

Rt Hon Kwasi Kwarteng MP  
Minister of State for Business, Energy and Industrial Strategy  
1 Victoria Street  
London  
SW1H 0ET

22 October 2020

Dear Minister

**Zero Carbon Humber: 'Build Back Better' by creating the world's first zero carbon industrial cluster**

The Zero Carbon Humber (ZCH) Partnership has recently submitted its public and private sector funded Industrial Strategy Challenge Fund (ISCF) bid worth around £75 million to accelerate decarbonisation in the UK's most carbon intensive industrial region, helping to support clean growth, future-proof vital industries and protect and create new jobs.

The Partnership brings together twelve leading organisations including international energy companies, heavy industry, infrastructure and logistics operators, global engineering firms and academic institutions in a plan to create the world's first net zero industrial cluster by 2040 through low carbon hydrogen, carbon capture and negative emissions, known as carbon removal technology.

In addition to these twelve major partners, the bid is supported by an abundance of other organisations who recognise its unique offering and unrivalled benefits for the environment and the economy. These supporters, demonstrated by the attached selection of forty-five formal letters of support, include international trade bodies and chambers of commerce; local authorities and LEPs; business and investment bodies; equality and diversity groups; trade associations; academic institutions; training providers; and supply chain networks.

We believe this illustrates the unified strength of Zero Carbon Humber Partnership's ISCF bid, which we would welcome the opportunity to brief you on further.

*Preserving and creating jobs in a proud industrial economy*

As you will be aware, the Humber is the most strategically important industrial cluster in the UK. It supports over 55,000 jobs across a diverse range of industries including petrochemicals, steel works and power generation. It is also the most carbon intensive. That is why we formed our partnership to jointly develop a strategy to transform the Humber into the world's first carbon neutral industrial cluster by 2040. In doing so, it will help to 'level up' an important region of the North of England by driving investment in a new green economy and creating new jobs. It will also reinforce the UK's leadership position on climate change in the run up to COP26, building on the Prime Minister's speech on 6th October.

*Building a suite of innovative projects with a shared infrastructure*

The ZCH partnership is already working to lay the foundations for this transformation of the Humber. In July, Equinor unveiled plans to build H2H Saltend, one of the world's largest hydrogen production facilities with carbon capture, that will deliver the world's first decarbonised chemicals park at px Group's Saltend Chemicals Park near Hull. In the first phase, this could reduce emissions by circa 900,000 tonnes per year as industrial

customers switch fuel to low-carbon hydrogen and Triton Power's gas power plant blends hydrogen into the fuel supply via its upgraded Mitsubishi turbines.

H2H Saltend will also serve as the foundation for the common carbon dioxide (CO<sub>2</sub>) and hydrogen transport system, led by National Grid Ventures, to enable sites across the region to decarbonise. The CO<sub>2</sub> will be compressed at Centrica Storage's Easington site and stored under the Southern North Sea using offshore infrastructure which can be shared with the Teesside industrial cluster.

At Drax Power Station, Britain's largest renewable generator is piloting innovative biomass with carbon capture (BECCS) technology that could enable it to become the world's first carbon negative power station by 2027. SSE Thermal also plans to establish its Keadby site near Scunthorpe as a clean power hub for the region with Keadby 3 as the UK's first gas-fired power station equipped with carbon capture and storage technology. The network will also run via Immingham, where Uniper is planning to add to its European hydrogen ambitions by developing clean hydrogen production at its Killingholme site, in line with Uniper's pledge to be carbon neutral in Europe by 2035.

As one of the UK's leading steel manufacturers, and a significant local employer, British Steel could benefit from the ZCH infrastructure as part of its drive to lower emissions. ABP, the major ports and logistics provider for the region, will support the global reach of the low carbon products and chemicals produced on both banks of the River Humber.

The ZCH projects are supported by the University of Sheffield Advanced Manufacturing Research Centre, which models the wider economic and supply chain opportunities in the UK provided by these new technologies.

All the ZCH partners have worked together to develop a credible, strategic plan to roll-out the deployment of these projects in the 2020s and submit a project proposal to the second phase of the Industrial Decarbonisation Challenge.

#### *Developing the UK's capabilities in clean technologies in advance of COP26*

The technologies being developed in the Humber – hydrogen production and low-carbon products, decarbonised power generation and negative emissions from BECCS – are all critical collectively to achieving Net Zero. Together, they demonstrate the UK's commitment to climate leadership in advance of COP26 in Glasgow next year. They also represent technologies that the UK could develop the knowledge, skills and expertise to become a world leader and export these technologies abroad. As other countries seek to decarbonise their economies the market for carbon capture and hydrogen technologies and low carbon products will grow exponentially in the 2030s and beyond. We would be delighted to contribute to the fifth anniversary of the Paris Agreement to showcase this opportunity.

#### *Working in partnership with the Government*

Over the coming months your department is due to take a number of critical decisions that will influence the direction of CCS and hydrogen in the UK for years to come. On behalf of the ZCH partnership, which will play an integral role in developing these technologies, we would like to discuss with you the key decision points facing our businesses in the coming three to 12 months, and the areas where intervention from Government is crucial to mobilising the private finance and investment decisions we wish to make.

I am delighted to attach a collection of letters demonstrating the strength of support for our proposals.

If you would like to visit our partner sites or discuss any of the above in further detail, we would welcome hearing from you on [dcair@equinor.com](mailto:dcair@equinor.com). We look forward to hearing from your office in due course.

Yours sincerely,

# **ZEROCARBON** HUMBER

On behalf of the Zero Carbon Humber Partnership, comprising:

*Associated British Ports; British Steel; Centrica Storage; Drax; Equinor; Mitsubishi Power; National Grid Ventures; px Group; SSE Thermal; Triton Power; Uniper; University of Sheffield Advanced Manufacturing Research Centre*

*Attached are letters of support from the following organisations:*

- Alternative & Renewable Transport (ART) Fuels Forum
- Apollo Engineering
- Aura Innovation Centre
- Bishop Burton College
- CATCH
- C-Capture
- Confederation of British Industry (CBI)
- DN Colleges Group
- DNV GL
- East Riding of Yorkshire Council
- E & D Talent
- Energy Institute
- Engie
- ETN Global
- EU Turbines
- Federation of Small Businesses (FSB)
- G2W Ventures
- Global Carbon Capture & Storage (CCS) Institute
- GMB Union
- Greater Lincolnshire LEP
- Grimsby Institute
- Hull City Council
- Hull & Humber Chamber of Commerce
- Humber LEP
- Humber Offshore Training Association (HOTA)
- Make UK
- Marketing Humber
- Mitsubishi Heavy Industries
- North Lincolnshire Council
- North East Lincolnshire Council
- Northern Powerhouse Partnership
- Norwegian-British Chamber of Commerce
- NP11
- ORE Catapult
- OSL Consulting
- Penspen
- Premier Oil
- RMRI Consulting
- Siemens Energy
- Team Humber Marine Alliance
- University of Hull
- University of Leeds
- University of Sheffield
- Women into Manufacturing & Engineering
- York & North Yorkshire LEP