Green boost for regions to cut industry carbon emissions

- Projects in the West Midlands, Tees Valley, North West, Humber, Scotland and South Wales win share of £8 million government backing to develop ways to cut carbon emissions from major industrial areas
- UK drive to lead global green industrial revolution will create 4 low-carbon industrial hubs by 2030 and at least one net zero emission cluster by 2040
- new funding is latest phase of government's £170 million Industrial Decarbonisation Challenge which has the potential to create tens of thousands of jobs as UK builds back greener

Six projects across the UK will today receive a share of £8 million in government funding as part of a drive to create the world's first net zero emissions industrial zone by 2040. Projects in the West Midlands, Tees Valley, North West, Humber, Scotland and South Wales will see local authorities working with industry to develop plans to reduce carbon emissions, with one scheme alone – across the North West of England and North East Wales – aiming to create over 33,000 new jobs and more than £4 billion of investment as it bids to become the world's first net zero industrial zone.

A net zero industrial zone will see all industries in a region collectively reducing their carbon dioxide emissions to as close to zero as possible using low-carbon energy sources and new technology like carbon capture.

All 6 areas receiving funding today have high concentrations of industrial activity and will get a share of up to £8 million towards the development of decarbonisation plans.

Energy Minister Kwasi Kwarteng said:

> The UK is leading the world's green industrial revolution, with ambitious targets to decarbonise our economy and create hundreds of thousands of jobs.
>
> As we continue to level up the UK economy and build back greener, we must ensure every sector is reducing carbon emissions to help us achieve our commitment to net zero emissions by 2050.
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> This funding will help key industrial areas meet the challenge of contributing to our cleaner future while maintaining their productive and competitive strengths.

Decarbonising UK industry is a key part of the government's ambitious plan for the green industrial revolution, which is laid out in its Ten Point Plan

and Energy White Paper and is set to create 220,000 jobs as we build back greener over the next decade.

The Industrial Clusters Mission aims to support the delivery of 4 low-carbon regional zones by 2030 and at least one net zero green hotspot by 2040, kickstarted by the government's £170 million Industrial Decarbonisation Challenge.

The 6 winners will now produce detailed plans for reducing emissions across major areas of industrial activity, where related industries have congregated and can benefit from utilising shared clean energy infrastructure, such as carbon capture, usage and storage (CCUS) and low-carbon hydrogen production and distribution.

All the winners have produced initial plans for reducing emissions across major industrial clusters across the UK and, in subsequent years, will build on these preliminary successes by bringing together industry and public sector bodies in a comprehensive effort to devise a route to net zero emissions.

Bryony Livesey, UKRI Challenge Director, Industrial Decarbonisation, said:

> Today's announcement shows that the industrial clusters campaign is proceeding at pace. This second phase of the competition asks companies and partners to plan for comprehensive changes to industries, products and supply lines.
>
> This is a crucial step in the government's plans to develop cost-effective decarbonisation in industrial hubs that tackle the emissions challenge UK industry faces. The move to low carbon industry is a huge opportunity, with the chance for the UK to take the lead and seize a large share of a growing global market.

Notes to editors

The Industrial Decarbonisation Challenge will commit £170 million towards deploying technologies like carbon capture and hydrogen networks in industrial clusters, supporting the Industrial Clusters Mission to establish the world's first net zero industrial cluster by 2040.

The Industrial Decarbonisation Challenge supports co-ordinated research, technology and infrastructure that allows UK industry to reduce carbon emissions across a large scale and in a way that can be easily replicated.

The funding for the £170 million Industrial Decarbonisation Challenge is being made through the UK Research and Innovation (UKRI) Industrial Strategy Challenge Fund.

Regional cluster leads

- in the West Midlands, the Black Country Consortium will be the cluster plan lead
- in the Tees Valley, the cluster plan will be overseen by the Tees Valley Combined Authority
- in the North West of England and North East Wales, the cluster plan will be led by Peel Environmental
- in the Humber it will be led by the Humber Local Enterprise Partnership
- in Scotland NECCUS, an alliance of industries and experts, will lead
- in South Wales, the cluster plan will be led by CR Plus consultancy

List of IDC Phase 2 Cluster Plan Projects

Project title: South Wales Industry – A Plan for Clean Growth

Region: South Wales
Project Lead: CR Plus consultancy

The South Wales Industrial Cluster (SWIC) is a diverse mix of critical industry that have come together to collaboratively achieve common objectives for decarbonisation and clean growth delivering job security.

Led by CR Plus consultancy the SWIC plans centres around a 5 stepped approach to net zero carbon (NZC), 5 spatial zone types will allow SWIC to take immediate steps toward NZC with a low chance of incurring ‘Regret Capital’. As well as targeting a NZC cluster by 2040, this plan focuses on societal needs, circular economy and clean growth aspirations of the region, tackling the common and unique commercial and operational challenges facing SW industry.

