), and Safelane (Herefordshire).



# Building Out the Cluster

Teesside Buildout is the next step for the infrastructure that NEP is delivering in the region. The connection of new carbon capture projects to our network will help to further multiply the positive impact that CCS has already had on Teesside. DESNZ has recently invited applications from carbon capture projects seeking to connect by 2032.

There is strong demand from projects in the region, including low-carbon hydrogen, energy-from-waste, Sustainable Aviation Fuel (SAF), Greenhouse Gas removal (GGR) projects, and existing industrial sites seeking to decarbonise. This demonstrates the growing importance of NEP's infrastructure to the local economy. Local leaders increasingly recognise that a T&S network strengthens the case for investing in new projects in the region, creating confidence that future demand will be there.

## The impact of Teesside Buildout

In addition, for the first time in the UK, DESNZ invited applications from projects seeking to connect to our network via road, rail and ship. This non-pipeline transport has also demonstrated promising levels of demand from a diverse range of projects around the UK. This would represent a major development in the evolution of the CCS industry towards a more commercially sustainable model.

Connecting additional users offers an opportunity to unlock significantly greater economic and reindustrialisation benefits from the infrastructure already being built on Teesside. Whilst delivering their own employment and supplier impacts, these connecting projects will also maximise capacity of our infrastructure, and, with limited additional investment, deliver greater value for taxpayers, consumers and industry.



From major engineering works to large-scale carbon capture infrastructure, the NEP and NZT Power projects are positioning Teesside as a leader in clean energy while supporting highly skilled jobs and bringing long-term value to the wider community. I have no doubt, as additional carbon capture projects are added to NEP in the coming years, that these benefits will continue to flow into the local area.

**Anna Turley MP, Redcar**

# Training the Next Generation

**With more than £1 million committed to regional training programmes, from NEP and NZT Power, 175 young people are currently undertaking courses designed to launch their careers in the clean energy sector, whilst also supporting the projects during construction. We asked some of those participating to reflect on their journey and how this opportunity has helped them to develop.**

## Taylor Thornton

Working on the NZT Power/NEP project has been an exciting milestone in my career. Through my two-year apprenticeship programme, I have studied towards a Level 3 Safety, Health, and Environment Technician qualification at Hartlepool College. Seeing the project progress from the FEED stage through to construction has been very interesting, and I have learned a lot during this period. Spending as much time on site as possible has given me valuable practical experience, and I look forward to seeing the project continue to develop.

## Aidan Ramzan

I began my journey with NEP through the two-year scholarship programme, which gave me a strong foundation in mechanical and electrical engineering. I then completed my first year at Middlesbrough College, developing my technical knowledge and skills in process engineering. I am gaining valuable practical experience on site, supporting operations, and learning how the plant works, which is preparing me to contribute confidently when I join the NEP project next year.

## Noah Jimson

I started three years ago when I joined the scholarship programme at Redcar College, gaining a Level 3 Extended Diploma in Engineering Technologies. I was then selected as one of five apprentices and have since completed my first year at Middlesbrough College, achieving a Level 3 City & Guilds in Process Engineering and a Level 2 NVQ. I have recently started at px's End of Life Plastics facility and am enjoying the opportunity to develop my skills further.



**Separately, NEP and NZT Power are providing opportunities for apprentices. Below, we have included the reflections from two apprentices who have worked on the projects.**

### **Sophie Gray**

As a Project Controls Degree Apprentice at bp, one of the shareholder partners in NEP<sup>3</sup>, I have had the opportunity to support the delivery of NEP's Teesside infrastructure, one of the UK's most significant energy transition projects. Working on NEP has been an incredibly rewarding experience so far and has accelerated my development far beyond what I expected at this stage of my career. I have progressed from supporting routine cost engineering activities to taking ownership of key responsibilities, including cost forecasting, reporting, and presenting project performance insights to project stakeholders. Through my involvement in the project, I have developed strong analytical skills, improved my confidence communicating with a wide range of stakeholders, from contractor teams to senior project leadership, and gained valuable insight into how major projects are governed and delivered. Being trusted with real responsibility on a project of this scale has helped me grow both professionally and personally.



I am gaining valuable practical experience on site, supporting operations, and learning how the plant works.

