



Department for
Energy Security
& Net Zero

Investing in a sustainable UK transition

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BNEF data shows UK low-carbon investment increased 71% from 2022 - 2023

According to BloombergNEF Energy Transition data, **low carbon investment increased from £35bn to £60bn (71%) in real terms from 2022 to 2023**, primarily driven by offshore wind.

Low carbon investment made up an even larger share of GDP in 2023, putting us joint top of the G7.

Figure 1: UK Low-Carbon Investment 2019-2023 (real £bns)

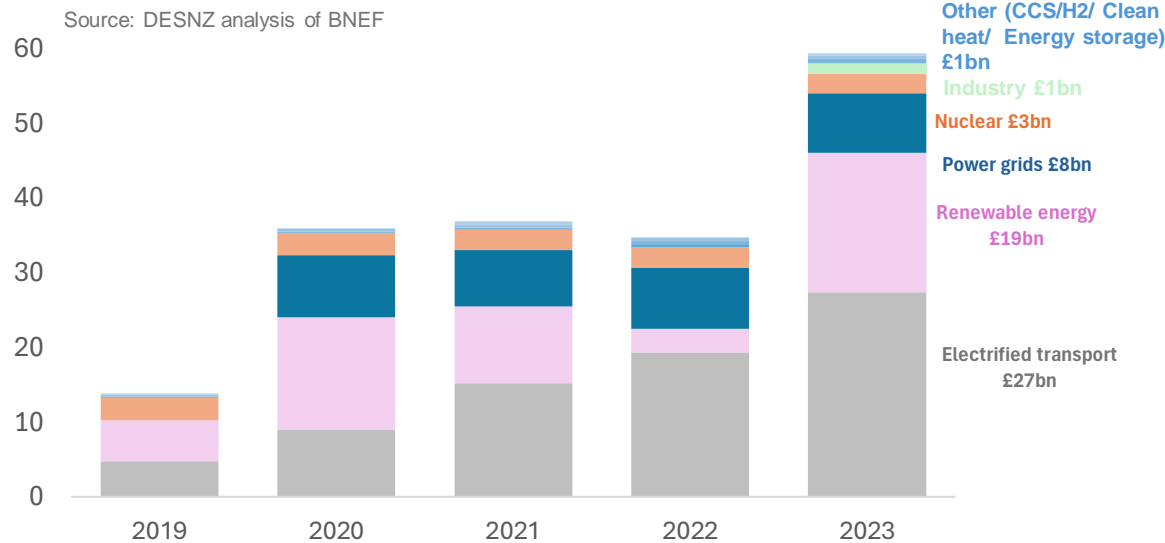
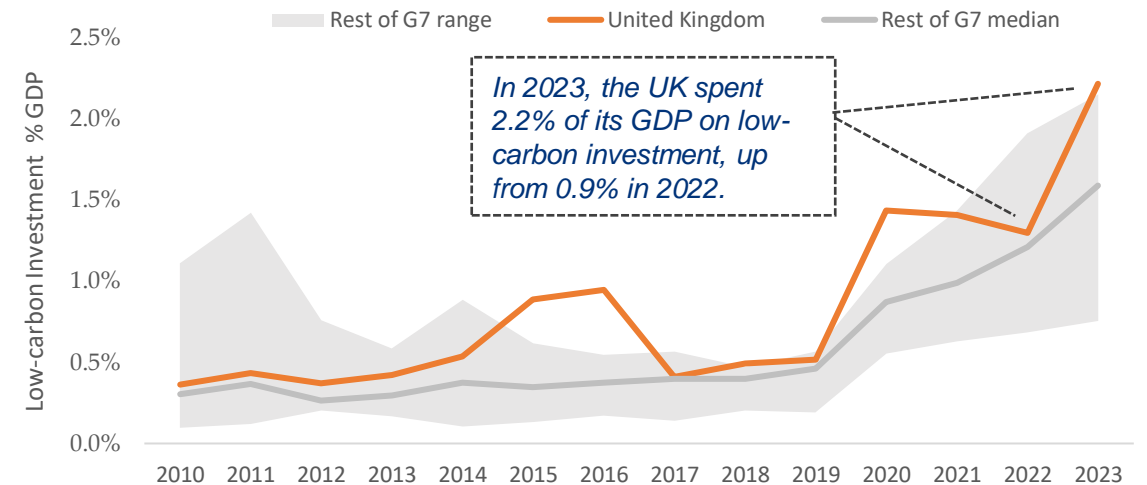


