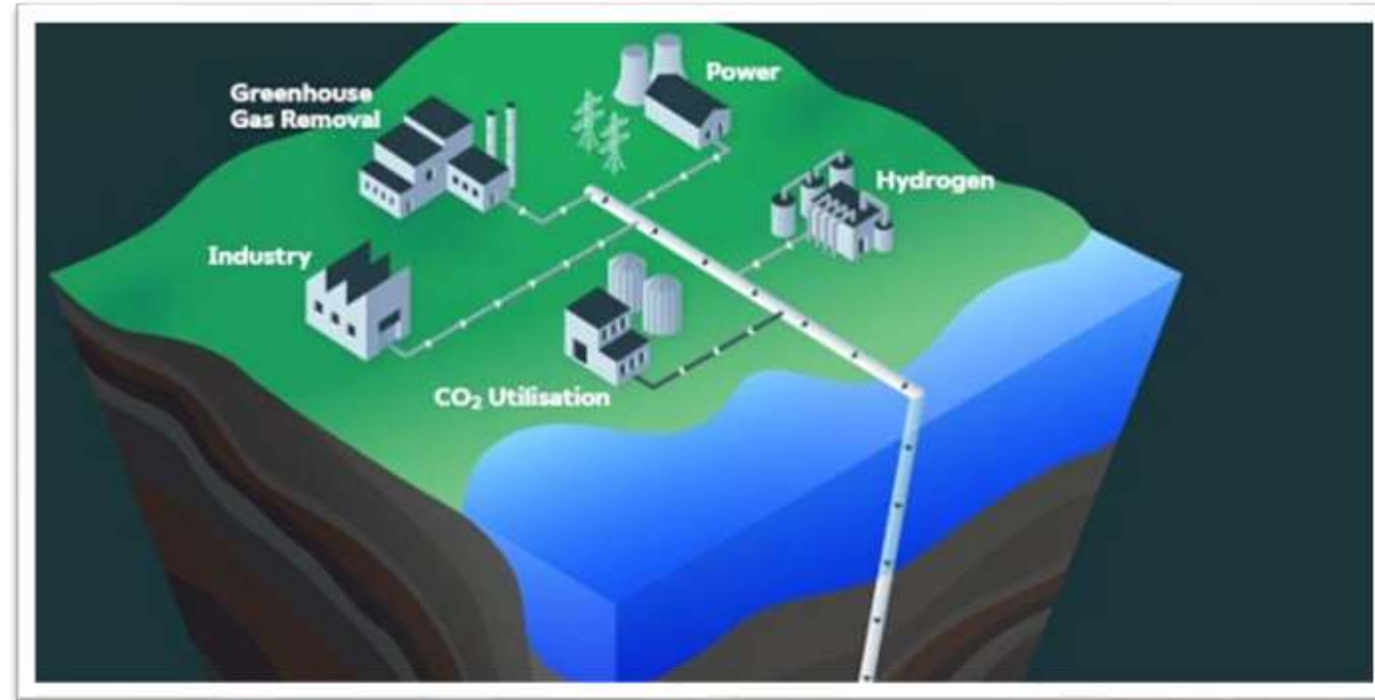




UK Research  
and Innovation

# The Industrial Decarbonisation Challenge

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IDC Challenge Director



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Industrial Decarbonisation Challenge

# Industry Emissions Today



# IDC Overview

## Deployment (£172m)

Support significant reduction in carbon emissions through at-scale decarbonisation of each cluster:

- FEED, permits and business plans
- Demonstration of cost-effective technologies and processes
- Core infrastructure in place for further decarbonisation
- Supply chain, jobs and skills creation

## Cluster Plans (£8m)

Develop plans for achieving net zero across the cluster, including:

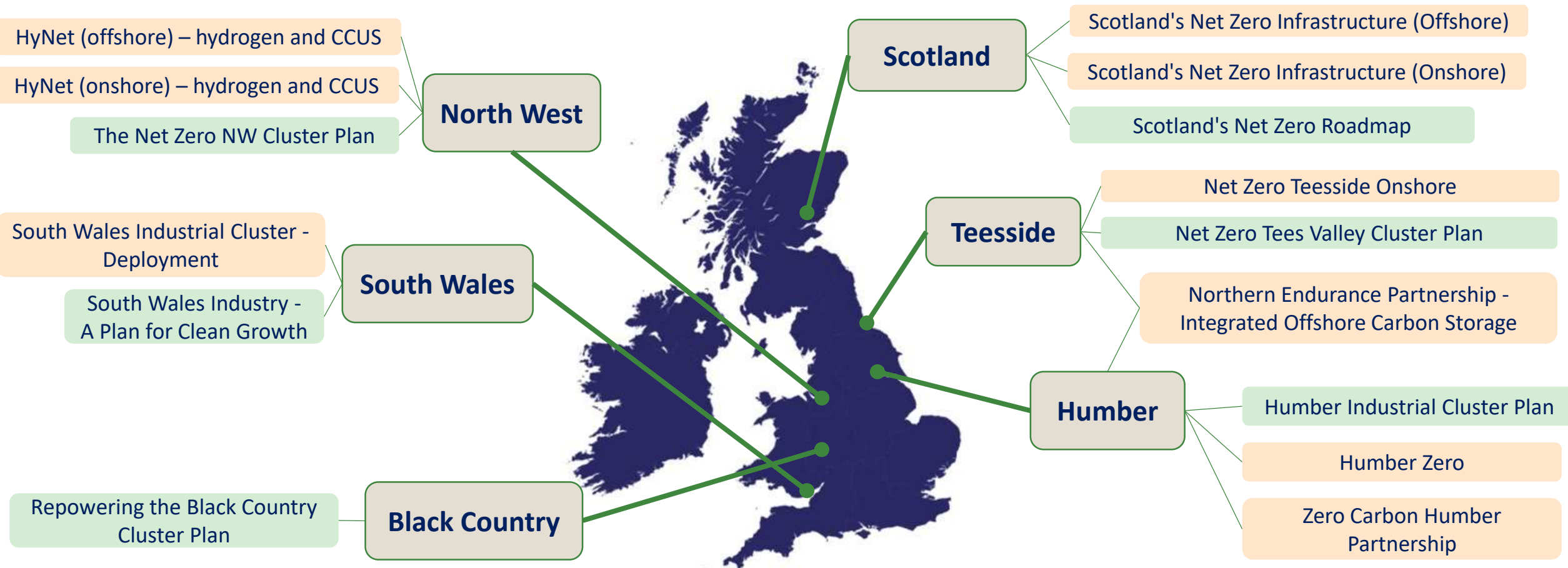
- Technology, infrastructure and policy gaps
- Business plans, regulatory and financing models
- Identification of skills and training needs
- Formation of a broad coalition of support