**Aidan Ramzan**

### **Sarah Wates**

During my first year as a Project Controls Degree Apprentice at bp, I have really enjoyed working on NEP as a cost engineer. Initially, I was amazed by the scale and ambition of the project and surprised to be given real responsibilities like leading cost activities for two contracts so early on in my career. With the support of the project team, I have developed valuable technical skills, whilst growing my confidence, and look forward to building on this experience.



Working on NEP has been an incredibly rewarding experience and has accelerated my development far beyond what I expected at this stage of my career.

**Sophie Gray**

# Backing British Suppliers

**More than 300 national suppliers are currently supporting NEP and NZT Power, with contracts worth more than £2.1bn awarded, including several local suppliers on Teesside. As part of this report, we have asked some of our suppliers to explain the impact that these projects have had on their businesses.**

## LSAW Hartlepool

Corinth Pipeworks UK at Hartlepool, in partnership with Marubeni-Itochu Tubulars Europe Plc and Eisenbau Kramer GmbH, has contributed to the supply of 105 km of linepipe for NEP's offshore infrastructure. An additional 65km was supplied from the Corinth Pipeworks facility in Greece. The pipes will transport carbon dioxide from capture projects across Teesside to secure storage beneath the North Sea. The project has supported skilled employment at the facility, including the creation of new roles and apprenticeship opportunities, while also engaging regional supply chain companies and supporting UK content. Today, as part of Corinth Pipeworks, the Hartlepool facility is building on its established expertise to support major domestic and international energy infrastructure projects, including carbon capture and storage, hydrogen infrastructure, LNG, and oil and gas projects.

## Coathams Coaches

Operating from their base near Guisborough, just under 12 miles from site, Coathams provide a park-and-ride service for both NEP and NZT Power. This has created 15 new jobs in the local area. Securing work on the projects has also given Coathams the ability to support local schools, by funding complimentary transport for five local primary schools, supporting trips that may otherwise be out of reach for many pupils. The journeys will help maximise the use of existing coach services, while delivering meaningful social value within the local community.

## pX Group

px Group, the Teesside-based, global Operations, Engineering and Maintenance (OE&M) specialist, has been awarded a major contract by NEP and NZT Power to safely operate and maintain two critical facilities. As NEP's Operator Partner, px brings its long-standing Teesside operating experience into operational readiness, commissioning and handover ahead of start-up and long-term operation of NEP's CCUS network. px Group will recruit and employ an on-site team of around 100 people locally to take both sites from commissioning through to sustained, safe operations. The contract is one of the most significant industrial O&M appointments in Teesside's recent history, and a major step forward in px Group's position as a leading O&M partner for net zero and low-carbon projects. The contract has allowed px Group to support five apprentices who are serving their time on px Group's three other operational sites around Teesside.

## Denholm Industrial

Denholm Industrial are specialists in surface preparation and protective coatings. Based in Middlesbrough, 13 miles away from the Teesworks site, all their workforce comes from the local area. They have provided blasting and coating services for NEP and NZT Power pipe, which has given continuity of work to the shop floor and the opportunity to train up new blasters, painters and sprayers in a controlled manner. 50 per cent of Denholm's shop floor was dedicated to supporting this work and 11 jobs have been sustained, including inspectors, supervisors, blasters, painters and labourers.

## A E Yates

A E Yates, operating from their regional office on Teesside, are working with Costain to deliver a broad range of temporary and permanent civil engineering works as part of the electricity and gas connections for NEP and NZT Power. This contract will support around 50 directly employed roles, including several apprentices, and will indirectly support many more jobs within our local supply chain. Committed to the local community, A E Yates Ltd. have already established relationships with various local charities, colleges, youth clubs and other community organisations to provide work experience opportunities, career talks, donations and volunteering.

## Sonardyne

Sonardyne is working with NEP to deliver, deploy and maintain environmental landers for the Endurance store. These systems will gather vital baseline data ahead of CO<sub>2</sub> injection. The contract has underpinned Sonardyne's offshore monitoring capability, supported skilled UK engineering and created a strong platform for growth in the emerging global carbon capture and storage market. To support the project, Sonardyne has increased headcount, including several full-time employees dedicated to supporting NEP. In addition, the project has helped secure employment for about seven existing employees in the UK across a number of specialised engineering disciplines.