Figure 2: UK Low-Carbon Investment as a % of GDP vs G7 counterparts

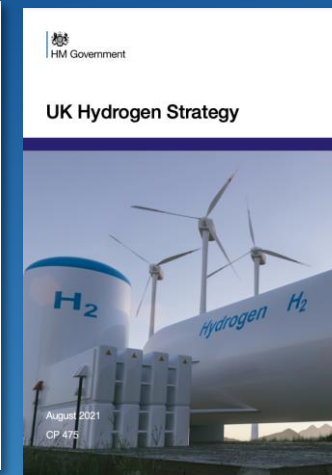
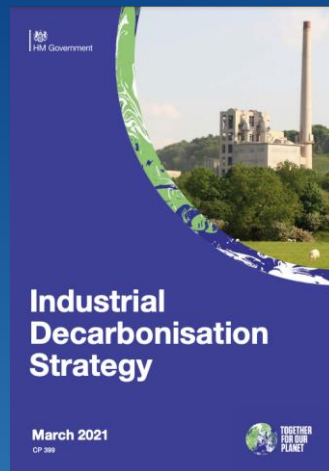
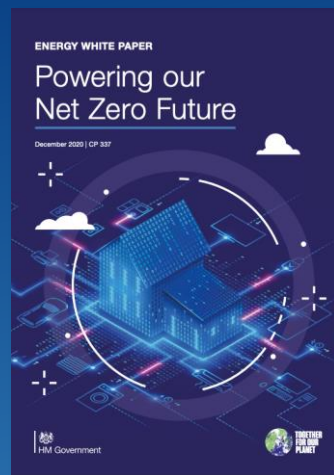
Source: DESNZ analysis of BNEF and IMF GDP data



Note: BNEF Energy Transition Investment data covers public and private investment in low-carbon industries in the following sectors: renewable energy, electrified transport, electrified heat, nuclear, power grids, hydrogen, CCS, energy storage, clean industry, and clean shipping. BNEF coverage is not comprehensive, and sectors have been added over time as data has become available.

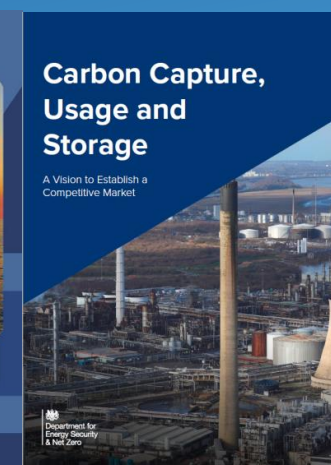
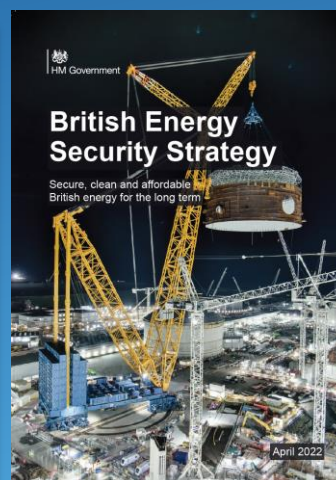
Since 2019 the UK has published a series of ambitious strategies – particularly the Net Zero Strategy in 2021

Dec 20



Aug 21

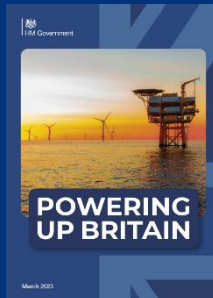
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Department for
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The UK's approach to mobilising investment

Long term policy

Clear world leading ambitions

- **Offshore Wind** – 50GW by 2030 and upto 5 GW of floating wind
- **Hydrogen** –10 GW by 2030; 6GW from electrolytic hydrogen
- **CCUS** - Getting to 20 to 30 megatonnes per annum (M t p a) CO₂ by 2030
- 24 GW of nuclear capacity by 2050 (25% of demand)
- Energy Act 2023.

