

South West Wales Energy Strategy

Our vision for 2035

“Harnessing the region’s low carbon energy potential across its on and offshore locations, to deliver a prosperous and equitable net zero carbon economy which enhances the well-being of future generations and the region’s ecosystems, at a pace which delivers against regional and national emissions reduction targets by 2035 and 2050.”

Our priorities

Energy efficiency

Electricity generation

Smart and flexible systems

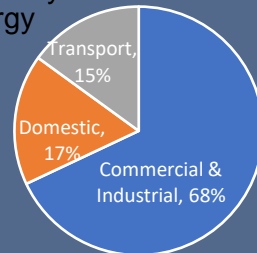
Decarbonise heat

Decarbonise transport

Regional coordination

Our baseline energy assessment

- We consume **36%** of total energy consumed in Wales
- We host **27%** of Wales's renewable energy capacity
- **0.9%** of our homes use a biomass boiler or heat pump
- We have **863 MW** of renewable energy installed in the region, of which **17%** is locally owned
- Our total energy consumption fell by **26%** between 2005 and 2017
- Since 1990 greenhouse gas emissions from our energy system have fallen by **14%**
- Our sectoral energy demand split:



Domestic

- 161,000 homes insulated
- 78,000 heat pumps installed
- 82,000 homes currently heated with fossil fuels moved to low carbon heating
- No new methane connections from 2025

Commercial & industrial

- Decarbonisation of the electricity network via renewables and behind the meter generation
- Switch to alternative fuels including hydrogen and electrification of heating
- 14% energy demand reduction

Energy vision modelling assumptions

Renewable electricity

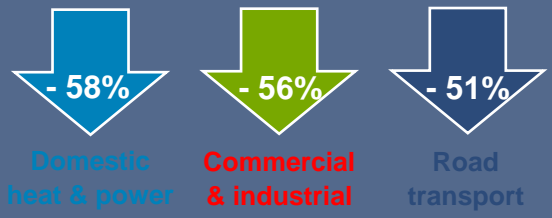
- Offshore wind capacity increased from 50MW to 696MW
- 800MW of onshore wind installed (399MW of new capacity)
- 1,061MW of marine technologies including 696MW of floating offshore wind and 320MW tidal lagoon
- 1,215MW of solar PV (827MW of new capacity)

Road transport

- 78% of vehicles electric by 2035
- 10% reduction in private vehicle mileage
- Creation of a hydrogen fuel cell EV refuelling network
- Increased use of public transport and active transport

Achieving our energy vision

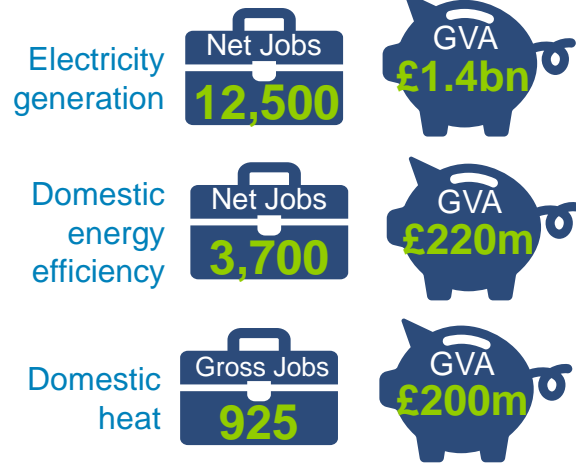
To be on track for net zero by 2050, we need to reduce emissions from our energy system by **55% by 2035**. Energy modelling achieves this reduction split by sector as follows:



Our energy vision is also supportive of the ambitions of the Wellbeing of Future Generations (Wales) Act 2015.



Estimated economic impacts of achieving our energy vision:



£4 billion spend required to achieve our energy vision

Not all of the jobs will be held by South West Wales Region residents; some jobs will be held by persons outside of the region

The additional jobs associated with this vision will require strengthening and building new skills within the region

* all figures shown are approximate values