## Adey Steel

Based in Loughborough, Adey Steel Group has secured a multi-million-pound contract to deliver structural steelwork for NEP and NZT Power on behalf of Costain. The works include the delivery of multiple large-scale steel pipe bridges spanning internal roads and service corridors in challenging access areas, allowing essential utilities and process systems to move safely and efficiently across the project sites. This work has supported Adey Steel's investment and development of fabricator and welder apprentices, and operational staff to meet the ever-increasing demands of the energy sector.

## PD Ports

PD Ports is playing a key role in establishing the East Coast Cluster. As well as supporting the delivery of nationally significant carbon capture infrastructure, their work as contractor to Saipem is allowing them to invest in their people and capabilities for the future. Around 60 colleagues will be deployed on the project, working 24/7 for its duration, creating new opportunities for skills development and hands-on experience, including for apprentices across engineering, procurement and communications. They have also invested more than £1 million in additional pipe-handling equipment at the Port of Hartlepool, with further infrastructure improvements planned to support future growth and long-term opportunities for the region.



**More than £2bn  
awarded to UK suppliers**



**More than 50 per cent UK  
supplier content utilised**



**More than 260 suppliers  
supporting East Coast  
Cluster projects**



NZT Power has worked alongside NEP from the beginning to make the UK's first commercial-scale CO<sub>2</sub> transport and storage network a reality. Together, we are unlocking carbon capture, supporting investment, and creating skilled jobs.

**Ian Hunter, Managing Director, NZT Power**



# Extending Our Impact

**Teesside clearly demonstrates the impact that CCS infrastructure can have. The opportunity now is to replicate those successes at greater scale in the Humber.**



The Humber represents one of the UK's biggest opportunities to use CCS to secure industrial investment, protect strategically important industries and create the next generation of skilled jobs. This is the next phase of the East Coast Cluster and, as the UK's largest industrial cluster, its successful decarbonisation will be critical to both the country's growth and net zero ambitions.

There is significant user demand for CCS from potential carbon capture projects in the region, from a range of industries, including new clean power generation, hydrogen production, and sustainable aviation fuels. As you can see on page 20, this report identifies a potential 6mtpa from some of the most mature regional capture projects. We are also aware of an additional opportunity to store upwards of 4mtpa transported by ship to the Ports of Immingham and Saltend.

A requirement to derisk a potential CCS investment in the Humber was placed on NEP as part of our TRI licence for Teesside. Delivering a CCS project in the Humber also fully realises the initial vision for the East Coast Cluster. That is why NEP has been working, with UK government approval and funding, to progress the planning, consenting and engineering design for our Humber Expansion build-out project. This is maturing at pace, with activities ongoing onshore and offshore to further derisk any potential investment.

This work includes expanding offshore storage, along with the development of the Humber Carbon Capture Pipeline (HCCP). HCCP is a proposed underground, onshore pipeline with above-ground installations that will transport carbon dioxide produced by industrial

projects in the Humber region to Easington, where it will be transported via an offshore pipeline to secure storage under the North Sea. Humber Expansion is designed to take a maximum capacity of 17mtpa for storage.

We are working towards a Final Investment Decision (FID) in the next few years, which would allow us to best leverage our experience from Teesside. We believe this would allow us to reduce costs between the projects. Humber Expansion would represent a potential £2.5–3.5bn infrastructure investment, capable of unlocking further investment from carbon capture projects across one of the UK's most strategically important industrial regions.

If we replicate our successes on Teesside, Expansion could deliver significant benefits in terms of decarbonisation, job creation, training opportunities, and reindustrialisation. CCS in the Humber could also deliver considerable economic impacts (see page 22). This includes supporting around £3 billion of GVA across the UK during construction, and sustaining around 1,800 full-time equivalent jobs per year once the infrastructure is operating.

Overall, delivering this project could support several of the UK government's strategic policies. It is crucial to continue the process of moving toward a self-sustaining domestic CCS industry, continuing the important work begun on Teesside.

# A United Vision for CCS on the Humber

**As we move Expansion forwards, we have brought together five potential carbon capture projects<sup>7</sup> to demonstrate the clear industrial demand for CCS infrastructure in the Humber.**

This also illustrates the scale and breadth of investment that access to a T&S network could unlock across the region. If an accessible Humber T&S network were to be delivered in the near future, these local operators, listed below, are more likely to advance investment decisions of their own at industrial facilities in the region. While the eventual user selection process remains the responsibility of DESNZ, these projects could deliver an initial 6mtpa into a Humber T&S network.

