



Llywodraeth Cymru
Welsh Government

Waste Management: Sector Emission Pathway



Waste: Sector Emission Pathway

Ambition

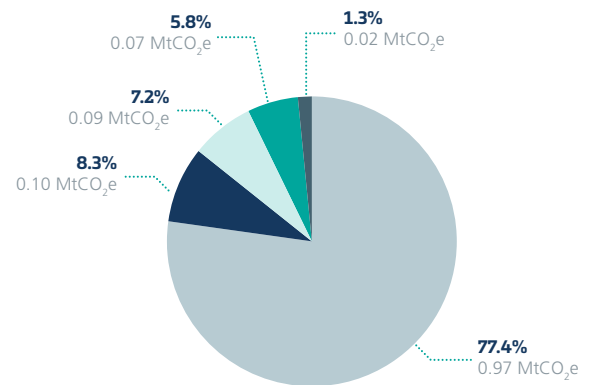
Our ambitions are long term and our drive to meet those ambitions will continue. Welsh Ministers have set the objective of, by 2050, having a more circular economy and being a zero waste, one planet resource use nation. We will aim to realise economic, social and environmental benefits whilst ensuring our approach to resource efficiency delivers our contribution to reducing carbon emissions.

By 2050 we will, as a minimum, reduce the impact of waste in Wales to within our environmental limits. We aim to phase out residual waste through enhanced actions on waste prevention and sustainable consumption and production and ensuring that all potential waste that is produced is reused or recycled.

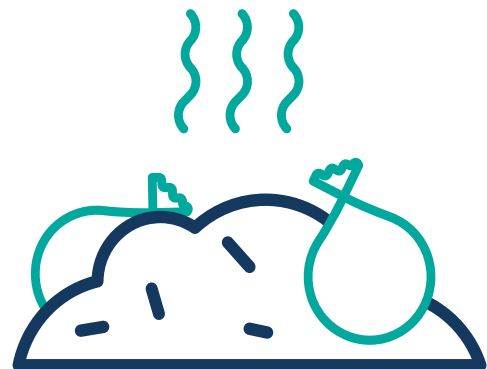
We also have an ambition of 'zero landfill' by 2025, which means we will be aiming for no waste to being landfilled in Wales.

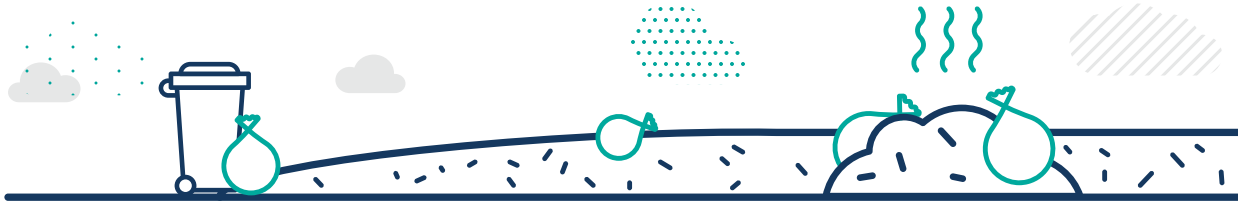


Waste sector emissions in 2016 (MtCO₂e)

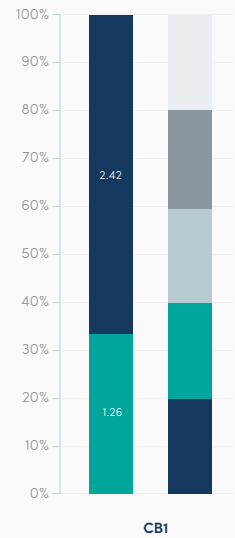
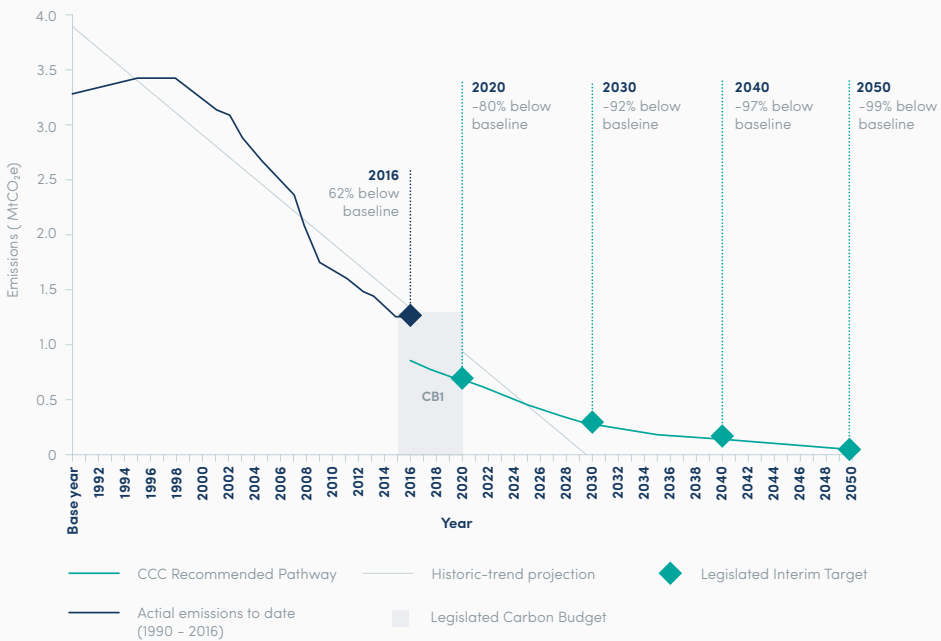


