

# Industrial Decarbonisation Challenge: Supporting the decarbonisation of key industrial clusters in the UK

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## Abstract

The Industrial Decarbonisation Challenge (IDC) supports development of low-carbon technologies and infrastructure in six of the largest industrial clusters in the UK. IDC aims to contribute to the UK's clean growth by reducing CO<sub>2</sub> emissions from energy intensive industries, such as iron and steel, cement, refining and chemicals, whilst still maintaining industry competitiveness. The IDC provides £210 million, matched by £261 million from industry, to invest in developing technologies such as carbon capture and storage and hydrogen fuel switching for deployment at scale.

In this contribution, we will provide an overview of the recent updates from the three key workstreams of the Industrial Decarbonisation Challenge, these include:

- **Deployment projects:** £171 million of investment to support the development of detailed designs of decarbonisation projects at scale in at least one industrial cluster to demonstrate a cost-effective approach. The stage two deployment projects include:
  - HyNet– Hydrogen and CCUS (onshore and offshore)
  - Scotland's net zero infrastructure (onshore and offshore)
  - Net Zero Teesside
  - Northern Endurance Partnership
  - Zero Carbon Humber
  - Humber Zero
  - South Wales Industrial Cluster
- **Cluster plans:** £8 million of investment to develop understanding in future technology and infrastructure needs, policy gaps, barriers and business, regulatory and financing models; this will be used to provide clear, evidence-based and attainable plans for decarbonising the cluster as whole. The six cluster plan projects are:
  - Humber Industrial Cluster Plan
  - Net Zero North West Cluster Plan
  - South Wales Industrial Cluster
  - Scottish Net Zero Roadmap
  - Repowering the Black Country
  - Net Zero Tees Valley Cluster Plan
- **Industrial Decarbonisation Research and Innovation Centre (IDRIC):** £20 million to create a research programme jointly led by academia, industry and government to deliver scientific evidence to feed into recommendations to policy makers and address barriers to commercialisation of decarbonisation technologies.

These strands together will help identify and resolve technical knowledge barriers to deployment, as well as facilitate the sharing of knowledge across clusters.