## Drax

Drax is advancing a bioenergy with carbon capture and storage (BECCS) project, which will capture and permanently store carbon dioxide that is generated during the production of electricity from sustainable biomass. BECCS provides negative emissions, as well as stable, renewable electricity and will play a vital role in tackling the climate crisis and supporting energy security.

## SSE

Keadby 3 is a planned power station equipped with carbon capture technology. Keadby 3 is expected to offset at least 1.5MT of CO<sub>2</sub> – 5 per cent of the Government's target. The project will bring a new scale of investment to the North Lincolnshire region, with an estimated £2.2bn expected to be invested throughout its development, construction and the first 25 years of its operational life. It is estimated that the project could deliver 560 jobs across the UK, with 250 of these delivered locally.

## Equinor

H2H Saltend is due to be operational by the early 2030s and sited at the energy-intensive Saltend Chemicals Park (SCP). The project will help to reduce SCP's emissions by up to one third. Low-carbon hydrogen will be used in chemical processes by SCP-based and other nearby companies, as well as directly replacing natural gas in several industrial facilities. This will create new jobs and

We are also aware of an additional opportunity to store upwards of 4mtpa transported by ship to the Ports of Immingham and Saltend – opening up a wider domestic and international market.

Likewise, several other large-scale decarbonisation projects are in development in the Immingham industrial region, which will create new jobs and deliver some of the world's largest carbon capture projects.

opportunities. The CO<sub>2</sub> by-product from the hydrogen production process will be captured and stored safely and permanently offshore.

## Uniper

The Killingholme Low Carbon Power (KLCP) project is a proposal to develop a new carbon capture power station on land next to Uniper's existing Killingholme power station site, which already has planning consent for a new combined cycle gas turbine (CCGT) power station. Uniper's proposal is for KLCP to provide dispatchable power. The planned CCGT power station and proposed carbon capture plant could be delivered from 2030, with new jobs created during the construction period and when operational.

## Velocys

The Altalto project is designed to produce 30 million litres (23kT) of sustainable aviation fuel annually from residual waste streams, enough to power over 500 London-New York flights per year. Once operational, the project will deliver more than 185,000 tonnes of CO<sub>2</sub>-equivalent savings annually, support the circular economy by diverting waste from landfill and incineration, whilst creating hundreds of jobs in the Humber region.

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The opportunity is not simply to cut emissions, but to make the Humber an even better place to build, invest and create well-paid jobs.

**Graham Stuart MP, Beverley and Holderness**



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# The Economic Impact of CCS in the Humber

The delivery of CCS infrastructure in the Humber, and the regional industrial investment it stimulates through the partner projects listed in this report, would have a clear impact on local industrial capacity, with associated benefits for workers and suppliers. In order to quantify what that impact could look like, NEP has recently commissioned economic modelling, conducted by Northern Powerhouse Partnership. These findings, which are a conservative estimate, demonstrate that a CCS pipeline in the Humber, with three of the capture projects mentioned in this report attached as users, could deliver significant economic benefits.

**Read the full Economic Case for CCS in the Humber here**



## SUPPORT GVA AND ECONOMIC ACTIVITY

Support around **£3 billion of GVA** across the UK during construction, and around **£240m per year once operational** – about £4 billion in present-value terms over a 25-year operating life. This figure includes the continued operation of existing power generation that depends on a Humber CCS project being delivered.



## UK EMPLOYMENT DURING CONSTRUCTION

Support around **44,000 job-years** of employment\* across the UK over the construction programme. This is a cumulative figure over the construction period, not a headcount at any one time. Of that, around 22,000 job-years would sit in the supply chain rather than with the firms contracted directly.



### ECONOMIC BENEFITS OF A HUMBER CCS PROJECT

## UK SUPPLIER CONTRACT

Place an estimated **£1.2bn worth of contracts** with UK suppliers from the pipeline alone, before any emitter-site spend is counted.



## SUSTAINED ONGOING EMPLOYMENT

Sustain around **1,800 full-time equivalent jobs** per year on an ongoing basis once the infrastructure is operating, of which approximately 1,300 are in the supply chain. This figure includes the continued operation of existing power generation that depends on a Humber CCS project being delivered.



## Action is needed to secure these benefits

There is significant demand for CCS in the Humber region. However, while the projects mentioned in this report are driving that demand and are relatively mature, they have not yet reached FID, and additional work is required to reach this point.

