Updating the Innovation Strategy in Response to Government Strategy

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WALES&WEST
UTILITIES

Our net zero roadmap delivers our sustainable energy targets

Doing all we can to provide sustainable energy

We are working to achieve net zero targets and deliver reliable, greener energy for heat, power and transport.

Delivers

Targets ✓ Projects

This roadmap is structured in two main sections

1) REDUCING EMISSIONS FROM THE GASES WE DISTRIBUTE

- Reduce shrinkage emissions (97% of our Scope 1 & 2 footprint) by 10% by 2026 compared to 2021/22
- 'Net zero ready' for 100% hydrogen in areas more likely to convert by 2035
- 'Net zero ready' for 100% hydrogen across the whole network by 2040

We plan to achieve net zero and deliver sustainable energy by:

- ✓ Investing in at least three industrial clusters to support net zero transition and develop broader rollout plans for hydrogen
- ✓ Preparing to receive up to 20% of blended hydrogen
- ✓ Using our whole systems modelling capability to support at least 30 Local Area Energy Plans

2) DECARBONISING OUR OWN OPERATIONS

- Reduce Scope 1 and 2 emissions by 37.5% by 2035*
- Net zero Scope 1 and 2 emissions by 2040*
- Net zero supply chain emissions (upstream Scope 3) by 2050

We plan to achieve net zero and deliver sustainable energy by:

- ✓ Adopting low and ultra low-emission options for our vehicle fleet where conditions and markets allow
- ✓ Tackling business and supply chain emissions through reducing waste from the project design stage

*Excluding shrinkage

The roadmap supports other sustainable energy targets

Technology: To innovate and choose greener technologies	2026	£13 million investment in innovation and early-stage decarbonisation projects
	2030	Low and ultra-low-emission options for our vehicle fleet
Social: To work with our customers during the net zero transition	2026	Invest in at least three industrial clusters to support industry net zero transition
	2030	Support local decarbonisation using whole system modelling
Environment: To improve the health of our environment	2026	Support natural environment and deliver biodiversity net gain
	2030	Become a zero-waste company

Aligned UN SDGs

Aligned Well-being of Future Generations Act goals

A Prosperous Wales · A Resilient Wales · A Globally Responsible Wales

WALES&WEST UTILITIES

NET ZERO BY 2050

Delivering net zero

- Industrial & Commercial
- Whole System & Electrolysis
- Ultra Low Emission Transport
- Hydrogen Storage
- Green Gas Blending

Supported by our Data and Digitalisation Strategy

Existing innovation strategy

- Industrial & Commercial – Hyline Cymru
  - New 130km hydrogen pipeline from Milford haven and Pembroke by 2033 to provide industry with cost effective route to decarbonisation, create thousands of jobs and unlock 4.5GW offshore wind
- Whole System & Electrolysis – HyVoltage/Microgrids & NextGen Electrolysis
  - Explore flexible vector conversion links between gas and electricity for co located power-to-gas and gas-to-power
  - Demonstrate green hydrogen production for blending & 100% using impure water to reduce operational constraints through distributed generation across the network, saving 4.5 swimming pools of water per GW of hydrogen produced
- Ultra low emission transport
  - Decarbonisation of operational fleet to support 365 days/year emergency service
- Hydrogen Storage
  - Assessing and modelling Aquifer reservoirs for hydrogen storage
- Green Gas Blending
  - Biomethane reverse compression to solve seasonal capacity constraints

Future innovation strategy

- Innovation plays a vital part of getting ahead of long-term net zero decarbonisation targets as well as near term 2030 Power
- We need to be ambitious and flexible in our approach to innovation in RIIO-3 to enable us to move quickly and adapt to potential changing of policy, as well as developments in technology and consumer choices
- We need to be able to respond to updated FSO and NESO strategies and local area energy plans
- We can exceed policy e.g. developing a hydrogen system, which could then integrate otherwise distributed production and demand