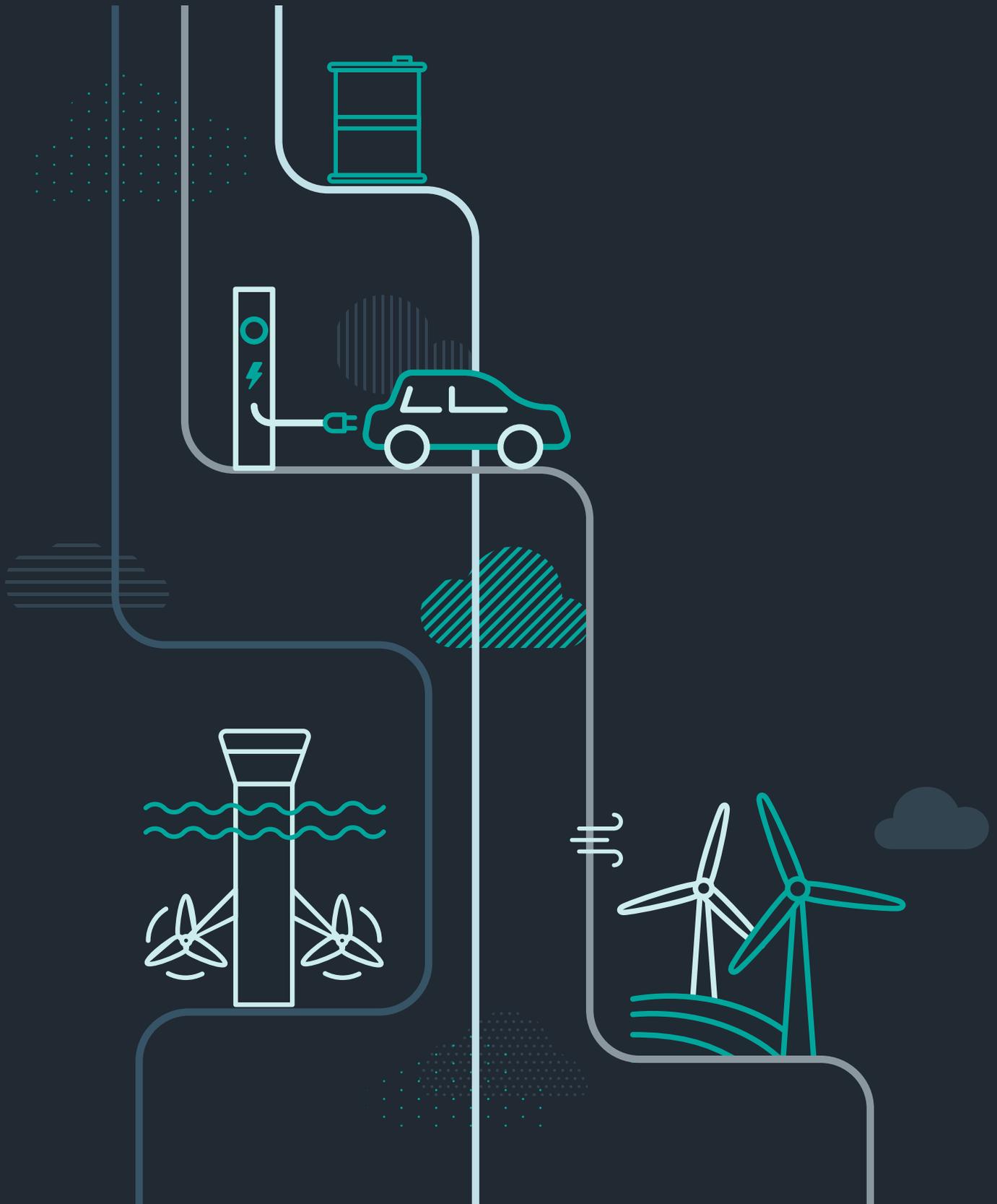




Llywodraeth Cymru
Welsh Government

Power: Sector Emission Pathway



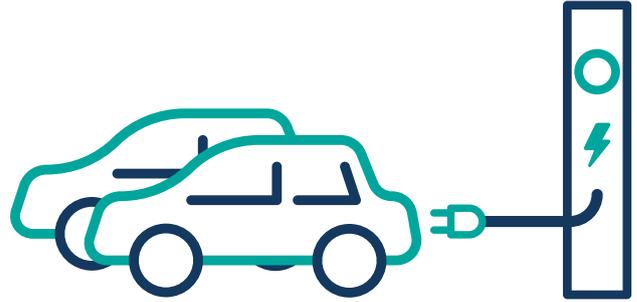
Power: Sector Emission Pathway

The Power sector covers electricity generation in Wales from fossil fuel and renewables.