Targeted public investment

Through world leading frameworks, capital and revenue funding such as the

- £160m Floating Offshore Wind Manufacturing Investment Scheme
- £240 million Net Zero Hydrogen Fund
- up to £20 billion for CCUS announced at Spring Budget 2023

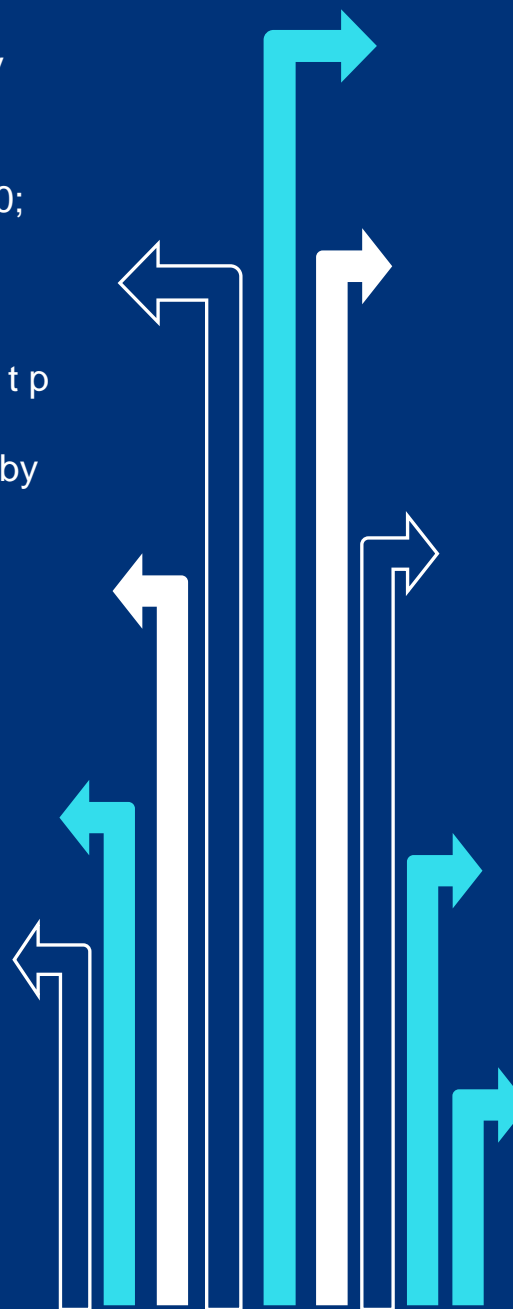
Revenue models and market frameworks

Through world leading frameworks, capital and revenue funding such as the

- **CfD support** for offshore and onshore wind
- CCUS Cluster models
- Hydrogen transport and storage business model
- Nuclear RAB
- 4.2 billion in net zero research and innovation over the period 2022-2025

Strong business environment

- Capital allowances
- Freeports
- Investment Zones
- Lowest and stable labour costs
- Business friendly employment laws





Going further: Strategy and Approach



Providing clarity and certainty

- Responding to key industry and investor concerns i.e. grid connectivity
- Creating business models and mechanisms to provide regulatory certainty i.e. Contracts for Difference, Hydrogen Production Business Model, Nuclear Regulated Asset Base.
- Backing plans with targeted funding – Spending Review 2021 committed £30bn to green industrial revolution.



