



North Devon Council

Report Date: Monday, 3 March 2025

Topic: Decarbonising North Devon Council's Vehicles

Report by: Donna Sibley, Sustainability and Climate Officer

1. INTRODUCTION

1.1. Our planet's climate is changing and warming is accelerating. The United Nations Intergovernmental Panel on Climate Change published their sixth assessment report in March 2023. It states that human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850–1900 in 2011–2020. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred. Human-caused climate change is already affecting many weather and climate extremes in every region across the globe. This has led to widespread adverse impacts and related losses and damages to nature and people.

1.2. Climate change is a threat to human well-being and planetary health. There is a rapidly closing window of opportunity to secure a liveable and sustainable future for all. We must make rapid, deep and immediate cuts in greenhouse gas emissions.

1.3. North Devon Council has declared a climate emergency, and made a commitment to be net zero carbon as an organisation by 2030. Our carbon footprint for the Council for 2023/2024 shows that our fleet contributes about a third of our total CO₂ emissions.

1.4. The majority of emissions from the Council's fleet comes from our Waste & Recycling vehicles.

2. RECOMMENDATIONS

2.1. That the contents of this report are noted.

2.2. That we will continue to pursue replacement of small and medium vehicles (up to 3500kg) with electric where cost savings can be demonstrated over the lifetime of the vehicle.

2.3. That we will not pursue replacement of large vehicles (over 3500kg) with electric at present due to costs.

3. REASONS FOR RECOMMENDATIONS

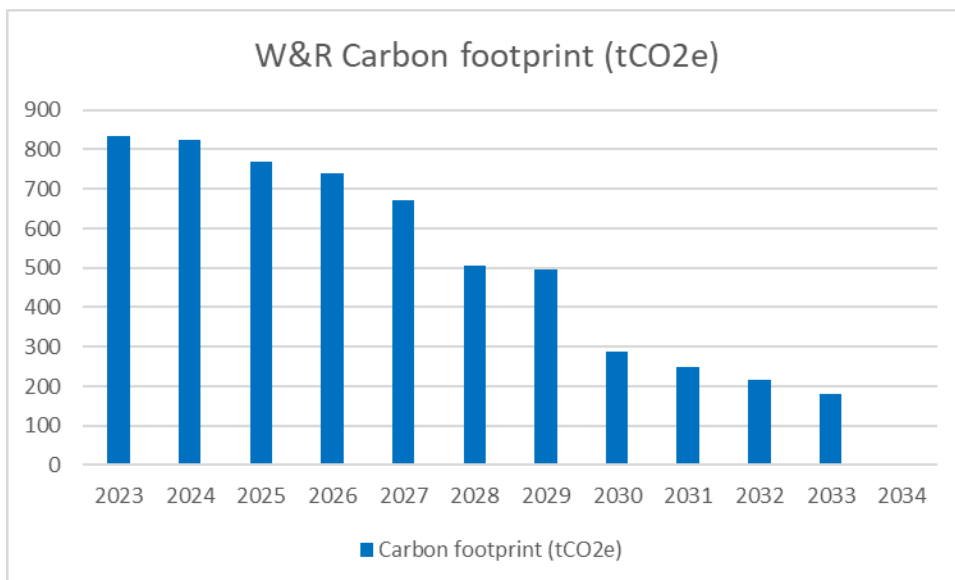
3.1. This report sets out the current carbon footprint for our Waste & Recycling service and the plan that the Climate Action Team has put forward to reduce emissions in the future with some indicative costs.

4. REPORT

4.1. In 2023/2024 North Devon Council had a carbon footprint of 3425 tonnes CO₂ equivalent (tCO₂e) of which approximately quarter of emissions can be attributed to the Waste & Recycling fleet.