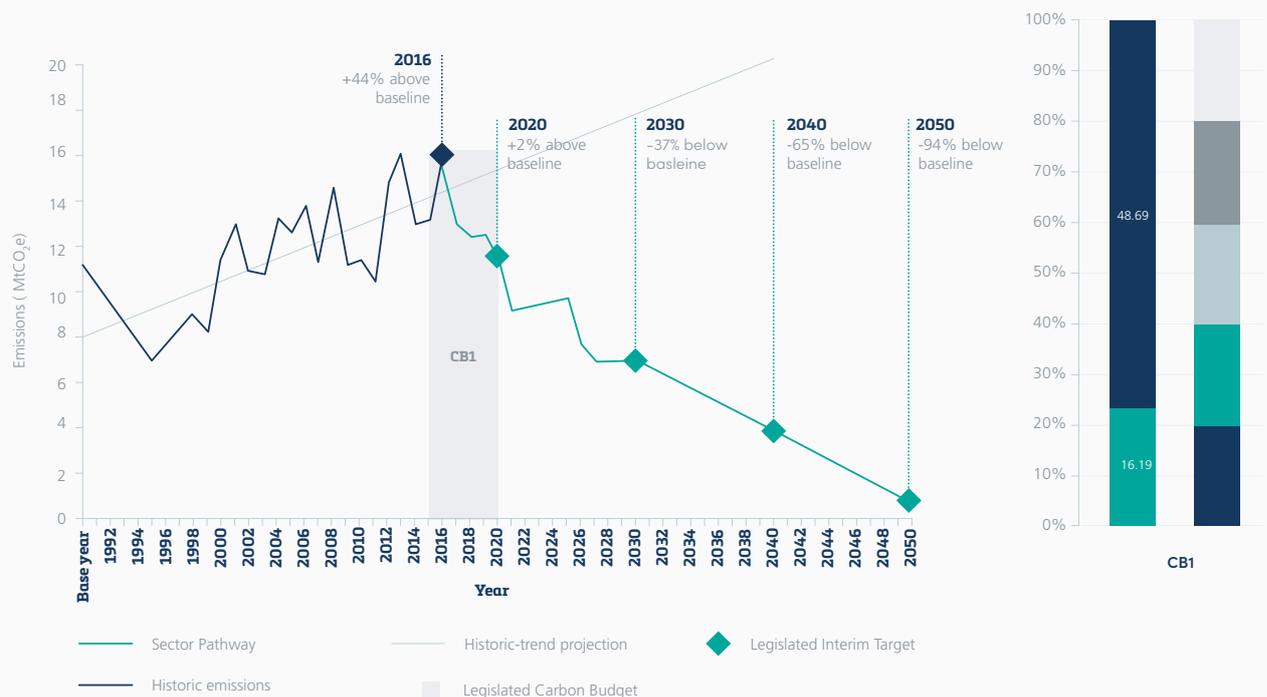
Ambition

We need low carbon electricity to become the main source of energy in Wales. Renewable electricity will be used to provide both heating and transport in addition to power.

In 2016 34% of all Wales' emissions come from the Power Sector.



Historic emissions for the Power Sector and UKCC modelling to show emission reductions for the first carbon budget (CB1) and a possible route for a contribution to an 80% reduction in all Welsh emissions in 2050



What are we aiming for?

2020 Emissions Target

Emissions in 2020 will be 29% lower than in 2016. This will mean that power sector emissions are 2% greater than the baseline in the year 2020.

Power sector allocation for Carbon Budget 1



The total budget for the power sector for CB1 is estimated to be 64.9 MtCO₂e. The Power Sector contributes 29.3% of the total Welsh budget for CB1.

In 2016 the sector emitted 16.2 MtCO₂e using up 25% of the Power Sectors contribution to CB1.

Power sector pathway to 2030

Power sector emissions will reduce by 37% from baseline levels [1990s] by the year 2030 by:

- › reducing emissions through reducing overall power generation from fossil fuels;

- › increasing the deployment of renewable energy to meet the target for Wales to generate 70 per cent of its electricity consumption from renewable energy by 2030 and
- › increasing support for innovation in the Power Sector

Policies & Proposals for Carbon Budget 1 (2016-2020) & towards 2030

We are part of a wider UK energy system where Wales has limited policy levers to influence emissions from fossil fuels in the power sector in the timescale to 2020. This limits our ability to make the necessary emissions reductions. The UK Government is responsible for energy policy and nationally significant infrastructure decisions, as well as energy resilience. Ofgem has a key role in regulating the energy market.

The Welsh Government has recently received greater permitting powers and will receive further consenting powers in April 2019. We believe these changes will allow us to exercise more influence over levels of emissions from the power sector for developments which have an installed capacity of 350 MW or less. Together with other policies to reduce the use of fossil fuels, increase the deployment of renewables and increasing support for innovation in the Power Sector will enable the emissions reductions require to meet CB1 and the 2020 target.

Policies & Proposals

We will reduce the use of Fossil Fuels for Power Generation through

- › Implementing Energy Consenting, Planning & Permitting policy
- › Removing barriers to consenting for storage by removing batteries as part of the development of National Significance process.
- › Phasing out Unabated Coal
- › Developing a Policy on Combustion of Fuels for Power

We will accelerate the deployment of renewable generation through

- › Continuing to be a part of the EU Emissions Trading System to the end of Phase III
- › Delivery of our Renewable Energy Targets

- › Developing Routes to Market for Renewable Technologies
- › Providing support through our Welsh Government Energy Service
- › Supporting local and regional bodies around Wales Energy Planning
- › Maximising Waste to Energy
- › Increasing local ownership of energy generation
- › Maximise Welsh benefit from major infrastructure projects in Wales

We will increase support for innovation in the Power Sector through

- › Energy Innovation
- › Market Regulation and Investment
- › Exploring potential for investment and new approaches to energy



Well-being

The move to cleaner, low carbon generation also provides other benefits to society. For instance, a decentralized system contributes to protecting householders and businesses from high energy costs by locating generation near to demand, improving the resilience and flexibility of our energy system and keeping more economic benefit within local communities. Therefore, the move away from fossil fuels combustion to a more low carbon electricity system contributes significantly to all our well-being goals.



Well-being Objectives



Key Themes

'Prosperity For All'

- the national strategy

The strategy sets out how we will deliver for Wales during this term - and set long-term foundations for the future

'Taking Wales Forward'

- The Programme for Government 2016-2021

The programme sets out what we will deliver for Wales during this Assembly term



Well-being of Future Generations Act

The Act sets out the need for a long-term focus, and five 'ways of working' to guide the Welsh public services in delivering for people