- Landfill
- Industrial wastewater treatment
- Domestic wastewater treatment
- Composting municipal waste
- Other waste





Historic emissions for the Waste Sector and UKCCC 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

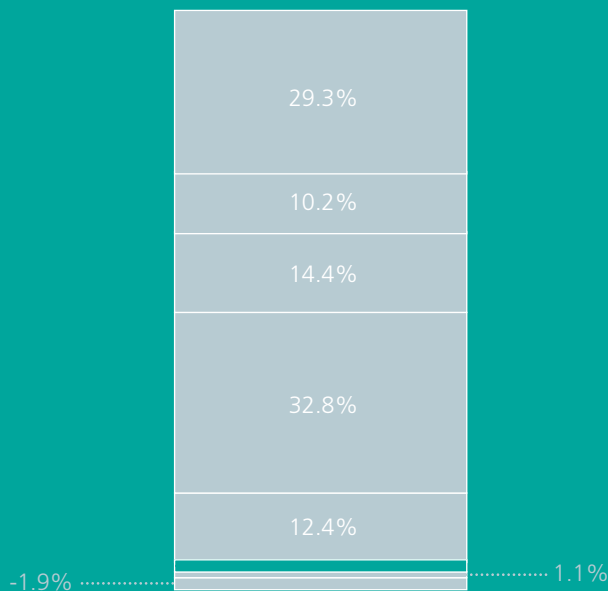


What are we aiming for?

2020 Emissions Target

Emissions in 2020 will be 48% lower than in 2016. This will mean that Waste sector emissions are 80% lower than the baseline in the year 2020.

Waste sector allocation for Carbon Budget 1



The total budget for the Waste sector for CB1 is estimated to be 3.7 MtCO₂e . The Waste Sector contributes 1.7% of the total Welsh budget for CB1.

In 2016 the sector emitted 1.3 MtCO₂e using up 34% of the Waste Sectors contribution to CB1

Waste sector pathway to 2030

Waste sector emissions will reduce by 92% from baseline (1990) levels by the year 2030:

- › through reducing waste emissions from landfill
- › Increasing measures to reduce emissions from water treatment

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

The policies and proposals focus on reducing greenhouse gases from landfill and reducing emissions from waste water. the two most dominant sources.

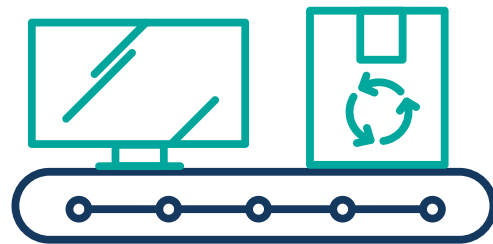
Policies & Proposals

We will increase measures to reduce emissions from landfill through

- › We will continue to reduce emissions from landfill by reducing the amount of biodegradable waste being sent to landfill and increasing landfill gas capture to convert to energy generation
- › We will continue to support the generation of renewable energy from the Anaerobic Digestion of food waste, energy recovery from waste wood in biomass power plants and the energy recovery of residual waste (the renewable element) and the utilisation of landfill gas.
- › We are working on transposing the EU's Circular Economy Package (CEP) into our own legislation. The Package includes waste management targets and waste packaging requirements to stimulate a transition towards a circular economy.

We will increase measures to reduce emissions from waste water through

- › Research and development is crucial in tackling emissions from waste water treatment. We need to explore opportunities around the effective use of green gases (biomethane) generated from the wastewater treatment process – which in turn would help to decarbonise heat or transport networks



Well-being

The policies and proposals aim to reduce emissions from the waste sector in way that provides multiple benefits that contribute to the well-being goals. Keeping products and resources in use for as long as possible through recycling, reuse, repair, remanufacturing reduces emissions and can help develop a circular economy. These include greater economic stability through increased resource security and new business and employment opportunities from an expanding industrial sector. Research suggests that if we stay on the current development path for the circular economy in Britain, then by 2030 the sector could require an extra 205,000 jobs.

The Well-being Matrix Tool identifies the strong link to a prosperous and globally responsible Wales