The Waste & Recycling Service has trialled a number of electric vehicles; we have found that current EVs are a suitable replacement for small and medium vehicles (up to 3500kg) and that over the lifetime of the vehicle there is a saving to the Council due to reduced fuel costs. Current EVs are not a suitable replacement for our HGVs (over 3500kg). This is due to vehicle range the electric HGV was not able to complete the waste collection round on one battery charge.

We lease our Waste & Recycling fleet from SFS, with a vehicle replacement schedule in place to ensure that our vehicles are replaced before costly repairs are regularly incurred and to schedule regular maintenance, saving money by not making costly repairs towards the end of a vehicle's life. There is a cost penalty for switching diesel to electric vehicles before the lease period expires so it has been suggested we switch to electric vehicles as the current lease ends. The graph below shows the potential path to decarbonisation if we were to follow this route:



5. RESOURCE IMPLICATIONS

5.1 Estimated costs for replacing our current vehicles with diesel vehicles is £9,485,000 and with electric vehicles is £18,669,000. There will be a saving in diesel which currently costs the service approximately £644,000 per annum in



total, this saving would therefore increase over the years as more electric vehicles are introduced.

We do not have provision for EV charging for HGVs. Exeter City Council have installed a solar farm and HGV charging at their Water Lane Depot at a cost of £3.5M. At present Exeter City Council have three electric HGV's but are not replacing their entire fleet at present because of the additional, upfront costs of replacing existing diesel vehicles with electric.

At NDC, one 26 tonne diesel vehicle is due for replacement in October this year in line with our replacement schedule. The approximate cost of replacing this with electric is set out below:

Dennis Eagle with Bin Lift £62,860 + VAT per year	Dennis Eagle eCollect with Bin Lift £108,992 + VAT per year
Diesel costs approx. £23,000 per annum	Electric HGV charging infrastructure and cost unknown

The cost of leasing this one electric vehicle will be an additional £162,000 over the 7-year lease period. This additional cost figure includes the estimated saving on diesel costs. Replacing this vehicle with an electric alternative would result in a carbon saving of 378 tonnes CO2 equivalent.

In 2026 and 2027 there will be opportunities to replace smaller vehicles with EVs; we will bring a paper to this Committee setting out the costs of doing so for Councillor Decision.

5.2 The cost of leasing this one electric vehicle will cost at least an additional £162,000 over the 7-year lease period. Please note that costs of installing an HGV charging point at Brynsworthy Environmental Centre (BEC) are unknown at present. We are liaising with National Grid to understand what infrastructure works may be needed at BEC if we are to replace our existing heating system with an air source heat pump, install EV charges for an electric fleet and have solar panels on site. A further report will follow when future infrastructure requirements and costs are confirmed.



6. EQUALITIES ASSESSMENT

6.1. No impact on protected characteristics as a result of these recommendations; Equality Impact Assessments will be completed when further purchase of electric vehicles is brought to this Committee.

7. ENVIRONMENTAL ASSESSMENT

7.1. There is a carbon saving of 54 tCO₂e per annum, if this vehicle is replaced with electric, which is approximately 1.6% of the Council's total annual carbon emissions.

8. CORPORATE PRIORITIES

8.1. What impact, positive or negative, does the subject of this report have on:

8.1.1. The commercialisation agenda: not applicable

8.1.2. Improving customer focus: not applicable; and/or

8.1.3. Regeneration or economic development: not applicable.

9. CONSTITUTIONAL CONTEXT

9.1. Save as provided in paragraph 9.2 below, the decision in respect of the recommendations in this report can be made by this Committee pursuant to delegated powers provided in Part 3 Annexe 1 paragraph 1.

10. STATEMENT OF CONFIDENTIALITY

This report contains no confidential information or exempt information under the provisions of Schedule 12A of 1972 Act.

11. BACKGROUND PAPERS

The following background papers were used in the preparation of this report: North Devon Council carbon footprint 2023 2024.

12. STATEMENT OF INTERNAL ADVICE

The author (below) confirms that advice has been taken from all appropriate Councillors and Officers: Donna Sibley, Sustainability & Climate Officer.