To give these businesses the much-needed confidence to continue investing in their projects, clarity on cluster sequencing (selecting a potential Humber CCS pipeline's users) is now needed from the UK Government. If that clarity is not provided this year, many of the potential capture projects in the region will conclude that they are unlikely to reach FID in this Parliament. Appraisal work on these projects will stop and they will stall. Indeed, many regional projects have already stalled and are now looking to the UK Government for clear signals to warrant starting their appraisal work again. This means that the benefits of CCS infrastructure in the Humber are being and could be unnecessarily delayed, with the potential of the region remaining unfulfilled. Delays also make possible deindustrialisation in the region more likely, factoring in the ever-increasing costs for existing businesses of alternative decarbonisation routes.

An alternative outcome is possible. To capture as much of that demand as possible, DESNZ should now begin a formal user selection process to identify the projects that could attach to potential CCS infrastructure in the region, regardless of any eventual pipeline operator.

### Henri Murison MBE, Chief Executive, Northern Powerhouse Partnership

The economic benefit to Teesside and the wider UK from Northern Endurance Partnership has already been hugely significant. Extending the pipeline to the most significant Humber projects could enable £3 billion or more of GVA, equating to at least 44,000 years of employment in the construction phase. It will sustain 1,800 full-time equivalent jobs every year once operational. This is reindustrialisation of the North built on the UK Government underpinning private investment.

### Beckie Hart, Regional Director, CBI Yorkshire and Humber

A Humber carbon capture pipeline represents a significant opportunity for businesses across the region. With clear demand from industry, the project provides greater confidence for companies looking to invest, expand and decarbonise. Beyond supporting major industrial emitters, the pipeline has the potential to create substantial opportunities for local engineering, manufacturing, construction and professional services businesses during development and operation. CCS can help strengthen regional capability, attract investment and reinforce the Humber's position as a globally competitive industrial cluster, supporting sustainable economic growth and skilled employment.

# Stakeholder Reflections

**NEP works closely with key stakeholders across Teesside and the Humber. We have included their reflections below.**

## **Luke Myer MP, Middlesbrough South and East Cleveland**

Teesside is on the rise. I've seen the progress being made on NEP's landmark infrastructure, which underlines the scale of opportunity and investment this project is bringing to our region. Thanks to government backing, private sector innovation and the skills of Teessiders, these projects are creating thousands of local jobs. They're creating opportunities for young people, supporting local supply chains and giving businesses across our region the confidence to grow.

## **Andy McDonald MP, Middlesbrough and Thornaby East**

What stood out during my visits to site was the real impact that these projects are already having on local people. From apprentices taking their first steps into industry to experienced workers building long-term careers back here in Teesside, NEP and NZT Power are creating lasting opportunities and strengthening the region's supply chain.

## **Gus Jaspert, Managing Director - Marine, The Crown Estate**

2026 marked a pivotal moment in our energy transition when NEP signed its seabed lease with The Crown Estate for the UK's largest commercial-scale carbon capture and storage project. Phase 1 of this world-leading project is already demonstrating the job creation and regional and national economic growth that CCS can bring. We're excited to continue working with NEP to move the project forward from construction to injection.

## **Joanne Leng MBE, Chief Executive, NOF**

NEP provides a renewed focus on the region as a location to invest in, supporting the position of Teesside as a compelling inward investment proposition from both national and international companies. It provides the existing process industry with an opportunity to reduce their production and energy related emissions which could not be achieved practically by other means.

## **Matt Bratton, Regional Director, CBI North East, Tees Valley and Cumbria**

Northern Endurance Partnership is helping to create one of the UK's most significant industrial growth opportunities on Teesside, with benefits extending well beyond the project itself. As construction progresses, we're already seeing local businesses securing contracts, apprentices developing valuable skills and supply chains strengthening across the region. The delivery of carbon capture infrastructure provides a platform for future investment, enabling more industrial projects to locate and grow on Teesside.

## **Graham Stuart MP, Beverley and Holderness**

The Humber has powered Britain for generations and it should remain one of the great centres of British industry for generations to come. Carbon capture and storage can help us keep skilled jobs and major industries here while attracting the next wave of investment. The opportunity is not simply to cut emissions, but to make the Humber an even better place to build, invest and create well-paid jobs. What matters now is getting the infrastructure in place, ensuring local businesses and workers benefit from it, and giving industry the confidence it needs to invest for the long term.

