

CHAPTER 5.

NET-ZERO TARGET, OBJECTIVES & PRINCIPLES

5.1 DEVON'S NET-ZERO TARGET

5.1.1 2050 at the Latest

This plan lays out a roadmap for Devon to achieve **net-zero carbon by 2050 at the latest, with an interim target of 50% reduction by 2030 below 2010 levels. The Plan is frontloaded with impactful actions** to support the partners that have set earlier net-zero targets for their areas.

The carbon budgets outlined below have been set for Devon for five-year periods between now and 2050 based on the Committee on Climate Change scenario. These budgets describe how much carbon can be emitted within each five-year period if Devon is to remain on track to meet net-zero by 2050. The purpose of using carbon budgets rather than annual targets is to allow for the effects of fluctuations in emissions due to factors such as short-term changes in economic activity or particularly cold winters, which when considered over the budget period will be less significant than they might be when considered annually.



Total carbon budget per period to achieve net-zero by 2050, including GHG removal

Budget period	2018-202	2023-202	2028-203	2033-203	2038-204	2043-204
	2	7	2	7	2	7
Budget (ktCO ₂ e)	34,096	28,971	24,613	18,771	11,771	4,770

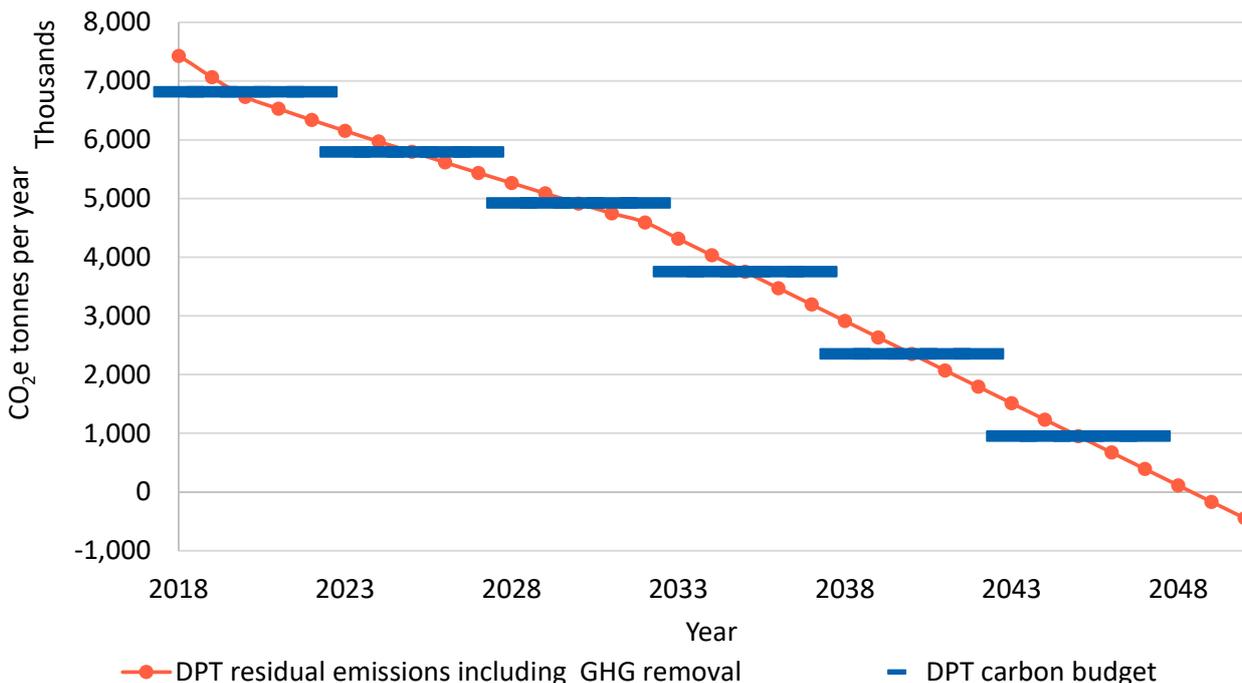


Figure 11 Projected emissions reductions for Devon, Plymouth and Torbay (DPT) combined to achieve net-zero by 2050. The orange bars show the carbon budget per year average over the relevant five-year period. The blue line shows the necessary year on year reductions.

