

















# Building an ecosystem for the hydrogen economy

The South West has a rich engineering and energy history and is already home to a powerful cluster of world-class businesses across key sectors from aerospace and nuclear to transport and utilities. We have a track record of strong research and development capabilities, and for scaling up this new technology, supported by our network of academic partners.

Working together, this diverse group of companies present a unique opportunity for cross-sector coupling that will accelerate decarbonisation through the transition to a hydrogen fuelled economy, creating jobs and solving key challenges of storage and skills development.

That is why we have joined forces to develop **Hydrogen South West** – a business-led infrastructure ecosystem for the accelerated production, transportation and use of hydrogen, beyond heavy industrial clusters.

#### Together, we are:

01

Raising the profile of hydrogen innovation across the South West and enabling cross sector partnerships to deliver distributed hydrogen production, storage and transportation at scale.

02

Building partnerships by creating an environment where businesses can develop decarbonisation projects with a focus on low carbon hydrogen.

03

Supporting the delivery of projects by bringing stakeholders together, sharing information and helping to secure investment for low carbon solutions beyond heavy industrial clusters.

- Project Acorn: developing hydrogen powered ground support equipment.
- Bristol Airport Hydrogen Hub: exploring hydrogen technology for other forms of transport.
- Bristol Sea Port Hydrogen Hub: seeking to become a hydrogen production facility at the port.

04

Positioning the South West as a Centre of Excellence for skills and research, creating a thriving environment for long-term research & development to solve key challenges, such as storage and distribution.

#### Skilling for the hydrogen economy through:

- Positioning for the jobs of the future
- Leveraging unique expertise already within the region
- Positioning the South West and UK Plc for export of green tech and in particular hydrogen

#### **R&D** initiatives including:

- Liquid Hydrogen Powered ZEROe passenger aircraft
- Hydrogen Storage solutions
- H2 Gear cryogenic drive

#### Our offer to UK plc

- Develop an industry-leading aerospace cluster to ensure the UK is a global leader in hydrogenpowered flight
- Demonstrate that hydrogen can be developed and implemented in distributed geography without a major industrial buyer
- Use our R&D capability to scale up new technology and create market opportunities, such as in distribution and storage
- Building on the region's nuclear legacy as a potential energy source for hydrogen production and further developing skills and supply chain
- Play an active role in building a pipeline of skills, to ensure UK plc seizes the opportunity hydrogen offers

#### Accelerating the change through partnership

As a broad partnership of businesses and organisations, Hydrogen South West has the capability to make significant capital investment and ensure engagement to maximise systems efficiency, both within and outside the region.

The South West is uniquely placed to unlock investment and create high-skilled green jobs. A supportive policy environment in the UK would accelerate the development of our hydrogen economy.

The support we need:

- Highlight the importance of investing in cross-sector hydrogen production, storage and transportation systems, and the unique opportunities presented by the South West's geographical position.
- Investment in programmes that will develop the hydrogen economy beyond 2025 and enable a pipeline of demonstrators to be developed, primarily in 'lighter industrial' clusters around the South West.
- **Mitigate** rrisk by focusing on challenges surrounding regulations and licencing with the use of hydrogen, so they don't limit speed of deployment of new systems.
- Showcase the importance of delivering a national Skills Forum and Framework that will link into specific regional and sectoral requirements to ensure the end-to-end value chain of hydrogen skills.

#### Together we can accelerate the change



"We are capitalising on our unique R&D base and our globally significant sectors such as aerospace and nuclear to accelerate the change. Armed with the industrial experience, delivery expertise and regional knowledge, HSW presents a formidable opportunity to support the UK's Net Zero transition."

Simon Earles, HSW Chair

# Membership.

### Join us on the journey

Joining Hydrogen South West gives organisations the chance to connect with industry leaders and gain access to a powerful cluster of infrastructure experience and expertise.

Together, we can make the strongest case for investment by demonstrating viability and value, and building public and political support. Join today.

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## **Accelerate the Change**

Join the ecosystem.

www.hydrogensouthwest.com