Building on industry feedback



Bridging financing challenges

Addressing policy challenges: i) Grid Connections



ofgem



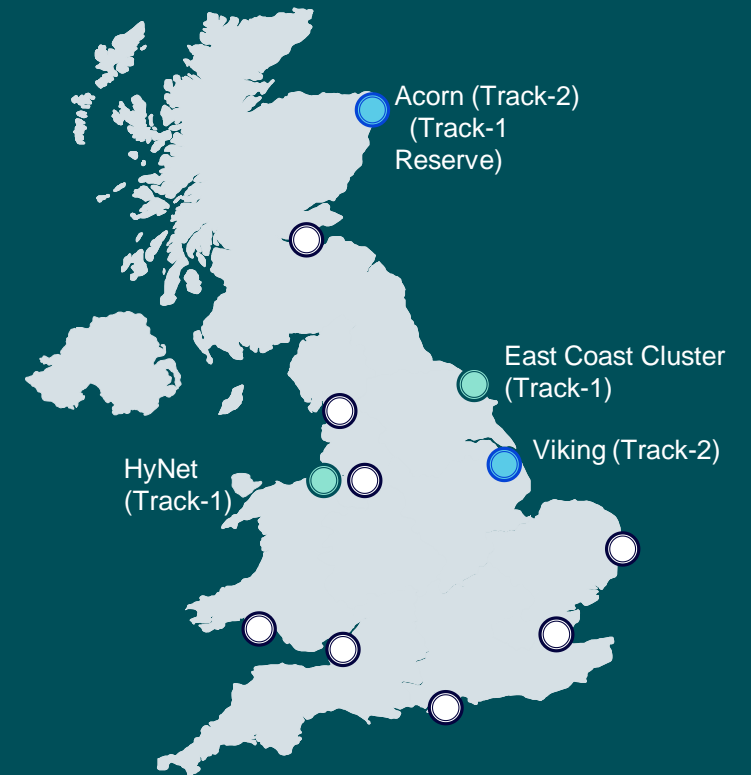
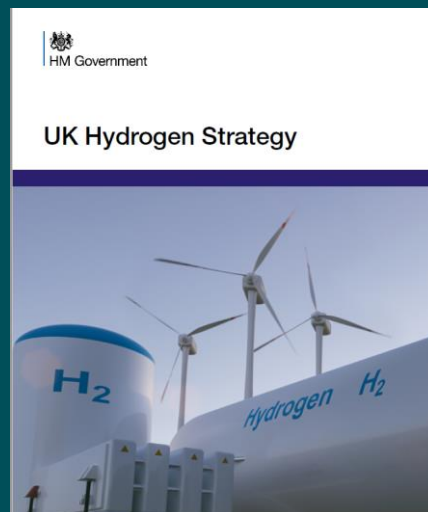
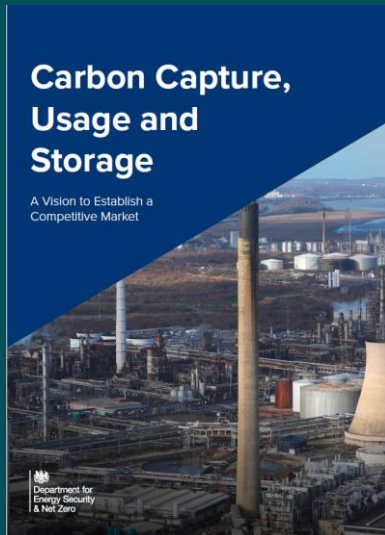
- **Package of measures announced to transform the electricity grid at the Autumn Statement**, including the Connections Action Plan (CAP) and the Transmission Acceleration Action Plan (TAP).
- The CAP would cut **average grid connection delays from five years to six months**, releasing up to 100GW of capacity.
- **Implementation of CAP is well underway** with over 40GW of energy projects have been offered earlier grid connection dates, accelerating up to £40bn of investment.
- The **Transmission Acceleration Action Plan aims to** halve the time it takes to complete the physical build on transmission assets).

The UK is an early mover for CCUS decarbonisation hubs, with ambitious plans to lead the global deployment and development of carbon capture

We are aiming to support the establishment of **four CCUS clusters by 2030**, aiming to capture **20-30MtCO₂ per year by 2030** – adding up to £5 billion to the economy by 2050.

Clusters have been centred around industrial hubs, enabling multiple emitter projects to use centralised CO₂ transport and storage.

In December 2023 published **HMG's CCUS Vision, setting out plans for new competitive market in CCUS by 2035.**



The UK has advanced CCUS projects across all major industrial regions that can begin operating in the 2020s and will establish necessary foundations for deploying CCUS at scale to meet Net Zero commitments.