## **Joanne Smith, CEO, NEPIC**

NEPIC welcomes the continued progress of the Northern Endurance Partnership and the development of the Teesside Phase 1 project. This critical infrastructure will play an important role in stimulating growth for existing businesses within the region by providing access to carbon transport and storage solutions that support competitiveness, investment and innovation. It will also create new opportunities for the Tees Valley supply chain to innovate, diversify and compete in emerging low-carbon markets.

### **Joe Howe, Humber Zero Professor of Industrial Decarbonisation, CATCH Humber Industrial Decarbonisation Network**

CCS has a crucial role to play in the transition to low carbon industry in the Humber. This is a huge opportunity for the region. A CCS network with the carbon capture projects identified in this report will deliver on that potential, with clear reindustrialisation benefits, including new jobs, industrial capability, and decarbonisation.

### **David Talbot, Chief Executive Officer, CATCH**

Expanding CCS infrastructure has the potential to unlock industrial investment, safeguard existing jobs and create well-paid skilled careers across the Humber region. To realise those benefits, investment in skills must keep pace with infrastructure. As an independent employer-led training provider, CATCH is committed to developing the workforce, apprenticeships and technical capability needed to support industrial requirements and the region's long-term competitiveness.

### **Andy Dawes, Regional Director for the Humber, Associated British Ports**

ABP's ports at Hull and Immingham are perfectly located to accept CO<sub>2</sub> by road, rail or ship. This allows businesses without a pipeline to safely transport emissions for permanent storage. Today, ABP is adapting established infrastructure to serve modern, green industries, making these deep-water ports ideal aggregation hubs for both UK and international CO<sub>2</sub>. Crucially, expanding port infrastructure will catalyse inward investment, create skilled local jobs and apprenticeships, while delivering vital new capability to the region.

### **David Hooper, Managing Director, Hull & Humber Chamber of Commerce**

The Humber is the biggest polluter of CO<sub>2</sub> in Europe, and that needs to change for the UK to meet its Net Zero targets. We know that the will from business is there and this can unlock inward investment, create much-needed jobs and boost industry, as well as improving the standard of living for everyone in the Humber. With two leading schemes for CCS already in place in our region, with the NEP and Viking proposals well established, it is now time to see these schemes progress at pace. We hope that the new Government will use CCS to unleash the Humber's full potential and help to clean up the brilliant industries that are already here, as well as attracting new ones to the region.



Phase 1 of this world-leading project is already demonstrating the job creation and regional and national economic growth that CCS can bring.

**Gus Jaspert, Managing Director - Marine, The Crown Estate**

## Endnotes

1. CBI Economics: Net Gains: The UK's Net Zero Economy in 2025
2. Northern Growth Strategy: Case for change
3. Energy Research & Social Science (2024) data puts Humber and Teesside at 44 per cent of major cluster emissions.
4. This map is a representation of the East Coast Cluster with NZT Power and the Humber capture projects identified by this report attached. Eventual user selection of NEP's Teesside infrastructure, and the eventual users of a Humber CCS pipeline, remains the responsibility of DESNZ.
5. CBI Economics: Net Gains: The UK's Net Zero Economy in 2025
6. Northern Endurance Partnership is an Incorporated Joint Venture composed of bp, Equinor and TotalEnergies as shareholders. bp are providing construction and operational services to NEP. Apprentices working for our shareholders can work on the NEP project.
7. The Capture Projects included in this report were approached first as they are some of the most mature projects in the region. Our work as part of this report has remained open to any feasible user of the HCCP.
8. Job-years measures the cumulative amount of work over a period, where one job year equals one full-time or standard job position sustained for one full year.

Northern Endurance Partnership is an incorporated joint venture established solely to develop and operate CO<sub>2</sub> transportation and storage infrastructure on behalf of the NEP Shareholders – bp, Equinor and TotalEnergies. Northern Endurance Partnership is a trading name of Net Zero North Sea Storage Limited.



Northern Endurance Partnership, Innovation Central Darlington,  
10 John Williams Blvd, Darlington, DL1 1BF

[enquiries@northernendurancepartnership.co.uk](mailto:enquiries@northernendurancepartnership.co.uk)

[www.northernendurancepartnership.co.uk](http://www.northernendurancepartnership.co.uk)





