Devon's Timeline to Net-Zero Carbon

Background

The Devon Climate Emergency (DCE) partners expect that the Devon Carbon Plan will indicate the earliest credible date for achieving a net-zero Devon, based on evidence, which the partners, particularly the local authorities, can collectively support.

Purpose

This paper outlines the Task Force's conclusion on the timeline to net-zero that is proposed to appear in the consultation draft Interim Devon Carbon Plan. Its content is for discussion by the Tactical Group and Response Group.

Context

The UK has declared and enshrined in law a target of net-zero emissions by 2050 – the first major economy to do so.

The thirteen local authorities in the DCE partnership have declared these dates for net-zero:

Authority	Geography date	Organisation Date
Exmoor National Park	2050 *at the latest* and 45% reduction by 2030 from 2010 levels	2030
North Devon District Council	2050 *at the latest* and 45% reduction by 2030 from 2010 levels	?
Torridge District Council	2050 *at the latest* and 45% reduction by 2030 from 2010 levels	?
South Hams District Council	2050 *at the latest* and 45% reduction by 2030 from 2010 levels	2030
West Devon Borough Council	2050 *at the latest* and 45% reduction by 2030 from 2010 levels	2030
East Devon District Council	2050 *at the latest* and 45% reduction by 2030 from 2010 levels	2040
Devon County Council	2050 *at the latest* and 45% reduction by 2030 from 2010 levels	2030
Dartmoor National Park	2045 *at the latest*	2025
Exeter City Council	2030	2030
Mid Devon District Council	2030	2030
Plymouth City Council	2030	2030
Torbay Council	2030	2030
Teignbridge District Council	2025	2025

The Climate Science

The 2018 IPCC report, *Global Warming of 1.5 Degrees*, is clear that achieving net-zero emissions by 2050, globally, provides a 50% chance of keeping global warming below 1.5 degrees Celsius. Achieving net-zero sooner improves that chance.

Message: We should achieve net-zero as soon as possible

The Technical Evidence

The Centre for Alternative Technology report, *Zero Carbon Britain*, describes a scenario using existing technology that could achieve net-zero emissions by 2030. However, it states:

> *"Without national-scale, systematic transition in place, time is now very tight. 2030 remains a valid target from the perspective of climate science, but we must recognise that this is now becoming a hugely challenging delivery timeline"*

Message: The technology exists now to achieve net-zero production emissions, but deep, systematic change is required to implement it, much of which is not in the control of local partners.

The Committee on Climate Change (CCC) report, *Net Zero,* recommended to Government a UK target of net-zero by 2050 as "*the earliest credible date*", which Government has accepted. The potential costs are up to 2% of Gross Domestic Product (GDP) each year, which is cost-effective against the potential impacts of climate change. Their scenario avoids punitive measures and capital scrappage. It states:

> *"A UK net-zero GHG target in 2050 is feasible, but will only be deliverable with a major strengthening and acceleration of policy effort"*

Message: To achieve a just and cost-effective transition to net-zero, 2050 is the earliest credible date that has been modelled for the UK.

The Net-Zero Devon report produced by the Centre for Energy and the Environment off the back of the CCC report identifies the net cost (sum of costs minus benefits) for the area administered by Devon County Council to achieve net zero in 2050 to be £658 million per year. This equates to 1.6% of Devon's GDP in 2050. Achieving the CCC 2050 scenario by 2030 would in effect require compressing the same measures into a timeframe that is only about a third as long. The costs to meet the target by 2030 increases the estimated annual net cost to Devon to about £1,852 million per year (7.1% of Devon's GDP).

Message: 2030 would be costly to Devon's economy and communities if other UK and international regions do not follow.

The UK economy will still be emitting greenhouse gases beyond 2050, but various carbon offsetting schemes will operate nationally to net-off those emissions to zero. Assuming that national policy remains focussed on 2050, for Devon to achieve net-zero ahead of 2050, Devon's emissions will need to be offset using local schemes.

Devon's emissions are attributable to individuals and organisations operating in, and visiting, Devon. There is no mechanism that would force these emitters to buy carbon offsets ahead of 2050, and indeed if there were, these emitters might move away from Devon, or visit other areas of the UK, that do not require them to pay to offset their emissions. In the year 2030, Devon's forecasted residual emissions under the CCC scenario would cost the economy approximately £575m to offset at £50 per tonne of carbon dioxide. This, combined with the £658m per year for technological measures to reduce residual emissions referenced above, means a total cost each year of £1,233 million, or 4.7% of Devon's GDP. Furthermore, using tree planting as the carbon offset opportunity, there is not enough land available in Devon to offset Devon's projected residual emissions between 2030 and 2050 and so investments would need to occur elsewhere in the UK and most likely internationally.

Message: Achieving net-zero emissions ahead of UK policy is highly problematic, costly and not feasible within Devon's borders

Proposal

The Task Force's recommendation that is proposed to appear in the consultation draft Interim Devon Carbon Plan is:

- 2050 as the target for net-zero carbon
- Interim carbon budgets for Devon set for years 1-5, 6-10 and 11-15 years based on the CCC scenario, incorporating a 45% reduction of 2010 emission by 2030.
- The Plan needs to be front loaded with impactful actions to support the partners that have set 2030 as their net-zero targets.
- Trigger points to fundamentally revise the plan must be included, particularly where reductions are not moving at the required pace, or where international targets are amended.

The Plan would also need to state that partners should endeavour to achieve net-zero sooner and exceed these targets if possible, particularly supporting with a collaborative spirit the five local authorities that have earlier ambitions.

Summary

Five of the 13 local authorities in the DCE partnership have set net-zero targets of 2030 or sooner. Seven have accepted the IPCC recommendations, pending different advice from the Net-Zero Task Force. One has set 2045.

The net-zero target of 2050 with 45% reduction by 2030 from 2010 levels, as proposed by the IPCC, will require unprecedented social change. 2030 is technically possible but even its advocates acknowledge how challenging it would be.

The UK Government has amended the Climate Change Act to embed the target of net-zero by 2050, which is world leading. It would be highly problematic to achieve net-zero in Devon ahead of the UK timeframe as Devon's emissions are dependent on national policy initiatives.