Addressing policy challenges: Strategy and Approach



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Building on industry feedback

- Energy Investment added to Minister Bowie's brief
- DESNZ seeking to understand where the UK's investment framework needs to be more attractive – led to the £960 million Green Industries Growth Accelerator (GIGA)
- Investor roadmaps communicating long-term investment opportunities and frameworks



Bridging financing challenges

Green Industries Growth Accelerator [GIGA]



- The UK Government recognises that we need a stronger manufacturing base to meet our energy security objectives and net zero goals.
- Ambitious deployment and the creation of a world leading market has not been enough to drive domestic industrial development to date.
- The GIGA funding forms part of the government's priority to grow the economy focusing on making the right long-term decisions for a brighter future by creating better-paid jobs and opportunity right across the country.

Split between the clean energy sectors

- with around £390 million earmarked to expand UK-based supply chains for electricity networks and offshore wind sectors,
- around £390 million for carbon capture, utilisation and storage and hydrogen sectors.

£960 million over 5 years (2025-26 to 2029-30)
announced in Autumn

Yesterday following a £120m increase to this fund - now increased to almost **£1.1 billion**

- The remaining £300 million has been previously announced for UK production of the fuel required to power high-tech new nuclear reactors, known as HALEU

Investor Roadmaps



Hydrogen Investor Roadmap
Updated Feb 2024:



CCUS Investor Roadmap
Updated April 2023; View
alongside the CCUS Vision
(Dec 2023)



Heat Pump Investor
Roadmap - Updated April
2023;



