



**Department for
Business, Energy
& Industrial Strategy**

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

Darren Jones MP
Chair of the Business, Energy and Industrial Strategy
Committee
House of Commons
London
SW1A 0AA

T +44 (0) 20 7215 5000
E enquiries@beis.gov.uk
W www.gov.uk

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Dear Darren,

Publication of UK Hydrogen Strategy and Consultation Package

I am pleased to announce that the government is today publishing the UK's first ever Hydrogen Strategy, alongside policy detail on its support for low carbon hydrogen production across the UK. I would have preferred for the package to be published when the House is sitting but given the keen interest from investors and the need to consult with industry before finalising policy in the coming months, we considered it important to set out the government's vision as soon as possible.

The Hydrogen Strategy drives forward the commitments laid out in the Prime Minister's ambitious 10 Point Plan for a green industrial revolution by setting the foundation for how the UK Government will work with industry to meet its ambition for 5GW of low carbon hydrogen production capacity by 2030.

A booming, UK-wide hydrogen economy could be worth £900 million and create over 9,000 high-quality jobs by 2030, potentially rising to 100,000 jobs and worth up to £13 billion by 2050. By 2030, hydrogen could play an important role in decarbonising energy-intensive industries like chemicals, oil refineries, power and heavy transport like shipping, and HGV lorries and trains, by helping these sectors move away from fossil fuels.

With Government analysis suggesting that 20-35% of the UK's energy consumption by 2050 could be hydrogen-based, this new energy source could be critical to meet our targets of net zero emissions by 2050 and cutting emissions by 78% by 2035 – a view shared by the UK's independent Climate Change Committee. A low-carbon hydrogen economy could deliver emissions savings the equivalent to the carbon captured by 700 million trees and is a key pillar of capitalising on cleaner energy sources as the UK moves away from fossil fuels.

As part of the package announced today, we have launched a public consultation on a preferred hydrogen business model which, built on a similar premise to offshore wind Contracts for Difference, is designed to overcome the cost gap between low carbon hydrogen and fossil fuels. Alongside this, the Government is consulting on the design of the £240 million Net Zero Hydrogen Fund, which aims to support the commercial deployment of new low carbon hydrogen production plants across the UK.

Other measures included in the UK's first-ever Hydrogen Strategy include:

- Outlining a 'twin track' approach to supporting multiple technologies including 'green' electrolytic and 'blue' carbon capture-enabled hydrogen production; and committing to providing further detail in 2022 on the Government's production strategy;

- Collaborating with industry to develop a UK standard for low carbon hydrogen giving certainty to producers and users that the hydrogen the UK produces is consistent with net zero while supporting the deployment of hydrogen across the country;
- Undertaking a review to support the development of the necessary network and storage infrastructure to underpin a thriving hydrogen sector;
- Working with industry to assess the safety, technical feasibility, and cost effectiveness of blending 20% hydrogen into existing gas supply. Doing so could deliver a 7% emissions reduction on natural gas
- Launching a hydrogen sector development action plan in early 2022 setting out how the Government will support companies to secure supply chain opportunities, skills and jobs in hydrogen

Throughout the development of the UK Hydrogen Strategy, we have been engaging with industry through the Hydrogen Advisory Council and its working groups, to ensure that the package of measures will bring forward the necessary investment across the value chain to deliver on our 5GW ambition.

The government is already working with the Health and Safety Executive and energy regulator Ofgem to support industry to conduct first-of-a-kind hydrogen heating trials. These trials along with the results of a wider research & development testing programme will inform a UK Government decision in 2026 on the role of hydrogen in decarbonising heat. We are today consulting on changes to legislation to facilitate these trials and ensure that gas network companies can carry out activities to deliver the trial, as well as appropriate protections for those living in the trial area.

With less than 100 days to go until the global COP26 climate summit, today's Hydrogen Strategy sends a strong signal globally that we are committed to building a thriving low carbon hydrogen economy that could deliver hundreds of thousands of high-quality green jobs, support the revitalisation of our key industrial heartlands and bring significant investment to the UK. I welcome the opportunity to engage with you and the BEIS Select Committee further as we deliver these commitments.

I will lay the Hydrogen Strategy as a Command Paper before Parliament and will place copies of the accompanying policy publications in the Libraries of the House:

- *Low Carbon Hydrogen Business Model: consultation on a business model for low carbon hydrogen*
- *Designing the Net Zero Hydrogen Fund – Consultation*
- *Consultation on a UK Low Carbon Hydrogen Standard and Options for a UK low carbon hydrogen standard*
- *Hydrogen Analytical Annex - Analytical Annex to the Hydrogen Strategy, Net Zero Hydrogen Fund consultation, Low Carbon Hydrogen Business Model consultation, and Low Carbon Hydrogen Standards consultation*
- *Hydrogen Production Cost 2021 and Hydrogen Production Cost 2021 Annex: Key assumptions and outputs for production technologies*

Yours sincerely,



RT HON KWASI KWARTENG MP

Secretary of State for Business, Energy and Industrial Strategy