Project title: Repowering the Black Country Phase 2 Cluster Plan

Region: Black Country
Project Lead: The Black Country Consortium

The Black Country is 1 of 7 strategic industrial clusters across the UK being supported by BEIS and Innovate UK to decarbonise by 2040. By 2030, without radical action, Black Country industry will be responsible for 2.3 $MtCO_2$ emissions a year, from an industrial base of more than 3000 energy-intense businesses, many still engaged in the region’s traditional metal processing operations.

This project, led by the Black Country Consortium (a partnership of private, public and voluntary sector organisations), aims to reduce these emissions to zero by 2030 through a co-ordinated programme of transformational projects focused around a new type of industrial estate: the zero carbon hub.

Zero carbon hubs will be based around anchor industrial processes, strategically-selected to match Black Country skills and strengths (for example aluminium reprocessing). Each hub will contain a mix of businesses carefully selected to complement each other by thinking about their energy

and waste flows.

Project title: Net Zero Tees Valley: Cluster Plan Stage 2

Region: Teesside
Project Lead: Tees Valley Combined Authority

The Tees Valley is the UK's most compact and integrated industrial cluster with a radius of 5 miles. The cluster includes several of the UK's top CO2 emitters and is responsible for 8.8 million tonnes of CO2. The Tees Valley industrial cluster generates £12 billion of exports annually, employs over 12,000 people and currently contributes some £2.5 billion to UK gross value added (GVA).

The cluster plan will be led by the Tees Valley Combined Authority and will identify the most appropriate range of technologies and potential pathways for the various industrial producers and energy generators in the Tees Valley, considering both existing and future new entrants. It is expected that this plan will combine carbon capture at scale, fuel switching to hydrogen, integration of renewables, low carbon energy sources, feedstocks changes, together with improved process and energy efficiencies.

Project title: Scotland's Net Zero Roadmap (SNZR)

Region: Scotland
Project Lead: Neccus

To achieve net zero by 2045 Scotland needs to decarbonise industry, transport, heat and power. Scotland's Net Zero Roadmap project (SNZR) will provide the roadmap to enable large-scale industrial CO2 emissions reduction in a way that focuses on ensuring the continued, but evolving, contribution of high-value industry and employment in a future net zero economy.

Led by Neccus, an alliance of industries and experts, the SNZR will provide the roadmap that enables the deployment of options in a way that ensures competitive decarbonisation through continued and growing prosperity across the economy.

Scotland is in a strong position to lead this new large scale CO2 management industry. Offshore Scotland has some of Europe's best-characterised and largest CO2 storage sites while CCS and hydrogen will create opportunities for jobs and economic activity and help transition staff employed in sectors such as oil and gas.

Project title: The Net Zero NW Cluster Plan

Region: North West
Project Lead: Peel Environmental

The Net Zero NW Cluster Plan, led by Peel Environmental, a development company, will set out the transition to net zero for industry in the North West of England and North East Wales. It will describe the investments,

technologies, infrastructure changes and sequencing required to fulfil the UK’s Industrial Clusters Mission.

Industry and public sector bodies, building on the preliminary research completed in Phase 1, will collaboratively promote and engage on plans to decarbonise, ensuring businesses have a strong voice in planning decarbonisation activity in line with current and future business needs whilst leveraging inward investment opportunities.

By enabling multiple industrial facilities to reduce their emissions by the greatest possible extent, with knock-on effects in the reduction of commercial, domestic and transport emissions, the Net Zero NW Cluster Plan hopes to realise over 33,000 new jobs, over £4 billion investment and the world’s first net zero industrial cluster.

Project title: Humber Industrial Cluster Plan

Region: Humber
Project Lead: Humber Local Enterprise Partnership

The Humber Local Enterprise Partnership (Humber LEP) and membership organisation CATCH will lead on the project and work with industrial partners across the Humber to develop the Humber Cluster Plan (HCP) that will enable the Humber industrial cluster, the UK’s largest by carbon emissions, to achieve net zero by 2040.

The Humber emits more CO2 than any other industrial cluster (30% more than the next largest), while the area is one of the most vulnerable to climate change. A quarter of the Humber’s GVA and 1 in 10 jobs depend on these industries, making safeguarding their competitiveness imperative for the local economy as well as strategically important for the UK.

A phased approach will prioritise near-term deliverable investments that will see quick results, significantly reducing the Humber’s emissions by 2030, mapping out how carbon capture and storage (CCS) and hydrogen infrastructure can be scaled up over time, and identifying the full range of interventions required to achieve net zero by 2040.

HCP will also outline the potential for the Humber’s industrial decarbonisation to support decarbonisation beyond the industrial cluster, including maritime in the UK’s largest ports complex, road/rail transport and decarbonisation of the gas supply (25% of the UK’s supply passes through the Humber). Linked opportunities and implications for renewable energy, especially bioenergy with carbon capture and storage (BECCS) and offshore wind (both of which the Humber leads on and are integral to decarbonising industry), will also be identified.