Civil Nuclear Roadmap
Updated January 2024 –
10 section on financing

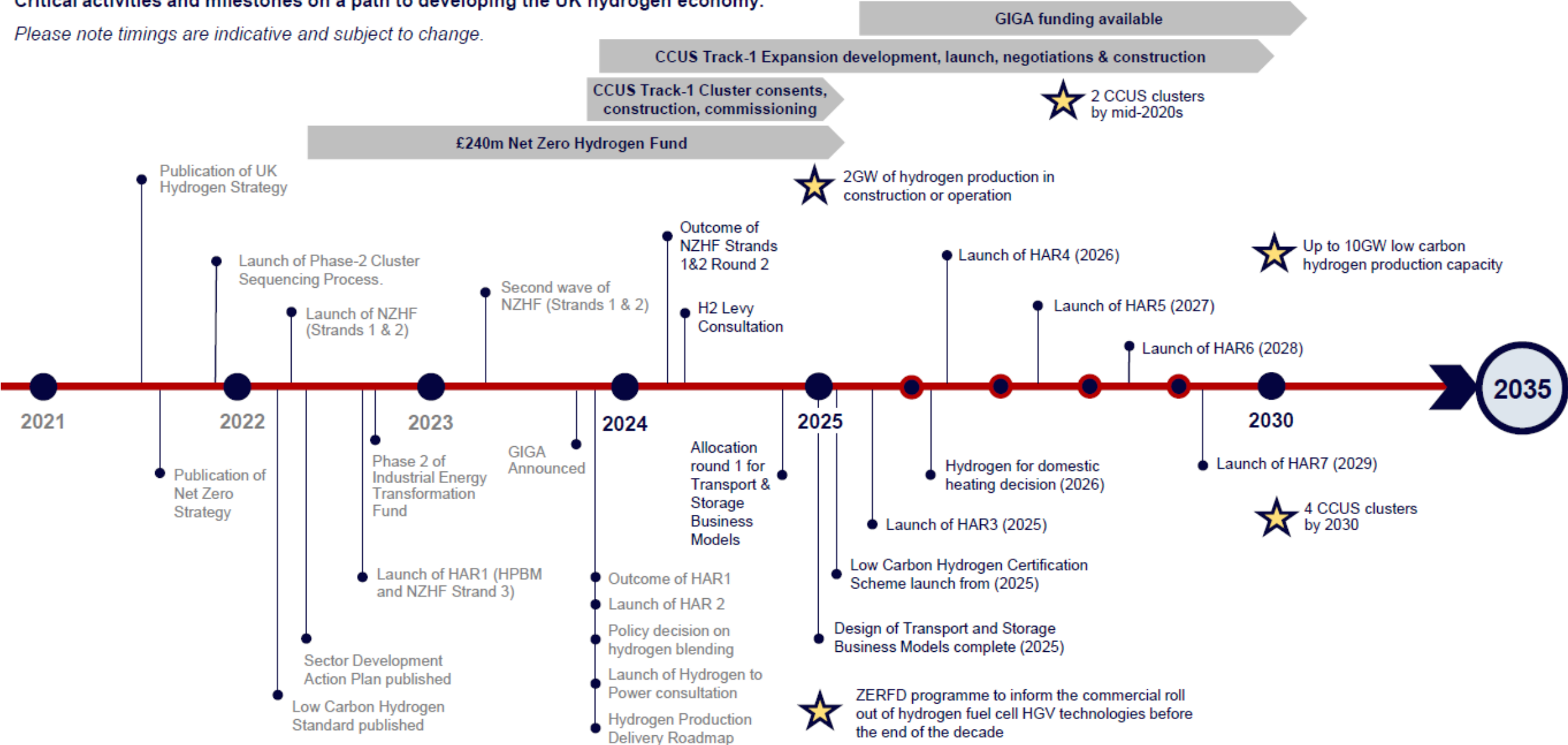


Offshore Wind Investor Roadmap
Updated March 2023

Our 2035 Delivery Plan

Critical activities and milestones on a path to developing the UK hydrogen economy.

Please note timings are indicative and subject to change.



HAR – Hydrogen Allocation Round; NZHF – Net Zero Hydrogen Fund; GIGA – Green Industries Growth Accelerator.



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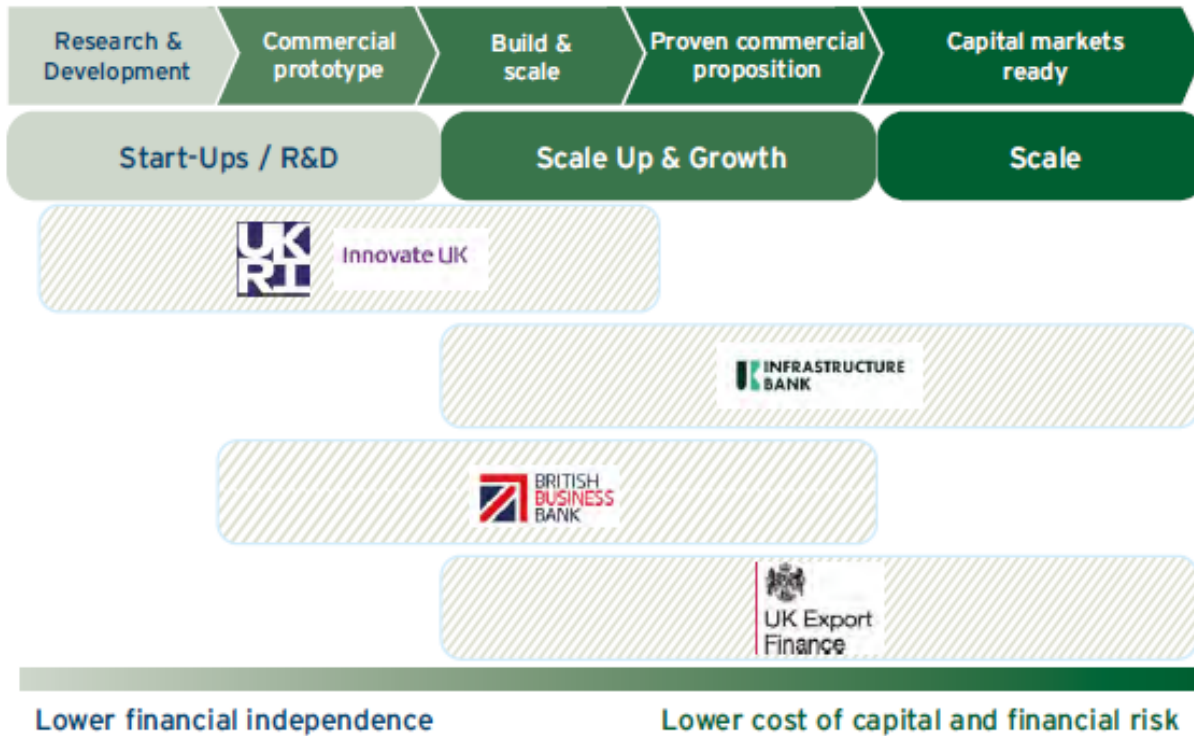
Bridging financing challenges

