

Appendix 1

North Wales Energy Strategy – 1-page summary

North Wales Energy Strategy

Our vision for 2035

“Delivering maximum local economic, social, ecological and wellbeing benefits from transitioning to a net zero economy and becoming a net exporter of low carbon electricity through cross-border and regional cooperation”

Our priorities



To harness the abundance of local low carbon resources to become a green powerhouse and diversify the energy mix

To become a world-leader in offshore wind and marine technologies



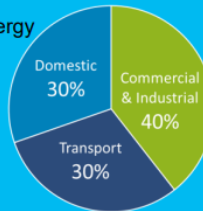
To improve the energy efficiency of the region's housing and accelerate the decarbonisation of North Wales' building stock

To achieve a shift to lower carbon transport



Our baseline energy assessment

- We consume **23%** of total energy consumed in Wales
- We host **37%** of Wales' renewable energy capacity
- **0.7%** of our homes use a biomass boiler or heat pump
- We have **1,183 MW** of renewable energy installed in the region, of which **8%** is locally owned
- Our total energy consumption fell by **5%** between 2005 and 2017 and the greenhouse gas emissions from our energy system fell by **28%**
- Commercial and industrial electricity consumption constitutes **71%** of all electricity consumption in the region
- Transport is dominated by private car use with **0.1%** of cars pure electric
- **36%** of our homes are EPC band E, F or G
- Our sectoral energy demand split:



Domestic

- 30,000 homes insulated
- 65,500 heat pumps installed
- 35% of homes improved to EPC band D, C and B
- 67,000 homes moved from fossil fuel to low carbon heating
- No new gas connections from 2025

Renewable electricity

- Over 2.8GW offshore wind
- 300MW small scale modular nuclear reactors
- 310MW onshore wind
- 180MW tidal stream
- 1GW tidal lagoon

Energy vision modelling assumptions

Commercial & industrial

- 16% energy demand reduction
- Switch to alternative fuels and electrification of heating
- Behind the meter generation

Road transport

- 55% of vehicles electric by 2035
- 2,600 gas HGVs and 1,000 hydrogen vehicles
- 15% reduction in private vehicle mileage
- Increased public transport and active travel

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:

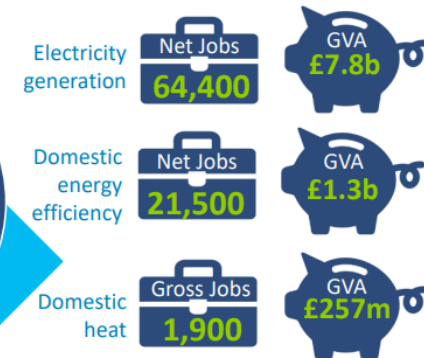


Our energy vision is also supportive of the ambitions of the Wellbeing of Future Generations (Wales) Act 2015.



north wales economic ambition board
bwrdd uchelgais economaidd gogledd cymru

Estimated economic impacts of achieving our energy vision:



£15 billion spend required to achieve our energy vision

Not all of the jobs will be held by North Wales 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