5.1.2 Achieving Net-Zero Sooner

Bringing the date forward from 2050, to achieve net-zero ahead of the national timetable, would be challenging and more costly.

The Centre for Energy and Environment at the University of Exeter has provided an indication of the net cost of meeting the national net-zero 2050 target in Devon, based on the work of the Committee on Climate Change, as well as indications of the net cost to accelerate local delivery ahead of the national timetable.²⁵

This identified the net cost (sum of costs minus benefits) to achieve net-zero carbon in Devon in 2050 to be £895 million per year. This equates to 1.5% of the area’s projected 2050 Gross Domestic Product (GDP) and £661 per resident per year. It is important to note that this is not the investment cost: Essentially this is the funding required for which there is not currently a financial investment

opportunity. There is an element of uncertainty in modelling these costs because there will be opportunities for unanticipated technology innovation over the next three decades to bring about investment opportunities to reduce this figure, but it's likely there will remain costs to be sought from philanthropic grant funding and the public sector, principally from national government via taxation. The Committee on Climate Change acknowledges that if the wider social benefits to human health and the environment from achieving net-zero can be monetised, then these would “partially or possibly even fully” offset the net costs.²²

Achieving net-zero carbon by 2030 would increase the estimated annual net cost to Devon to about £2,522 million per year (6.6% of the area's projected 2030 GDP) and £1,992 per resident per year. Therefore, there would be significant financial cost for Devon's economy and communities in achieving net-zero which would put Devon at a disadvantage if other UK and international regions do not do the same. However, achieving net-zero sooner than 2050 would also bring forward the co-benefits described throughout this plan, such as cleaner air and its health benefits, as well as a head start on the economic opportunities available in certain sectors. But it requires the social transformations described in this plan to be achieved within 10 years rather than 30.

Achieving net-zero carbon by 2040 has an estimated annual net cost to Devon of approximately £1,320 million per year (2.7% of the area's projected 2040 GDP) and £1,007 per resident per year.

The challenges arise when it's considered how Devon could achieve net-zero ahead of the national timetable. Many policy aspects relevant to reducing GHG emissions and their associated funding are controlled nationally, such as energy, strategic transport, agricultural and waste policy and retrofitting buildings. Assuming national policy remains focussed on 2050, for Devon to achieve net-zero sooner would require the emissions in Devon that result from activity over which there is little local control (such as whether somebody chooses to operate a petrol or diesel car rather than an electric alternative) in the intervening years would need to be offset using local schemes. But who will fund the offsetting? Devon's emissions are all attributable to individuals and organisations operating in and visiting Devon, yet there is no mechanism to force these emitters to buy carbon offsets ahead of 2050. If such a policy was able to be implemented, these emitters might move away from Devon or choose to visit other areas of the UK that do not require them to pay to offset their emissions.

However, the costs and challenges of achieving net-zero ahead of 2050 in Devon are less significant if the UK was to bring forward the national target. This plan identifies the key policy changes needed to achieve net-zero irrespective of the target date and the Devon Climate

Emergency partners will give clear signals that we are ready to work with them to implement those changes on an accelerated timetable. We **strongly encourage national government to bring forward the net-zero carbon date for the UK**, which we are ready to implement locally given the necessary national support.

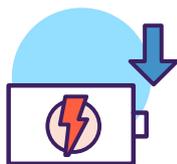
Recognising the opportunities and importance of responding to the climate emergency, the Devon Climate Emergency partnership **encourages all Devon-based organisations to become net-zero by 2030**, including their supply chains.

As part of this consultation on this Interim Devon Carbon Plan there is **an opportunity to have your say** on what is an appropriate target date to achieve net-zero in Devon.

5.2 PLAN OBJECTIVES AND THEMES



Fossil fuels phased out as an energy source



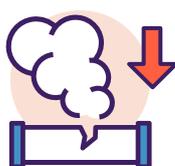
Minimise energy consumption



Engaged communities acting for resilience and a net-zero carbon Devon



Carbon captured and stored from the burning of fuels



Minimise fugitive greenhouse gas emissions



Resilient local economies with access to green finance



A circular use of resources



Maximise carbon storage in marine and terrestrial environments

A set of eight objectives has been developed, which demonstrates concisely what this plan needs to achieve by 2050 at the latest. These are shown below. Indicators to monitor progress towards achieving these are proposed at Section 12 of this Plan.