- Transition Finance Market Review
- DESNZ is exploring innovative ways of attracting private investment, through innovative financing strategies and investor engagement via our blended finance project.
- Collaborating with PFIs
- Review of Electricity Market Arrangements (REMA) underway.



Public Finance Institutions

- The UK's public finance institutions play a key role in supporting sectors and technologies to commercial maturity and scale



UK Export Finance Loans/Guarantees

UKEF provides attractive financing terms for overseas buyers of UK goods and services. UKEF can help exporters make their offering more competitive.

UK Infrastructure Bank

£22bn financial capacity with the mission increase infrastructure investment to tackle climate change and support regional and local growth.

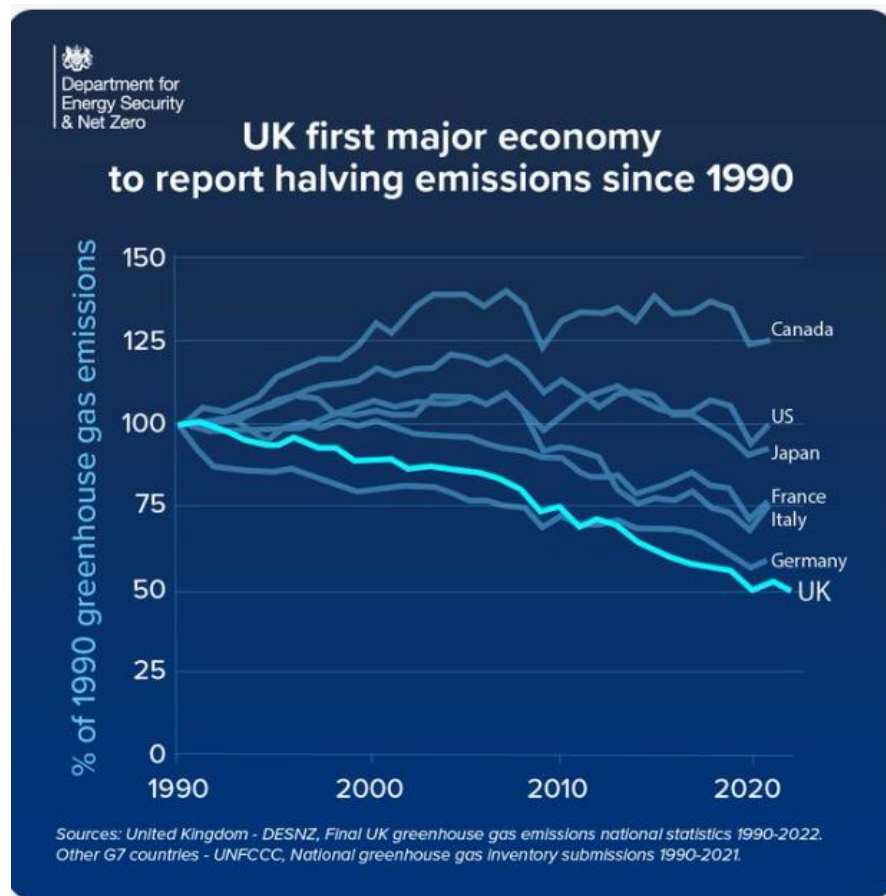
British Business Bank

BBB supports access to finance for smaller businesses to drive sustainable growth and prosperity across the UK, and to enable the transition to a net zero economy.



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Summarising



CREATING
THOUSANDS OF
JOBS AND
GENERATING
INVESTMENT
ACROSS THE UK



Q&A