## IDRIC (£20m)

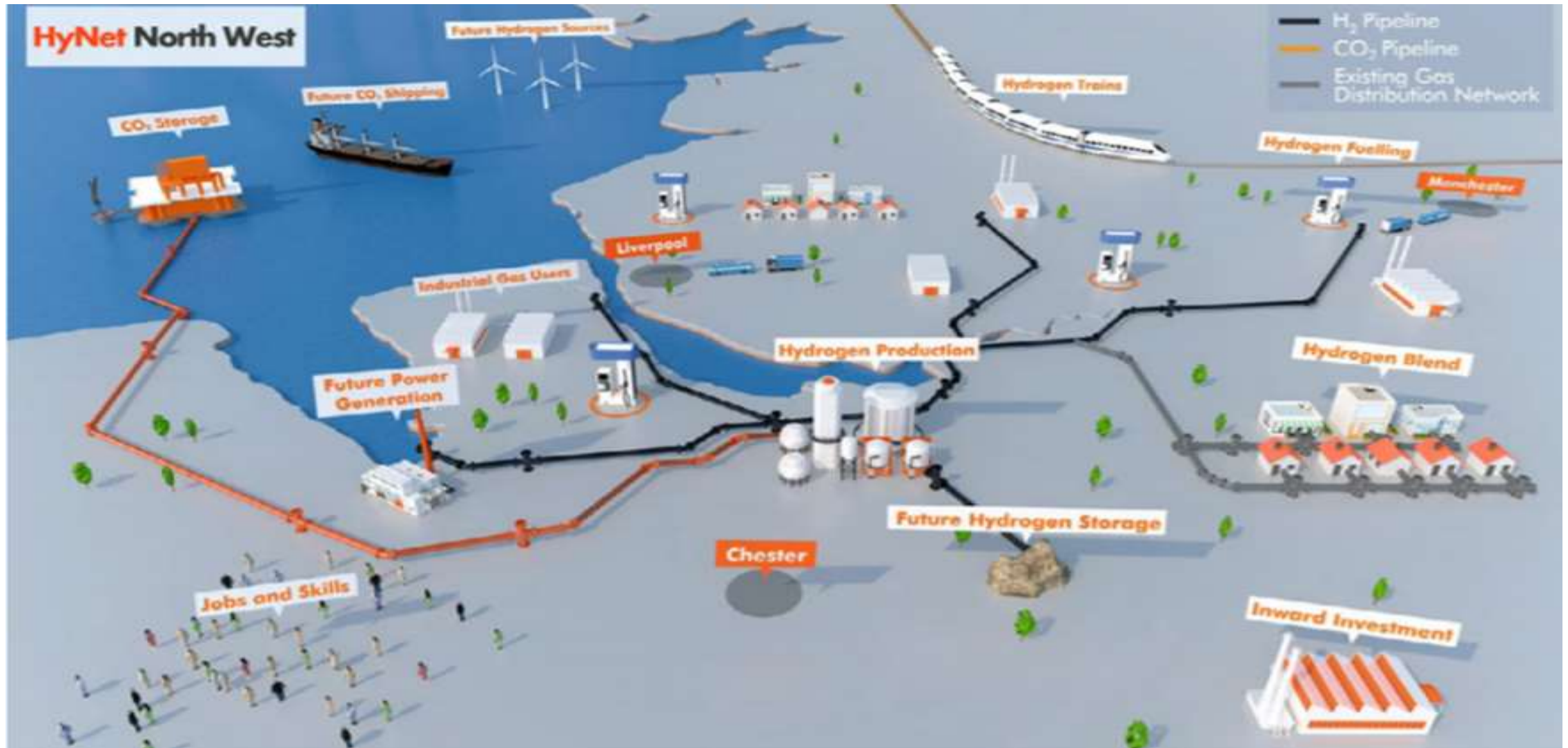
Multidisciplinary research in cross-cutting areas of technology, policy and economics and deliver a programme of knowledge exchange activities.

- Strong evidence base to enable informed decisions about future decarbonisation options, policies and institutional reforms.
- Cross learning between industrial clusters
- Virtual centre, led by Prof. Maroto-Valer, Heriot-Watt University

# IDC-Supported Clusters and Projects



# Example Project – North West





# Political Landscape Development



IDC Funding aligns with the **Industrial Clusters Mission**:  
*“We will establish the world’s first net-zero carbon industrial cluster by 2040 and at least one low-carbon cluster by 2030”*



## **Government Budget March 2020:**

The government will establish in at least two UK sites, one by the mid-2020s, a second by 2030. This will be supported by the creation of a new Infrastructure Fund of at least £800 million.



IDC Funding aligns with **The Ten Point Plan for Green Industrial Revolution November 2020**:  
*“We will establish CCUS in two industrial clusters by mid 2020s, and aim for four of these sites by 2030, capturing up to 10 Mt of carbon dioxide per year.”*



## **Ambition of the Industrial Decarbonisation Strategy March 2021:**

*“four of our major industrial regions linked up to the necessary decarbonisation infrastructure by 2030; around 3 MtCO<sub>2</sub> of industry emissions captured each year by 2030 [...] low carbon fuels such as hydrogen, electricity and bioenergy replacing fossil fuels, unless combined with carbon capture”*

# Progress, and What's Next?

Deployment (£172m)	Cluster Plans (£8m)	IDRIC (£20m)
<p>All projects underway</p> <ul style="list-style-type: none"><li>• 3 offshore storage projects</li><li>• 6 cluster decarbonisation projects</li><li>• Completion March 2023-March 2024</li></ul>	<p>All projects underway</p> <ul style="list-style-type: none"><li>• 6 industrial clusters are developing detailed decarbonisation plans</li><li>• A UK-wide plan will also be developed to integrate some elements of this work (details to be announced later in 2021)</li><li>• Completion March 2023</li></ul>	<p>1 April 2021-31 March 2024</p> <p>Initial programme of work is due to be announced soon</p>

- Projects are all now in the delivery phase
- How to share learning in a meaningful way?
- What more can an industrial cluster deliver?