



Llywodraeth Cymru  
Welsh Government

# Hydrogen Policy Development – Welsh Government

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# Energy system for Wales

- Our vision is for a decarbonised energy system which provides wider economic and social benefits for Wales than the system we see today.
- Decarbonising electricity production from fossil fuels.
- Increasing electricity from low carbon and variable renewables.
- Supporting innovation and new technologies.



# Holistic approach to our future Energy system for Wales

	Policy	Origin
<b>1. Avoid the extraction of fossil fuels</b>	<ul style="list-style-type: none"> <li>• Coal extraction policy (2021)</li> <li>• Petroleum extraction policy (2018)</li> </ul>	<ul style="list-style-type: none"> <li>• Wales Act 2017 transferred new licensing powers</li> </ul>
<b>2. Restrict the use of fossil fuels</b>	<ul style="list-style-type: none"> <li>• Presumption against fossil fuels for electricity (consult 2025)</li> </ul>	<ul style="list-style-type: none"> <li>• Net Zero Wales Carbon Budget 2: Policy 17</li> </ul>
<b>3. Manage those emissions that can not be avoided</b>	<ul style="list-style-type: none"> <li>• Carbon Capture and Storage (publish July 2025)</li> <li>• Decarbonisation Readiness and Implementation within Environmental Permitting Regs (consult 2025/2026)</li> </ul>	<ul style="list-style-type: none"> <li>• Net Zero Wales Carbon Budget 2:</li> <li>• Ambition Statement: CCS</li> <li>• Proposal 2: Decarbonisation Readiness</li> </ul>
<b>4. Provide alternatives</b>	<ul style="list-style-type: none"> <li>• Hydrogen Policy (publish July 2025)</li> <li>• Welsh Government Heat Strategy – (July 2024) &amp; Mine-water heat opportunity maps (July 2024)</li> </ul>	<ul style="list-style-type: none"> <li>• Net Zero Wales Carbon Budget 2:</li> <li>• Ambition Statement: Hydrogen</li> <li>• Policy 28: low carbon heat</li> </ul>



# Development of Welsh Government policy approach

- Welsh Government policy has developed following advice from the Climate Change Committee (CCC) and industry on the role Hydrogen can play in supporting decarbonisation and the green economy in Wales.
- Hydrogen offers clear and significant potential to form part of a transition towards sustained low carbon energy and industry.
- We welcome the future advice from the CCC that:
  - The Welsh Government should support the development of plans to develop CCS and hydrogen in the South Wales Industrial Cluster and the HyNet cluster (which will support decarbonisation of some industrial sites in Wales).
  - Continue to work with the UK Government to assess the potential for large-scale hydrogen production and infrastructure in Wales, and how Wales can best contribute to UK-wide hydrogen plans.



# Our Proposed Hydrogen Policy

- Supports the development of hydrogen infrastructure and applications which will have a positive impact on decarbonisation, and a just transitions for citizens and industry affected by climate change.
- The hydrogen meets the requirements of the UK Low Carbon Hydrogen Standard.
- The developer can provide evidence of contributing to a just-transition for those communities and industries affected by the deployment of hydrogen.
- Consultation ran 21 February to 15 May - 64 substantive responses. Responses being assessed.
- Publication of Welsh Government response, strategic policy statement and Ministerial Written Statement due in coming months.



# Our support for Hydrogen

## Smart Living

**HYBRID SBRI** Hydrogen Business Research & Innovation for Decarbonisation  
Programme 2021 - 2025

Develop innovative and research solutions which support one or more of the ten objectives of the Welsh Government [Wales Hydrogen Pathway report](#) incorporated into the second carbon reduction plan [Net Zero Wales CB2 – 2021-2025](#).

These aim to accelerate the development of technologies and processes which enable the deployment of hydrogen as a keystone energy vector, and help us meet our national commitment to achieve net zero emissions by 2050.



# **HYBRID SBRI** Hydrogen Business Research & Innovation for Decarbonisation

**Fund - £2.6m invested 2021-2025 and 26 projects completed.**

## [HyBRID 1.0 Phase 1 Feasibility & Demonstrators](#)

**17 Projects TRL 4-9 December 2021 – March 2022**

## [HyBRID 1.0 Phase 2 Demonstrators](#)

Prototype Development & Evaluation TRL 4-9

**3 Projects July 2022 – March 2023**

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Visit [Smart Living Scheme | GOV.WALES](#) for more on **HYBRID programme** project outputs, guidance and case studies



# Closing

- Building from our hydrogen pathway and supporting innovation in hydrogen, we have a clear policy position in support of low carbon hydrogen.
- We want to build from the success we have in the sector to integrate hydrogen into our energy system in Wales.
- Green economy and sustainable transition for the economy and society is central to our approach
- Scaling up activity will be key in delivering our long-term climate targets

