

ZERO STARTS HERE

What Does it Take to Create a Carbon Neutral Energy Intensive Industry in the UNECE Region?

Wednesday 14th April 2021

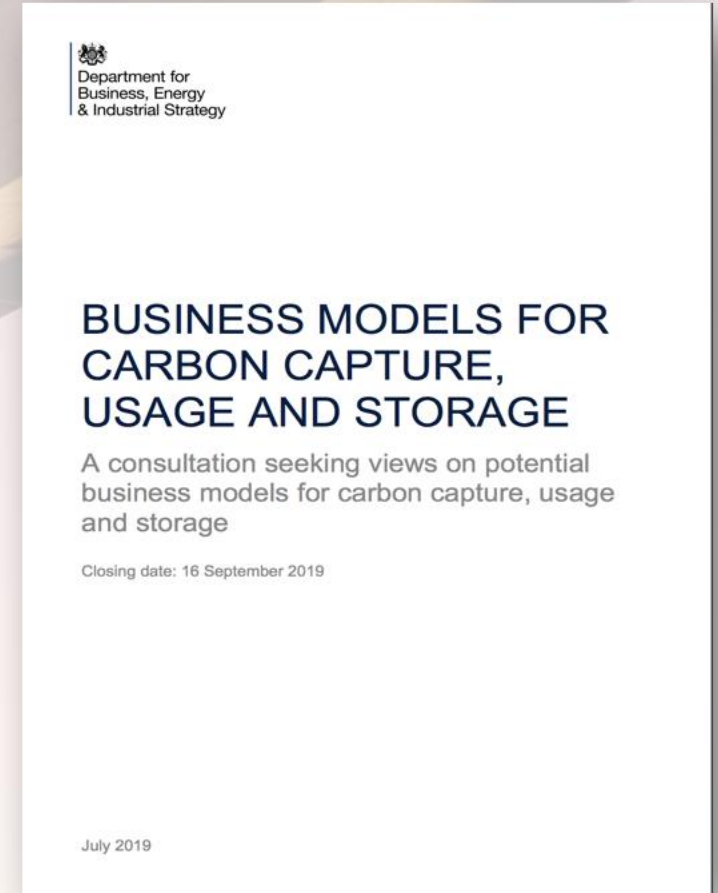
GB Industrial Clusters...Key Enablers



Structured Early Collaboration



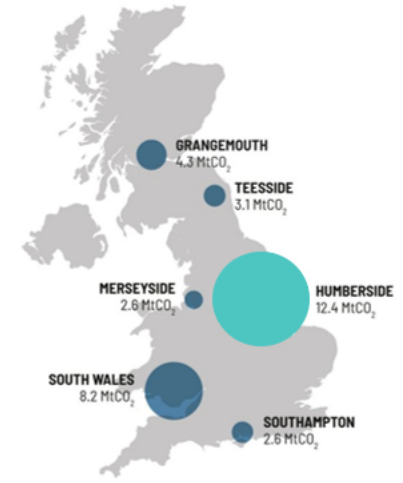
Committed Ambition



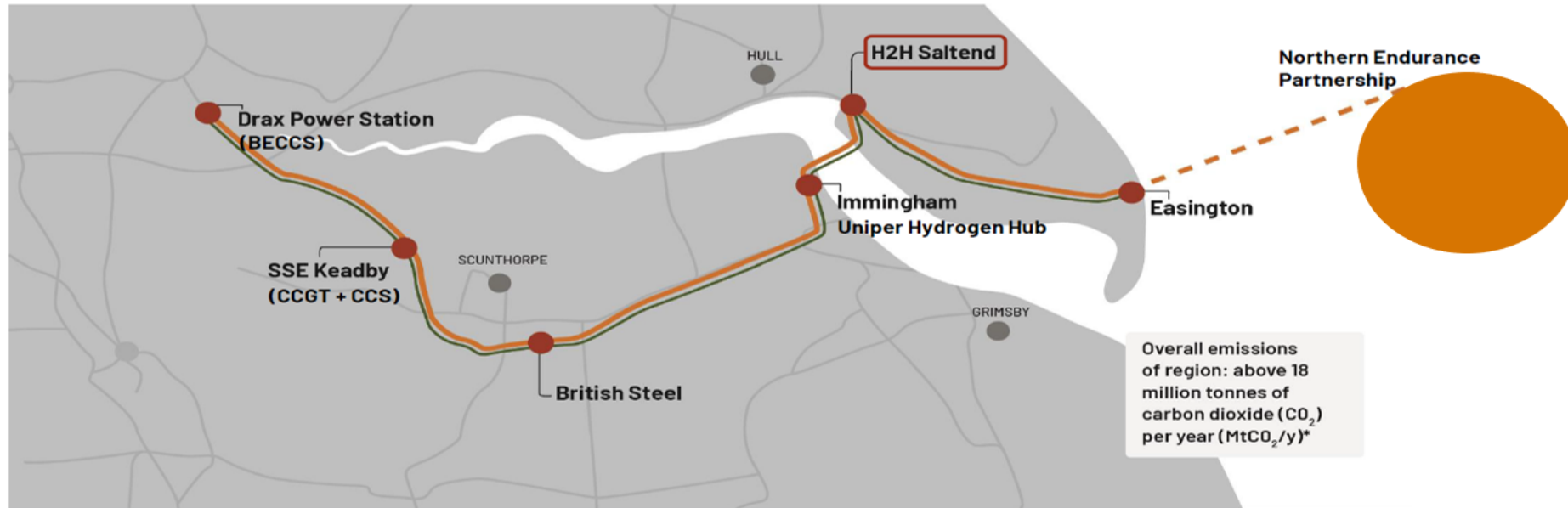
Business Models

ZEROCARBON HUMBER

■ **PROVEN PARTNERS COMMITTED TO CLEAN GROWTH**



■ **With a £75M BLUEPRINT TO KICK-START A NEW LOW CARBON ECONOMY**



KEY — Hydrogen pipeline (illustrative) — CO₂ pipeline (illustrative) ● ZCH businesses / facilities

GLOBAL LIGHTHOUSE FOR NET ZERO CLUSTERS

We want to transform the Humber into **the world's first carbon neutral industrial cluster by 2040.**

This ambition would be realised by creating:

- The **world's largest hydrogen production plant** with CCS at Equinor's H2H Saltend project
- The **world's first carbon negative power station** at Drax
- The **UK's first decarbonised gas power stations** at SSE's Keadby site
- Additional **hydrogen production capability** at Uniper's Killingholme site
- **Low carbon steel production** at Scunthorpe steelworks

This would be enabled by:

- **A regional carbon dioxide (CO₂) transportation system**, shared by multiple users
- **Hydrogen pipelines** enabling the decarbonisation of the Humber and the wider North of England
- **Safe offshore subsea CO₂ storage**, which can also be utilised by the Teesside cluster



DELIVERING FOR UK PLC

**A TRANSFORMATIVE VISION
FOR THE HUMBER**