Each action in this plan helps deliver one or more of these objectives. The objectives are difficult to relate to our behaviour in our everyday lives and so the actions in this Plan are collated into five linked themes that many of us are more familiar with, which helps us as communities and individuals understand how we can make changes to achieve these objectives for a better future. The themes are:

ECONOMY AND RESOURCES

ENERGY SUPPLY

BUILT ENVIRONMENT

TRANSPORT

FOOD, LAND AND SEA

Initially, the Plan opens with a section on Cross Cutting themes, which are relevant to the whole Plan. This section highlights the role for behaviour change and community engagement; spatial planning; finance, economy and resource access; knowledge sharing, skills and learning; and procurement and commissioning.

5.3 PRINCIPLES FOR IMPLEMENTING THE DEVON CARBON PLAN

In developing the Plan to achieve the objectives, the following principles have been applied. Many of these principles are based on key messages the Net-Zero Task Force heard in the Call for Evidence and the Thematic Hearings. These principles must also be considered when implementing each action.

1. **Achieving net-zero is not optional, it is essential.**
2. **The role of this Plan is to map out all of the change needed, even if some are not possible yet.**
3. **The Plan needs to reflect the specific qualities and characteristics of Devon in planning for net-zero. This includes that Devon is more rural than much of England, is relatively remote, and has a significant proportion of upland and coast.**
4. **Although this is a Plan for Devon, it also seeks common cause with other areas of the country facing similar challenges to reach net-zero, and will seek to work with them to make finding the right solutions more efficient and effective.**
5. **All policies and actions must deliver carbon reductions across their life cycle; cradle to grave.**
6. **We must deliver and account for multiple benefits for health, well-being and resilience of communities and nature.**
7. **The term 'emergency' should have due consideration given to it. Any activities incompatible with net-zero emissions by 2050 at the latest must be reconsidered.**
8. **The implementation of the plan must be democratic and involve communities, so not 'done to' people.**
9. **A just transition is required to ensure that:**
 - a. **Vulnerable and low-income segments of society and rural communities are not disadvantaged.**
 - b. **The differing impacts of climate change on different groups e.g. disabled, minorities, gender, are addressed.**
 - c. **Actions to decarbonise Devon must not be at the expense of other communities or ecology globally.**
10. **Significant behaviour change must be recognised as a necessity.**
11. **We must reframe how we envisage our local economy to move beyond using growth as the measure of success.**
12. **The Plan must recognise the varying geography of the County, including the importance of linkage and networks.**

13. Spatial planning has a clear role to reorganise society towards net-zero living:

- a. Ensuring that new development strongly contributes to the transformation required to achieve Net-Zero.
- b. The importance of 'place' and people's connection to a location has to be a priority in all future development.
- c. Spatial planning and transport planning need to be better linked. Relocalisation should be an organising principle wherever it can assist achievement of net-zero.
- d. A net-zero Devon needs to recognise the importance of rural areas in delivering net-zero not only for their communities, but also the growing importance of the resources and services they provide for larger towns and cities, including ecosystem services. Therefore, a more balanced emphasis is required between spatial planning for urban and rural areas.

14. Resources, energy, and mobility, should be considered in a hierarchy:

1. Avoid where possible, reduce our resource and energy consumption and the need to travel
2. Improve the efficiency of our use of resources and energy, e.g. reusing, recycling, insulating buildings and active and shared travel modes
3. Use renewable and low-carbon resources, e.g. timber, solar power and ultra-low emission vehicles.

15. We must be innovative and dynamic in our pursuit of a net-zero Devon, sometimes leading and steering policy and action ahead of national initiatives.

16. We must collaborate to make use of a range of financing opportunities, e.g.

- a. Find financially viable, self-sustaining solutions and work with the private sector to develop these.
- b. Work with national government to develop public-sector support.
- c. Community investment.

17. The implementation of this Plan will be monitored regularly, and a review will be triggered if carbon emissions are not reducing at the necessary pace.