

Energy Security Strategy - Hydrogen

The UK Government's British Energy Security Strategy is an updated plan for "a strong, home-grown, low-carbon economy to strengthen our energy security into the future". Hydrogen (alongside nuclear and offshore wind) is one of the key pillars:

- In the strategy's foreword, the PM says: "We're going to produce vastly more hydrogen, which is easy to store, ready to go whenever we need it, and is a low carbon superfuel of the future".
- The doubling of the production target to 10GW, with a clear "intention that at least half of this will come from electrolytic hydrogen" is a significant scale up of ambition.
- Hydrogen binds other aspects of the strategy together. The Strategy states that: "Investing in the North Sea, expanding our renewable capacity, and leading in nuclear power will also enable the UK to produce more hydrogen".
- BEIS recognises the non-disruptive benefits that hydrogen offers (which is key for taking voters on the Net Zero journey), stating that: "We fully support hydrogen as a relatively frictionless way to decarbonise our lives in the near-term".

In addition to the ramping up of the production target, the key measures announced are:

- Annual allocation rounds for electrolytic hydrogen, moving to price competitive allocation by 2025 as soon as legislation and market conditions allow.
- 1GW of electrolytic hydrogen in construction or operational by 2025, with up to 2GW of production capacity overall (including CCUS-enabled hydrogen) in operation or construction by 2025.
- Design, by 2025, new business models for hydrogen transport and storage infrastructure, which will be "essential to grow the hydrogen economy and provide security for producers and consumers of hydrogen".
- Set up a hydrogen certification scheme by 2025, which will aim to open up export opportunities and help ensure both exported and imported hydrogen meet high standards.
- The Government has also published a 'Hydrogen Investment Package'. Ambitious targets, like those listed above, are only meaningful with policy to support them. This package delivers on significant Hydrogen Strategy commitments, with more detail on priority policies, informed by industry responses to the consultations that were published alongside the Hydrogen Strategy last August.
- A top BEIS official "The Energy Security Strategy yesterday set out the government's increased ambition for the UK hydrogen economy, and the Hydrogen Investment Package published today fires the starting gun on the concrete delivery of that ambition - this is what industry have been waiting for and places the UK firmly at the forefront of global efforts to develop low carbon hydrogen as a clean, secure energy source of the future."

Overall, this package contains:

- Government responses to consultations on the Hydrogen Business Model, Net Zero Hydrogen Fund and Low Carbon Hydrogen Standard, along with indicative Heads of Terms for the Business Model.
- The package includes an Hydrogen Investor Roadmap to help guide investors through the huge investment opportunity across the UK hydrogen economy.



- There is further information on the launch of the Industrial Hydrogen Accelerator programme, and some guidance and research reports connected to the low carbon hydrogen standard.
- This comes ahead of the Net Zero Hydrogen Fund (NZHF) opening for applications on 25 April, and alongside the consultation opening today on the joint allocation round for electrolytic projects for the Business Model and NZHF, ahead of applications opening for this in the summer.
- The Government's increased focus on hydrogen has clearly been driven by political decision-making and priorities - with the PM firmly at the centre of this, evidenced by his quote - the labelling of hydrogen as a 'superfuel' is now being commonly used by other ministers.
- The Conservative Environment Network, an influential group of Conservative MPs, Lords and councillors, praised the Government's plans to "firmly back emerging technologies like hydrogen". This means the centre of the Tory party, and a major part of the grassroots, are broadly aligned on hydrogen.
- By raising the hydrogen production target from 5GW to 10GW, and introducing a green and blue split, the Government has sought to tackle two major criticisms of the Hydrogen Strategy - 1. That it wasn't ambitious enough and 2. It was too 'blue bias' - a challenge that was sometimes raised by Labour and the Lib Dems.
- On wider political points on the British energy supply strategy, the Chancellor vetoed new spend on energy efficiency, and splits between No10 and BEIS with other cabinet ministers and backbenchers regarding onshore wind, all heavily influenced the final shape of the document. Hydrogen will not be exempt from these political and financial pressures, but the PM's desire to place a 'big bet' won through. However, the Treasury will have had significant reservations about increasing the hydrogen ambition before any low carbon hydrogen has actually been built. HY NEWS is not surprised that the strategy includes obvious caveats such as 'subject to affordability and value for money' in the hydrogen section and we can expect HMT to pay very close attention to project costs in the early production pipeline.