**PROVEN PARTNERS WITH A
SHARED AMBITION TO TURN
THE HUMBER INTO THE
WORLD'S FIRST ZERO
CARBON INDUSTRIAL
CLUSTER BY 2040**

**BUILDING BACK BETTER AS PART
OF A GREEN RECOVERY**



**SAFEGUARDING OF 55,000
EXISTING INDUSTRIAL JOBS
AND CREATION OF
THOUSANDS OF NEW LOW
CARBON JOBS BASED
AROUND CCS AND
HYDROGEN**

**VALUE FOR MONEY
PROPOSITION FOR THE UK**



**THE HUMBER CAN DELIVER
COST EFFECTIVE
DECARBONISATION BY
REALISING ECONOMIES OF
SCALE IN THE REGION AND IN
PARTNERSHIP WITH TEESSIDE**

**SUPPORTING GB CLIMATE
LEADERSHIP AHEAD OF COP26**



**SHOWCASING UK LEADERSHIP
ON THE WORLD STAGE, DRIVING
INWARD INVESTMENT &
ENABLING THE UK TO TRADE IN
LOW-CARBON MANUFACTURED
PRODUCTS**

**ZEROCARBON
HUMBER**



ASSOCIATED
BRITISH PORTS



centrica

drax



MITSUBISHI
POWER

nationalgrid



sse
Thermal

TRITON POWER

uni
per



UNLOCKING WORLD-LEADING PROJECTS



Two first-of-a-kind low-carbon power stations:

- **Keadby CCS** – one of the UK's first CCGTs with CCS
- **Keadby Hydrogen** – world's first major 100% hydrogen-fuelled power station

Providing flexible, efficient power to support intermittent renewable generation and maintain security of supply through the net zero transition.

“

This new partnership will ensure that world-first technology is being developed in Scunthorpe and across the Humber, creating green jobs and bringing new investment which will benefit local communities and businesses – revitalising this industrial heartland as the UK builds back greener.

”

Kwasi Kwarteng
UK Secretary of State for Business, Energy and Industrial Strategy